

Climate proofing Dutch social housing

Internship report

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Internship report (condensed version)

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Colophon

This internship report is the result of a short internship at the Stimulation-programme for Spatial Adaptation (SRA) of the Dutch Delta programme, from February 1st until April 8th 2016, 4 days a week. The stimulation-programme for Spatial Adaptation supports the implementation of the 'Delta decision' on spatial adaptation and is concerned with supporting a transition to 'climate-resilient and water robust' spatial planning in the Netherlands.

This document is an internship report. It is the result of a small study conducted during my internship, and aims to answer a currently relevant policy question about a policy problem which the policymakers at the stimulation-programme for Spatial Adaptation encounter. Furthermore, the internship report includes practical policy recommendations which may contribute to foster the integration of climate adaptation measures in (re)development- and renovation projects of social housing.

This small study was furthermore conducted in the context of the second year of my participation in the Honoursprogramme Nijmegen School of Management at Radboud University. This is an extracurricular research oriented programme, and it is concluded with a thesis project, due in August 2016. This internship report is a part of this larger thesis project.

Especially I would like to thank prof. dr. Bregman. Due to his dedication arranging the internship placement I was able to get this unique experience to intern at the Ministry of Infrastructure and the Environment.

I would like to thank all my former colleagues at the Stimulation-programme for Spatial Adaptation (SRA) for showing me the world of policy making at the Ministry of Infrastructure and the Environment, and the helpful explanations of questions I had, tips for interesting conferences to visit and feedback on concept documents. Furthermore, I liked the pleasant atmosphere in the department, and the sometimes spontaneous discussions taking place here which everyone participated in. In particular, I would like to thank Mrs. van der Vlugt and Mr. Arbouw for their substantive and organisational help during the internship.

Furthermore, I would like to thank my supervisor Dr. D. Boezeman at Radboud University for his comprehensive feedback and helpful tips.

Last, I would like to thank all the interview participants for finding the time to share with me their experiences and insights with respect to the object of study.

I hope you enjoy reading my findings, and I hope that my findings and recommendation contribute to the efforts of the stimulation-programme for Spatial Adaptation to foster the integration of climate adaptation measures in (re)development- and renovation projects of social housing.

Thijs de Vries, April 2016

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Management samenvatting

Inleiding

Het is te verwachten dat we frequentere en grotere schades gaan ondervinden aan objecten en infrastructuur als gevolg van de impacts van klimaatverandering. Daarnaast is te verwachten dat klimaatverandering ook negatieve effecten zal hebben voor het leef comfort en de veiligheid van mensen. Het gaat daarbij onder meer over schade aan objecten en infrastructuur als gevolg extreme neerslag, en gezondheidseffecten en voortijdig overlijden van kwetsbare personen te wijden aan langere perioden van hitte.

Als we minder kwetsbaar voor de negatieve impacts van klimaatverandering willen worden is het van belang om de gebouwde omgeving aan te passen aan de impacts van klimaatverandering. Dat is niet alleen een technisch vraagstuk maar ook een sociaal vraagstuk. Het menselijk handelen zal namelijk ook aangepast moeten worden aan klimaatverandering. Dat wil zeggen dat de manier waarop we denken over toekomstige stedelijke ontwikkelingen, en hoe we deze daadwerkelijk ontwikkelen, zal moeten veranderen, en klimaatadaptatie zal moeten gaan integreren.

Deze studie is uitgevoerd voor het Stimuleringsprogramma voor Ruimtelijke Adaptatie (SRA). Dit programma is onderdeel van een drietal onderdelen die onder het Nederlandse Deltaprogramma vallen en de Deltabeslissing Ruimtelijke Adaptatie ondersteunen. Het Stimuleringsprogramma voor Ruimtelijke Adaptatie heeft als beleidsdoelstelling dat "Klimaatbestendig en water robuust inrichten in Nederland een vanzelfsprekend onderdeel bij ruimtelijke (her)ontwikkelingen moet worden." (Kennisportaal ruimtelijke adaptatie, z.d.). In 2020 moet dit de dagelijkse praktijk zijn zodat Nederland klimaatbestendig is in 2050.

Het Stimuleringsprogramma voor Ruimtelijke Adaptatie constateert dat woningbouwcorporaties nog maar gering bezig zijn met het integreren van klimaatadaptatiemaatregelen bij (her)ontwikkeling- en renovatieprojecten van sociale woningbouw in Nederland. Omdat 29,63% (2014 gemiddelde) (Ilent, n.d. A) van de woningvoorraad in Nederland bestaat uit sociale woningbouw is het in de context van het eerdergenoemde beleidsdoel van het Stimuleringsprogramma voor Ruimtelijke Adaptatie erg relevant om te analyseren wat mogelijke belemmeringen zijn voor woningbouwcorporaties om klimaatadaptatie maatregelen bij (her)ontwikkelings- en renovatieprojecten van sociale woningbouw in Nederland te integreren.

De doelstelling van dit project was dan ook om meer inzicht te verschaffen in de vraag: Wat zijn de beperkende factoren met betrekking tot de integratie van klimaatadaptatie maatregelen bij (her)ontwikkelings- en renovatieprojecten van sociale woningbouw in Nederland? Een tweede doelstelling was om concrete beleidsaanbevelingen te doen voor het wegnemen van de ontdekte beperkende factoren.

Werkwijze

Eerst is een analytisch kader opgesteld aan de hand van bestudeerde institutionele beleidstheorie. Er is daarbij gekozen voor de beleidsarrangementenbenadering. Deze

theorie is geoperationaliseerd in een toepasbaar analytisch kader. Daarna is met behulp van het analytisch kader een literatuurstudie uitgevoerd met als doel om het beleidsarrangement van sociale woningbouw in kaart te brengen. De bedoeling hiervan was om de interviews goed te kunnen voorbereiden, en inhoudelijk voldoende kennis te verkrijgen over dit beleidsdomein om tijdens de interviews op niveau te kunnen praten over het onderzoeksobject. Vervolgens zijn gesprekken gevoerd met 7 medewerkers van 6 verschillende woningcorporaties. Aanvullend is met 5 andere relevante experts gesproken om bepaalde aspecten, zoals wetgeving, nader te onderzoeken. De interviews gingen in op de beperkende factoren die de interviewparticipanten ervaren bij de integratie van klimaatadaptatiemaatregelen in (her)ontwikkelings- en renovatieprojecten van sociale woningbouw in Nederland.

Conclusies

Op basis van deze studie kunnen de volgende conclusies worden getrokken ten aanzien van de hoofdvraag.

Conclusie 1:

De Woningwet 2015, Besluit Toegelaten Instellingen (BTIV) en Verordening toegelaten instellingen beperken de reikwijdte van de toegestane klimaatadaptatie maatregelen door woningcorporaties, en kunnen mogelijk leiden tot verantwoordingsproblemen hierover.

Namelijk:

Klimaatadaptatie maatregelen worden alleen toegestaan zolang die investeringen uitsluitend betrekking hebben op de onroerende of infrastructurele aanhorigheden voor het bezit op het perceel van de woningbouwcorporatie, en dus niet betrekking hebben op een groter gebied. Het is dus een voorwaarde dat klimaatadaptatie maatregelen uitsluitend ten goede komen aan de eigen huurders van de desbetreffende sociale huurwoningen. De klimaatadaptatie maatregelen moeten kunnen worden beschouwd als onderdeel van de infrastructuur van de woning. Het is dus niet toegestaan om als woningcorporatie in de openbare ruimte te investeren. Deze bepalingen kunnen in de praktijk leiden tot onduidelijkheden in situaties waar het lastig te bepalen is of de klimaatadaptatie maatregelen uitsluitend betrekking hebben op de onroerende of infrastructurele aanhorigheden voor het bezit op het perceel van de woningbouwcorporatie. Daarmee kan dit mogelijk leiden tot verantwoordingsvraagstukken hierover. Moeten woningbouwcorporaties straks in dergelijke minder duidelijke situaties gaan aantonen dat de klimaatadaptatie maatregelen uitsluitend betrekking hebben op de onroerende of infrastructurele aanhorigheden voor het bezit op het perceel van de woningbouwcorporatie, en niet op een groter gebied?

Conclusie 2:

De Woningwet 2015, BTIV en Verordening toegelaten instellingen introduceren een aantal financiële beperkingen voor de uitvoering van klimaatadaptatiemaatregelen door woningcorporaties, omdat deze bepalingen de investeringscapaciteit van woningcorporaties verminderen.

Namelijk:

- De verhuurdersheffing verhoogt kosten.
- De bepalingen omtrent passend toewijzen van sociale huurwoningen beïnvloeden de huurinkomsten van woningbouwcorporaties.
- Het verrekenen van financiële tekorten in het sociale huisvesting deel binnen gebiedsontwikkelingen, door middel van de ontwikkeling van winstgevend commercieel vastgoed binnen eenzelfde gebiedsontwikkeling, is niet meer mogelijk.
- Als een klimaatadaptatiemaatregel wordt beschouwd als een niet-daeb activiteit kan er geen borging vanuit het Waarborgfonds Sociale Woningbouw (WSW) worden afgegeven, en kan er hierdoor geen externe financiering worden aangetrokken tegen gunstige lage rente via het WSW-borgingsstelsel.

-Het introduceren van de marktwaarde in verhuurde staat voor de waardering van vastgoed voor financiële risico-evaluatie kan een negatieve financiële risicobeoordeling voor bepaalde sociale huisvesting projecten betekenen, waaronder adaptatiemaatregelen (zie paragraaf 2.2). In dergelijke gevallen kan er geen externe financiering tegen gunstige lage rente worden verkregen via het WSW-borgingsstelsel, omdat er dan geen WSW borging wordt afgegeven.

Conclusie 3:

Woningbouwcorporaties beschouwen de samenwerking met de Autoriteit woningcorporaties (Aw) als een beperkende factor voor het integreren van klimaatadaptatie maatregelen in projecten.

Namelijk:

De Autoriteit woningcorporaties zou niet de onzekerheden wegnemen over de interpretatie van de Woningwet 2015, BTIV en Verordening toegelaten instellingen ten aanzien van klimaatadaptatie, omdat ze het zelf ook niet weten. Wel zou de Autoriteit woningcorporaties aangeven aan woningbouwcorporaties dat ze een risico lopen teruggefloten te worden door een inspecteur als ze investeren in klimaatadaptatie maatregelen.

Conclusie 4:

Woningbouwcorporaties beschouwen de samenwerking met gemeenten als een beperkende factor voor het integreren van klimaatadaptatie maatregelen in projecten.

Namelijk:

- Gemeenten zouden weinig bewustzijn tonen over de gevolgen van klimaatverandering en adaptatiemaatregelen.
- De politieke urgentie van de impacts van klimaatverandering en aanpassingsmaatregelen bij gemeenten wordt als laag ervaren.
- Woningbouwcorporaties die actief zijn in meer dan één gemeente gaven aan te maken te hebben met zeer verschillend beleid met betrekking tot klimaatverandering en klimaatadaptatie in de verschillende gemeenten.
- In bepaalde gevallen vergaand gemeentelijk kostenverhaal vermindert de financiële ruimte voor investeringen in extra elementen in gebiedsontwikkelingen, zoals klimaatadaptatie maatregelen.
- Het werd ervaren dat gemeenten soms niet bereid zijn om actief mee te denken met woningbouwcorporaties die van plan zijn om te investeren in klimaatadaptatie maatregelen.
- Gemeenten zouden klimaatadaptatie binnen een bepaald gebied te veel als individuele problemen zien die op perceelniveau opgelost moeten worden door de betreffende eigenaren, en te weinig als een gedeeld integraal probleem binnen een bepaald gebied.
- Over afdelingen beheer van nutspartijen en openbare ruimte werd gezegd dat ze klimaatadaptatie maatregelen in de openbare ruimte tegen houden als die maatregelen technisch en financieel moeilijker zijn om te beheren (een voorbeeld dat genoemd werd was dat dichtsteden is makkelijker en goedkoper te onderhouden is dan een groenzone).

Naast beperkende factoren voor de integratie van klimaatadaptatiemaatregelen bij (her)ontwikkelings- en renovatieprojecten van sociale huisvesting, werden andere factoren ontdekt die het gebrek aan integratie van klimaatadaptatie verklaren. Echter, deze factoren zijn niet per se harde beperkingen voor het kunnen integreren van klimaatadaptatie in projecten. Het zijn daarom aanvullende conclusies.

Conclusie 5:

Er is onbekendheid onder woningcorporaties over de gevolgen van klimaatverandering voor het eigen vastgoedbezit.

Namelijk:

Woningbouwcorporaties hebben vaak nog weinig of geen ervaring met schade als gevolg van water, of klachten over de klimaatbeheersing in hun vastgoed als gevolg van hitte. Actie wordt alleen ondernomen nadat ernstige schade heeft plaatsgevonden.

De medewerkers van de woningbouwcorporatie waarmee gesproken is, zijn grotendeels onbekend met bestaande kennisnetwerken over klimaatadaptatie en bestaande instrumenten

om de gevolgen van de klimaatverandering voor hun vastgoed in beeld te brengen. Dit komt vooral omdat klimaatadaptatie weinig tot geen onderwerp is dat aandacht krijgt via de communicatiekanalen die met name bekend zijn bij woningbouwcorporatie medewerkers: bijv. Cobouw en Aedes.

Conclusie 6:

Klimaatadaptatie heeft een lage prioriteit binnen de sociale woningbouw sector. Dit is vanwege de lage korte termijn urgentie van klimaatadaptatie door alle huidige veel urgentere problemen waarmee corporaties geconfronteerd worden, in combinatie met de grote juridische veranderingen en financiële beperkingen die zijn geïntroduceerd in de sector.

Daarom:

Veel woningbouwcorporaties waarmee gesproken is gaven aan zich veelal te richten op compliance met waar ze formeel tot verplicht worden in wetgeving (Woningwet 2015 en bouwvoorschriften, en wat anderszins wettelijk bindend is zoals de overeenkomsten met gemeenten: de prestatieafspraken), en wat financieel een positieve businesscase oplevert.

De meeste woningbouwcorporaties waarmee is gesproken baseerde klimaatadaptatie maatregelen niet op basis van feitelijke kennis over de impacts van klimaatverandering voor het betreffende onroerend goed, maar vooral op basis van de financiële ruimte die nog over was in een exploitatie voor duurzame investeringen in het algemeen. Corporaties waren niet bezig om proactief de gevolgen van klimaatverandering voor het vastgoed van de woningbouwvereniging in kaart te brengen. Ze zagen dit als de taak van gemeenten omdat daar meer expertise is over dit onderwerp dan bij de woningbouwcorporaties.

Aanbevelingen

De conclusies geven aanleiding tot de volgende beleidsaanbevelingen.

Aanbeveling 1:

Overwogen kan worden om op termijn financiële prikkels en/of wettelijke verplichtingen te introduceren gezien woningbouwcorporaties aangeven als gevolg van de lage prioriteit van klimaatadaptatie, door de vele urgentere problemen waarmee ze momenteel geconfronteerd worden, zich vooral richten op waar ze formeel tot verplicht worden in wetgeving en/of wat financieel een positieve businesscase oplevert.

Aanbeveling 2:

Start met het vergroten van bewustzijn en de ontwikkeling van kennis door gemeenten over de impacts van klimaatverandering voor vastgoed (van sociale huisvesting) binnen de gemeente. Stimuleer dat klimaatadaptatie een plek krijgt in gemeentelijk strategisch woonbeleid (de zogenoemde woonvisies), en zorg met name dat klimaatadaptatie vanuit die woonvisies ook een plek krijgt in de verplichte jaarlijkse prestatieovereenkomsten die wordt gesloten tussen woningcorporaties, huurdersverenigingen en de gemeente. Door verwachtingen naar elkaar uit te spreken met betrekking tot klimaatadaptatie in een prestatieovereenkomst in het verlengde van de woonvisie, creëert dit wederzijds belang, geeft legitimiteit weer van dit type investering door woningbouwcorporaties en helpt ook de Autoriteit woningcorporaties en het Ministerie van Binnenlandse Zaken en Koninkrijksrelaties bekend te maken met het onderwerp klimaatadaptatie.

Aanbeveling 3:

Woningcorporaties beschouwen BREEAM-NL en GPR Gebouw als behulpzame instrumenten om hun duurzaamheidsprestaties te meten. Zorg daarom, samen met de organisaties die BREEAM-NL en/of GPR Gebouw hebben ontwikkeld, om klimaat

adaptatie aspecten beter te integreren in deze instrumenten.

Aanbeveling 4:

Neem als Stimuleringsprogramma Ruimtelijke Adaptatie deel aan de procedures voor de reparatiewetgeving van de Woningwet 2015 en vraag aandacht voor het wegnemen van de onzekerheden in de huidige wetgeving over de vraag welke type investeringen in klimaatadaptatie maatregelen zijn toegestaan, en welke niet.

Aanbeveling 5:

Het merendeel van de geïnterviewde medewerkers van woningcorporaties waren niet bekend met de Deltaprogramma, het stimuleringsprogramma voor ruimtelijke aanpassing of enig ander programma over klimaatadaptatie. Sommige van de deelnemers stelde dat er een soort van kennisdatabank moet komen waar ze concrete en praktische voorbeelden van klimaatadaptatie maatregelen kunnen vinden. In het bijzonder gaat het hierbij om bewezen positieve business cases van andere corporaties. De website www.ruimtelijkeadaptatie.nl is, echter, nog niet bekend bij de woningcorporaties. Maak daarom gebruik van de communicatiekanalen die bekend zijn bij de woningcorporaties: bijv. Cobouw, Aedes (-Magazine), om de bekendheid van het kennisportaal op www.ruimtelijkeadaptatie.nl beter bekend te maken bij woningcorporaties.

1 Introduction

1.1 Project framework

Anthropogenic induced climate change is predicted to lead to more frequent extreme weather events including conditions among which: extreme precipitation and heat waves (de Bruin et al. 2009). These effects are becoming increasingly visible already and the process is also expected to accelerate (Hansen et al. 2013). Mitigation of climate change is necessary but will not be sufficient without also addressing climate change adaptation given the current mitigation pathways followed (FEA, 2005).

The impacts of the effects of climate change for society is multiple. In this study the built environment is addressed. We may expect more frequent and bigger damage to objects and infrastructures, and climate change will furthermore have adverse effects on the quality of life for people living in urban environments (Roders & Straub, 2014; Bulkeley, 2013), as it will affect the living comfort and safety of residents during extreme weather events. These extreme weather conditions include the increased frequency of: peak precipitation, high temperatures and heat waves. Concrete examples of the impacts of these weather conditions for the build environment, and the living comfort and safety of its residents, are: the increased risk for damage due to floods, localized inundation due to extreme precipitation, health issues as a result of heat stress caused by the urban heat island effect, premature deaths of vulnerable people during prolonged periods of heat, etcetera.

If we want to become less vulnerable to the adverse impacts of climate change, the built environment will have to be adapted to become more climate-resilient. It is, however, not only the present physical environment that will need to be adapted to address the forthcoming challenges, and needing technical solutions to solve them. It are foremost also human practices which have to be adapted to a changing climate (i.e. social change). That includes that the way we previously thought about and developed future urban area's will need to change (Boezeman, Ganzevoort, Van Lier, & Louwers, 2014). The way we develop and redevelop urban areas needs an approach that integrates climate adaptation.

For this reason, the Dutch government initiated the Stimulation-programme for Spatial Adaptation (SRA) within the Dutch Delta programme, which is a programme of the Dutch Ministry of Infrastructure and the Environment (I&M), provinces (IPO), municipalities (VNG) and water boards (UVW). The Stimulation-programme for Spatial Adaptation (SRA) is one of three elements that support the Delta decision on spatial adaptation. The Delta decision on spatial adaptation is furthermore supported by a programme on the climate adaptation of vital and vulnerable functions, and the development of a National Adaptation Strategy (NAS).

In the context of the Delta decision on spatial adaptation, the national government, the provinces (IPO), the municipalities (VNG) and the water boards (UVW) agreed to start integrating climate adaptation in future spatial developments. In 2020 this must be everyday practice, to the end of realizing a climate proof Netherlands by 2050 (Spatial Adaptation Knowledge Portal, n.d.). According to the Dutch Ministry of Infrastructure and the Environment: "Klimaatbestendig en waterrobuust inrichten moet in Nederland een vanzelfsprekend onderdeel bij ruimtelijke (her)ontwikkelingen worden." (Spatial Adaptation Knowledge Portal, n.d.).

One important policy challenge (among other) for the transition to 'climate-resilient and water robust' spatial developments is the lack of action among housing associations to integrate climate adaptation measures in (re)development- and renovation projects of social housing in the Netherlands (M. van der Vlugt, personal communication, September 10, 2015), to minimize the risk of future damage to property and to retain a desirable living comfort and safety for residents. Because social housing constitutes a significant 29,63% (2014 mean) (Ilent, n.d. A) share of the total housing stock in the Netherlands, it is relevant in the context of the Dutch policy goals of the Stimulation-programme for Spatial Adaptation (SRA) to study the causes of the lack of action, and contribute to address these causes by recommending concrete policy interventions.

1.2 Objective

The first objective of this study was to gain better insight into the constraining factors of influence on the integration of climate adaptation measures in (re)development- and renovation projects of social housing in the Netherlands.

The second objective of this study was to make practical policy recommendations for taking away the constraining factors of influence on the integration of climate adaptation measures in (re)development- and renovation projects of social housing in the Netherlands, and which may, therefore, contribute to foster the integration of climate adaptation measures in (re)development- and renovation projects of social housing.

The empirical material will furthermore be used in my larger honours programme thesis project for the which runs until August, and is not part of the internship.

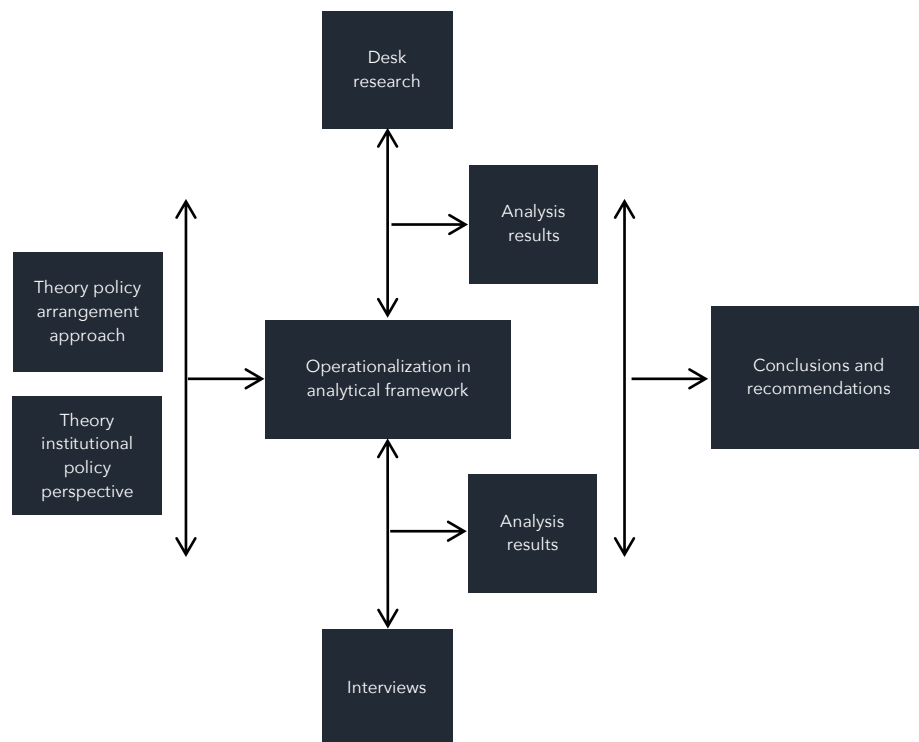
1.4 Research Question

The research question of this study was:

What are constraining factors with respect to the integration of climate adaptation measures in (re)development- and renovation projects of social housing in the Netherlands?

1.3 Research method

Figure 1.1: Research model



The first phase (see figure 1.1) of the study consisted of a literature study of institutional policy theory, including the institutional policy perspective and the policy arrangement approach.

During the second phase of the study, the theory was operationalized into an analytical framework which was used in later stages of the study as input for 1. structuring the desk study content analysis, and for 2. devising an interview protocol (appendix A) being used during the empirical data collection.

In the third phase of the research a desk study was conducted using the analytical framework structured along the dimensions provided by the policy arrangement approach: actors; resources; rules and discourses. The desk study was conducted to gain an initial insight into the substantive and organisational characteristics of the social housing policy domain in the Netherlands. This was to make myself familiar with this policy field as I had little prior knowledge about the substantive and organisational characteristics of the social housing policy domain. The desk study was furthermore helpful to prepare the interviews. Documents which were studied during the desk study included academic literature, policy documents and legislation, websites and media articles.

During the fourth phase of the research process, in total 11 semi-structured interviews were conducted with practitioners mainly working in the social housing policy domain. The interviews lasted 1 hour on average. The research data has been collected during an internship at the Dutch Ministry of Infrastructure and the Environment, from February until April 2016. The interview protocol has been included under appendix A. The interview protocol has largely been structured using the analytical framework discussed in chapter 2. The empirical research data was analysed using content analysis in Atlas TI software for qualitative analysis. The interviews, 8 of which were taped, were transcribed for this purpose. The content analysis looked at the

constraining factors with respect to the integration of climate adaptation measures in (re)development- and renovation projects of social housing.

Seven interview participants were practitioners working at six social housing associations (see figure 1.2), and five interviews participants were experts to study particular aspects in more detail (see figure 1.3). Sampling took place on the basis of maximum variation:

- Prior experience with the effects of extreme weather conditions for the social housing' real estate property and/or climate adaptation.
- Position of the social housing practitioners (e.g. project manager etc.).
- The size of the social housing associations' real estate property.
- Spatial distribution of the social housing associations (as much as possible).

It must be noted that spatial distribution proved to be very difficult, and was limited because of the scope of the study (i.e. total number of interviews conducted), and furthermore did not take into account the physical-spatial differences (e.g. Rotterdam versus Arnhem) that could possibly mean different climate change impacts, and relating adaptation practises and experienced obstacles.

Diversity in the sampling of participant on the basis of level of awareness of the impacts of climate change for the housing association' real estate property could not be realized. Namely, content analysis (bulk search using software, for the presence of words related to climate change and/or adaptation) of publicly available policy documents (annual reports & strategic policy plans) of 30 randomly selected housing association all proved no or negligible awareness of climate change and/or adaptation. None of the housing associations that were part of the empirical section of this study have a portfolio strategy, year plan or business plan that explicitly includes climate adaptation or individual water or heat related subject.

Figure 1.2: Interview participants

Municipality	Organisation	Size real estate property	Position
Rotterdam	Social housing association Havensteder	Major	Projectmanager strategy
Dordrecht	Social housing association Stichting Trivire	Large	Board advisor (board secretary)
Geldermalsen	Social housing association Stichting KleurrijkWonen	Large	Projectmanager planned maintenance
Geldermalsen	Social housing association Stichting KleurrijkWonen	Large	Technical project supervisor
Amsterdam	Social housing association Woningstichting Eigen Haard	Major	Projectdeveloper / projectmanager
Zwolle	Social housing association Woningstichting SWZ	Medium	Supervisor/auditor department construction and operation
Zwolle	Social housing association Woningstichting Openbaar Belang	Small	Manager Real Estate department and projectmanager

Figure 1.3: Interview participants

Organisation	Position
Authority housing associations (Aw) - Human Environment and Transport Inspectorate (ILT)	Coördinator / specialist consultant licensing, analysis and development
Netherlands Enterprise Agency (RVO)	Advisor utility- and housing construction
Watercoalition - Ministry of Infrastructure and the Environment	Policy assistant
Amsterdam Rainproof	Accountholder social housing associations
STIJL Advocaten	Lawyer

In the fifth and last phase of the research process, the insights of the study were translated into a conclusion, answering the research question: *What are constraining factors with respect to the integration of climate adaptation measures in (re)development- and renovation projects of social housing?* In addition, the findings were translated into practical policy recommendations to address these constraints and contribute to foster the integration of climate adaptation measures in (re)development- and renovation projects of social housing.

1.5 Reading guide

In chapter 2 the results of the empirical data (interviews) analysis are discussed. Content wise, the chapter consists of an overview of the constraining factors with respect to the integration of climate adaptation measures in (re)development- and renovation projects of social housing. Chapter 3 presents the findings in main conclusions, and chapter 4 policy recommendations.

2 Constraints

2.1 Legal constraints

The practitioners interviewed pointed out several legal constraints for the implementation of climate adaptation measures by housing associations due to the housing act 2015, BTIV and Regulation allowed institutions. Most of the legal constraints the practitioners pointed out during the interviews are financial legal constraints, and are therefore discussed in paragraph 2.2.

The original housing act of 1901 has recently been revised and entered into force on the 1st of July 2015 as the housing act 2015. This new housing act is more stringent about the role of housing association on the housing market and determines that housing associations should focus on their core responsibility, described as: “Het huisvesten of doen huisvesten van personen die door hun inkomen of door andere omstandigheden moeilijkheden ondervinden bij het vinden van hun passende huisvesting.” (Woningwet art. 46 lid 1). The responsibilities of housing corporations are more specifically defined (Woningwet art. 45 lid 2) as the:

- Construction and operating of homes
- Development of social real estate (only in the vicinity of social housing), e.g. community centre, library, school
- Contributing to the liveability in the immediate vicinity of property of the corporation. Activities that contribute to sustainability are subject to the condition that the activities regarding sustainability will benefit its own tenants.
- Development of commercial property

In addition to the terms that regulate the core activities of housing associations, a distinction is made between activities which are ‘services of general economic interest’ (daeb) and those activities who are not (niet-daeb). Activities which are not services of general economic interest should be administratively separated or legally detached from the core activities (daeb) of the housing association (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2015). Housing associations can furthermore only be engaged in administratively separated activities which are not services of general economic interest if there are no other (market) parties interested (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2015). In these cases, a market assessment must be conducted by a municipality to assess that. Furthermore, the activity may not harm the financial position of the association’s daeb activities (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2015).

An important question with respect to the question whether climate adaptation is allowed, is if these measures can be considered a core activity of housing associations. If not, investing in such measures is not allowed. Most of the practitioners which were interviewed considered climate adaptation measures a core activity. Some stated that climate adaptation measures can be considered a core activity as long as the adaptation measure solely relate to the association’ daeb housing units. Investing in public space is not a core activity of the housing association and thus not allowed. Investments in climate adaptation measures outside a plot owned by a housing association is only possible if the investments relate to the property or infrastructures on the housing association’ plot. It remains unclear to what extent housing associations may probably have to give account that this is indeed the case, and that the climate adaptation measures do not exceed their scope (i.e. that the investments are only meant for the residential daeb units, and not for a much larger area).

2.2 Financial constraints

The practitioners interviewed pointed out several financial constraints for the implementation of climate adaptation measures by housing associations. These mainly concerned financial constraints caused by legislation.

Lessor charge

All social housing associations which rent more than 10 social housing units (rent below € 710,68) pay a so called lessor charge. This charge is based on the value of the housing association's real estate property. The lessor charge is 0,491% (2016) of the total WOZ-value of the property deducted with 10 times the mean WOZ-value of the property. The lessor charge reduces the investment capacity of housing associations. According to the practitioners interviewed, projects run the risk to become economic unviable because of the lessor charge, if project costs are not reduced. Cost reduction is necessary to make projects economic viable. Investments in additional project features, such as climate adaptation, therefore, is difficult. Because of this challenge, the practitioners stated to relapse to only those sustainability investments which are formally obliged in law, and sustainability investments which are cost neutral or even show a positive business case.

Appropriate allocation

The practitioners interviewed considered the terms with respect to appropriate allocation in the housing act 2015 as an important financial constraint for the implementation of climate adaptation measures by housing associations. At least 80% of vacant social housing must be allocated to the main target group of housing associations, and, as from 2016, housing associations must limit their rental prizes to the maximum rent prizes that qualify for a housing allowance, for at least 95% of the households which can be entitled a housing allowance. The maximum rental prizes that qualify for housing allowance is € 575,87 for single-person households and € 618,24 for multi-person households. These rents are much less than the social housing liberalisation rent limit of € 710,68. In order to be able to realize an economic viable real estate exploitation given these required rents determined by appropriate allocation, investments in additional project features, such as climate adaptation, may become difficult if these measures lead to significant higher construction costs. Namely, higher construction costs would have to lead to higher rents to avoid an economic unviable real estate exploitation. Thus, higher construction costs due to climate adaptation measures, combined with the obliged rent prices that do not allow for higher rent prices make that certain projects become economic unviable, there is an investment gap. To realize an economic viable exploitation of the real estate, cost reduction is necessary. Again, because of this challenge, the practitioners stated to relapse to only those sustainability investments which are formally obliged in law, and sustainability investments which are cost neutral or even show a positive business case.

Offsetting gains and deficits

In the past housing associations could solve possible deficits in the exploitation of social housing in area developments by means of adding some commercial real estate to the area development. The profits made on the sale or rent of commercial real estate could be used to solve the deficit problem in the exploitation of the social housing. Spending more on the quality of social housing, including sustainability and climate adaptation measures, could be financed in this way.

The housing act 2015 means the end of this kind of solutions due to the obliged legal or administrative separation of the social (daeb) and commercial activities (niet-daeb) of housing associations, and the strict regulation of non-daeb activities. Possible deficits in the exploitation of social housing in area developments due to investments

in additional project features such as climate adaptation, therefore, cannot be solved by adding some commercial real estate to the area development.

WSW

Housing associations are able to receive favourable low interest loans due to the Social Housing Guarantee Fund (WSW). The WSW determines that loans with the WSW guarantee can only be provided for investments in certain categories. These so called 'borgingsdoeleinden' are closely aligned with the daeb activities described in the housing act 2015 and accompanying regulation. Niet-daeb activities do not receive the guarantees from the WSW, and therefore do not qualify for low interest loans via the WSW. Therefore, if a certain climate adaptation measure is considered a niet-daeb activity, such as investments that do not solely benefit daeb real estate but benefit a much broader area (see paragraph 2.2), alternative finance has to be arranged. In that case the interest the housing association pays is likely higher. Furthermore, the WSW seeks to reduce the financial risk of the WSW guarantees it provides in a number of ways. One important risk reduction aspect is the assumption that financial risks are sufficiently covered by the collateral value of the social real estate it provides with the WSW guarantee. To make sure that this is indeed the case, the collateral value of the social real estate may not deviate too much from the loan on that real estate. Otherwise the financial risk of the WSW guarantee on that loan is considered too big. The WSW uses the so called coverage ratio to assess that the collateral value of the social real estate does indeed not deviate too much from the loan on that real estate. The coverage ratio must be 50% or less. In the housing act 2015 it is determined that housing association must make use of the rented market value when determining the value of their real estate. The WSW determines this rented market value at 70% of the WOZ value of the property. In the interviews, some practitioners argued that even if the adaptation measures would be considered a daeb activity, the question remains if the extra investment in climate adaptation is sufficiently reflected in the rented market value. If not, the coverage ratio limit may be crossed. In that case the WSW will not provide the WSW guarantee and the housing association will thus not receive favourable low interest loans and has to arrange alternative finance, possibly at higher interest rates.

2.3 Constraints in the cooperation with external parties

Authority housing associations

The cooperation with the Authority housing associations was considered disappointing with respect to the authority' advise about the interpretation of the new legislation applied to climate adaptation measures. Questions such as if and when an investment in climate adaptation measures or sustainability in general is to be considered a daeb or a not-daeb activity, and permitted or not, were often not clarified to the extent the practitioners desired. Some of the practitioners said that the authority explained not to know an answer to these questions, and in such situations therefore refers to what is formally stated in legislation and furthermore emphasizes that investing in these measures poses the risk of a negative ruling of an inspector. The practitioners expressed that they cannot work with such answers, and are left with the uncertainty, and the risks of their actions. Some of the practitioners explained that the new Authority housing associations exists since July 1st of 2015 and that until now, the organisation has been mainly busy with its internal organisation. The practitioners explained that there is still a lot of unfamiliarity with the housing act 2015, and that time is needed to clarify the uncertainties of the interpretation of the legislation. Also, unclear terms in the law should be addressed in the reparation legislation of the housing act 2015.

Municipalities

A next external actor with whom cooperation is considered a constraint for the integration of climate adaptation measures, are municipalities. Different reasons were being given. First of all, some of the municipalities are considered to show a lack of awareness about the impacts of climate change. Some of the practitioners were however positive about the awareness of their respective municipality. These are municipalities (e.g. Dordrecht and Zwolle) that are very active on the subject of climate adaptation, especially water related, and also used it as a marketing strategy for their cities. Some practitioners argued that especially the smaller municipalities which do not have the means to employ specialists in water and climate change topics, in particular show less awareness of climate change impacts and knowledge of adaptation measures.

Furthermore, it was pointed out that the low political urgency about climate change impacts and adaptation responses are an important constraint. If a municipality administration considers climate change impacts and climate adaptation not enough of an urgent issue adaptation measures do not find their way in the the municipal strategic housing vision, and therefore also not in the obliged social housing performance agreements. Performance agreements are the joint product of a housing association, respective municipality and respective resident's association. A housing association can propose to include climate adaptation the performance agreements. However, if the municipality and resident's association do not consider climate adaptation an urgent issue, they probably rather want the housing association to invest in other issues, and have these included in the performance agreements instead.

Next, social housing associations active in more than one municipality all explained that they have to cope with various political climates, and therefore, different levels of awareness and sometimes very different policies relating to climate change and climate adaptation.

The cooperation with municipalities was moreover considered a constraint for the integration of climate adaptation measures due to municipal cost recovery. Some of the practitioners considered negotiations about the municipal cost recovery (gemeentelijk kostenverhaal) as an often difficult process whereby municipalities, where allowed, try to recover any cost made by the municipality. The practitioners argued that this diminishes their financial room for additional investments, such as climate adaptation, in area developments.

Besides, some practitioners also explained that the realisation of measures such as climate adaptation sometimes needs adjustments of public space or infrastructures. They considered municipalities to take a very aloof position, not wanting to actively think along with them technically and taking the position that the housing association should handle adaptation measures in such a way that storm water is handled on the housing association's own parcels. They experienced that municipalities do not want to make necessary adjustments to the public space or infrastructures if necessary (e.g. in the case of a spillway of an infiltration installation into the sewer), or only on the basis of full municipal cost recovery (both direct and indirect) of the adjustments. Therefore, the practitioners felt that municipalities in general don't treat adaptation issues as a shared problem within a particular area, and tends to individualize the problem.

Some practitioners also pointed out that this non-integrated approach would also run the risk of blind spots in the area and mismatch of the various individual solutions.

Next, most of the practitioners considered it an important role of municipalities to set norms (e.g. storm water storage capacity during extreme precipitation) the housing associations have to take into account. The practitioners explained that there are no specialists within their organisation concerned with climate adaptation. Housing associations mostly employ generalists, not specialists in the field of climate adaptation. They considered municipalities as the organisations to be employing the specialists that should have knowledge of issues such as climate adaptation. The

practitioners expected municipalities to identify the impacts of climate change for the built environment and provide housing associations with the knowledge about climate change impacts for their real estate, and how to practically deal with it in terms of norms and possible adaptation measures.

One last constraining factor which the practitioners considered really important was the constraining role of operation departments of municipalities and utility companies. Operation departments were considered to promote technically and financially easily manageable solutions and to oppose those which are less. This conflicts with climate adaptation interests. For example, operation departments promote the paving of public space instead of leaving green spots. That is cheaper because it needs less maintenance and is therefore also easier manageable. On the other hand, in the interest of climate adaption paving is undesirable and more green spots may be desirable (e.g. to reduce heat stress and increase the number of natural infiltration possibilities during extreme precipitation).

2.4 Awareness

Besides the constraining factors the practitioners mentioned for the integration of climate adaptation measures in (re)development- and renovation projects of social housing, they also mentioned several other factors which were not constraints but which can explain why there is little integration of climate adaptation measures in (re)development- and renovation projects of social housing. These factors are discussed in paragraph 2.4 and 2.5.

As a reason for lack of action concerning climate adaptation, most of the practitioners mentioned to observe a lack of awareness about the implications of climate change for their association' own real estate, both within the organisation as well as at municipalities and the authority housing associations.

Experience of damage

They attributed this lack of awareness to the situation that their housing association had no or little experience with damage due to water, or complaints about the climate control in their real estate due to heat. Some of the practitioners had experience with water related measures in projects, none had experience with heat related measures. The practitioners which had experience with water related measures described that until now, action is only taken after serious damage has taken place. Action is not taken on the basis of proactive policy and is thus not a natural standard part in their projects, although some mentioned that such issues are increasingly considered in their projects due to the increasing number of water related incidents causing damage, thereby increasing the awareness about water related climate change impacts and the belief that action is needed.

Examples and communication

Some of the practitioners also blamed the lack of awareness about climate change impacts and the belief that action is needed due to lack of communication of the subject, and absence of a database including practical adaptation examples, tools and work methods. These practitioners argued that there should be some kind of knowledge database, where they could find concrete and practical examples of climate adaptation measures, especially proven viable business cases by other housing associations. However, only one of the practitioners was familiar with the knowledge portal at www.ruimtelijkeadaptatie.nl. Therefore, the actual problem might be the unfamiliarity with these existing knowledge networks about climate adaptation and existing tools to identify the impact of climate change for their real estate, instead of the lack of such databases itself. Therefore, when asked about this, some

practitioners also pointed out that climate adaptation is not a subject getting attention via the channels of communication well known among housing association' practitioners such as Cobouw and Aedes(-Magazine).

2.5 Priority

The practitioners being interviewed described that the low short term urgency of climate adaptation, both politically and physically (no damage yet), was one reason the integration of climate adaptation measures in (re)development- and renovation projects was not on their agenda. More urgent issues their housing association is dealing with in the short term are: the housing of status holders, climate mitigation challenge in all of its facets and the huge changes in the social housing policy domain. Furthermore, they mentioned that at the same time the investment capacity of housing association has reduced and regulation of the sector has become more stringent (see next paragraphs). Because of all the urgent issues which the housing associations are confronted with, combined with the legal changes and financial constraints, most of the practitioners pointed out to therefore only comply with what is formally demanded in legislation: housing act 2015 and building code, and what is otherwise legally binding such as the agreements in the performance agreements with municipalities. Therefore, some of the practitioners pointed out that only if there was financial room left, climate adaptation was considered. Most of the housing associations which had prior experience with adaptation measures (those not related to experienced damage) based these measures not on the basis of factual knowledge about the impacts of climate change for the particular real estate, but mostly on basis of the financial room left for sustainability investments in general. Only some of the practitioners based their investment in climate adaptation measures on knowledge about climate change impacts, and in these cases knowledge was provided by the respective municipality. These practitioners argued that they saw it as the task of municipalities to identify the specific impacts of climate change for the built environment.

3 Conclusions

As set out in the research method section, the conclusion will reflect on the research question: *What are constraining factors with respect to the integration of climate adaptation measures in (re)development- and renovation projects of social housing?*

Based on the findings of this study the following main conclusions are drawn:

Conclusion 1:

The housing act 2015, BTIV and Regulation allowed institutions limit the scope of allowed climate adaptation measures by housing associations, and may potentially lead to accountability issues thereof.

Namely:

Climate adaptation measures can only be considered a core activity as long as the effects of an adaptation measure solely relate to a daeb housing unit. It remains unclear to what extent housing associations may probably have to give account that this is indeed the case, and that the climate adaptation measures do not exceed their scope (i.e. that the investments are only meant for the residential daeb units, and not for a much larger area).

Conclusion 2:

The housing act 2015, BTIV and Regulation allowed institutions introduce a number of financial constraints for the implementation of climate adaptation measures by housing associations, as it reduces the investment capacity of housing associations.

Namely:

- The lessor charge increases costs.
- Appropriate allocation regulates rent prices and therefore effects the housing association' rent income.
- Offsetting deficits by means of commercial real estate development within area developments is no longer possible.
- If an adaptation measure is considered a niet-daeb activity, no favourable low interest loans can be obtained, as no WSW guarantee is given.
- Introducing the rented market value for financial risk assessment may result in a negative financial risk assessment for certain social housing developments including adaptation measures. In such cases no favourable low interest loans can be obtained, as no WSW guarantee is given.

Conclusion 3:

Social housing associations consider the cooperation with the Authority housing associations as a constraining factor for the integration of climate adaptation measures in social housing.

Namely:

The authority fails to take away uncertainties about the interpretation of the housing act 2015, BTIV and Regulation allowed institutions, and leaves housing associations with the notice that investing in climate adaptation measures poses the risk of a negative ruling of an inspector in certain cases.

Conclusion 4:

Social housing associations consider the cooperation with municipalities as a constraining factor for the integration of climate adaptation measures in social housing.

Namely:

-Municipalities were considered to show little awareness of climate change impacts, and to show little knowledge of adaptation measures.

- The political urgency about climate change impacts and adaptation responses was experienced as low.
- Housing associations active in more than one municipality experienced very different policies relating to climate change and climate adaptation.
- Municipal cost recovery diminishes the financial room for investments in additional features in area developments, such as climate adaptation measures.
- It was experienced that municipalities were sometimes unwilling to actively think along with housing associations which were planning to invest in climate adaptation measures.
- Municipalities were said to not treat adaptation issues as shared problems within a particular area, but to individualize the problem
- Public space and utility operation departments were said to oppose climate adaptation measures, as those measures are conceived technically and financially more difficult to manage.

In addition to the constraining factors for the integration of climate adaptation measures in (re)development- and renovation projects of social housing, other factors were discovered that explain the lack of integration climate adaptation. However, these other factors are not constraints per se.

Conclusion 5:

There is a lack of awareness among housing associations about the implications of climate change for their own real estate.

Namely:

Housing associations often have little or no experience with damage due to water yet, or complaints about the climate control in their real estate due to heat. Action is only taken after serious damage has taken place. Therefore, action is not taken on the basis of proactive policy and is thus not a natural standard part in social housing projects.

Also, housing associations practitioners are largely unfamiliar with existing knowledge networks about climate adaptation and existing tools to identify the impact of climate change for their real estate. This is mainly because climate adaptation is not a subject getting attention by the channels of communication well known among housing association' practitioners (e.g. Cobouw and Aedes).

Conclusion 6:

Climate adaptation has low priority within the social housing domain because of the low short term urgency of climate adaptation and all the current urgent issues housing associations are confronted with, combined with the legal changes and financial constraints introduced to housing associations.

Therefore:

Housing associations only comply with what is formally demanded in legislation: housing act 2015 and building code and what is otherwise legally binding such as the agreements in the performance agreements with municipalities.

Most housing associations spoken with base climate adaptation measures not on the basis of factual knowledge about the impacts of climate change for the particular real estate, but mostly on basis of the financial room left for sustainability investments in general. Housing associations do not proactively identify the impacts of climate change for the housing association' real estate. They saw this as the task of municipalities.

4 Recommendations

The following policy recommendations have been formulated in response to the findings of this study:

Recommendation 1:

Given that (due to the low experienced priority of climate adaptation) housing associations point out to only comply with what is formally demanded in legislation and/or financially viable, it can be considered to introduce financial incentives and legal obligations.

Recommendation 2:

Focus on increasing awareness and development of knowledge about the impacts of climate change for (social housing) real estate among municipalities, and encourage climate adaptation to be included in strategic municipal housing visions and in the obliged performance agreements.

Recommendation 3:

Housing associations consider BREEAM-NL and GPR Gebouw as helpful tools to measure their sustainability performance. Therefore, cooperate with the organisations which initiated BREEAM-NL and/or GPR Gebouw to better integrate climate adaptation aspects into these tools.

Recommendation 4:

Participate in the repair procedures of the housing act 2015 and focus on removing the uncertainties about the question whether investments in climate adaptation measures are allowed at all, and which type of investments in climate adaptation measures are allowed, and which are not.

Recommendation 5:

Most of the practitioners interviewed were not familiar with the Deltaprogramme, the stimulation programme on spatial adaptation or any other programme about climate adaptation. Some of the practitioners argued that there should be some kind of knowledge database, where they could find concrete and practical examples of climate adaptation measures, especially proven viable business cases by other housing associations. Apparently the website www.ruimtelijkeadaptatie.nl is not yet well known among practitioners working at housing associations. Therefore, make use of channels of communication that are well known among practitioners working at housing associations: e.g. Cobouw, Aedes(-Magazine).

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Appendix A:

Interview guide semigestructureerde interviews

Introductie

Tijd interview:

Datum:

Plaats/adres:

Organisatie:

Naam participant:

-Wat is uw formele functie?

-Wat zijn uw werkzaamheden?

-Hoe lang werkt u in uw huidige functie, en bij deze organisatie?

-Hoe bent u betrokken (geweest) bij het ontwikkelen van klimaatadaptatiebeleid en/of de implementatie van klimaatadaptatiemaatregelen?

-Hoelang bent/was u hierbij betrokken?

-Heeft u hiernaast op een andere manier te maken (gehad) met het ontwikkelen van klimaatadaptatiebeleid en/of de implementatie van klimaatadaptatiemaatregelen?

Korte introductie onderzoek en interview:

-Toelichting op het onderzoek: het centrale doel van het onderzoek en de methode voor dataverzameling.

-Toelichting waarom de participant is geselecteerd voor het onderzoek.

-Aangeven wat de participant aan de uitkomsten van het interview heeft.

-Toestemming vragen voor audio opname van het interview.

-Benadrukken dat de participant te allen tijde het recht heeft om zich terug te trekken uit het interview, en het onderzoek.

-Opmerkingen over het beschermen van de vertrouwelijkheid van de respondenten.

-Benadrukken dat de participant vragen, of onderdelen ervan, niet hoeft te beantwoorden. Het is ook mogelijk om aspecten 'of record' te vermelden, waarvoor de audio opname stilgezet kan worden.

-Benadrukken dat de participant te allen tijde mag onderbreken met opmerkingen of aanvullingen.

-Check de afgesproken duur van het interview bij de participant.

Hoofdvragen

- Wat zijn de gevolgen (risico's en kansen) van klimaatverandering voor het vastgoedbezit van uw organisatie?
- In hoeverre brengt uw organisatie de gevolgen van klimaatverandering voor het vastgoedbezit van uw organisatie in beeld?
- Hoe zou u de stand van kennis in uw organisatie, over de gevolgen (risico's, kansen en onzekerheden) van klimaatverandering voor het vastgoedbezit van uw organisatie, en adaptatieopties, beoordelen?
- In hoeverre is uw organisatie bekend met het begrip klimaatadaptatie?
- Wat wordt binnen uw organisatie verstaan onder klimaatadaptatie?
- In hoeverre ziet u adaptatiemaatregelen als behorende tot de taakstelling van woningbouwcorporaties?
- In hoeverre voert uw organisatie beleid om haar vastgoedbezit aan de effecten van de klimaatverandering (klimaatadaptatiebeleid) aan te passen?
 - Zo ja, hoe zou u de urgentie van dit beleidsonderwerp binnen uw organisatie beoordelen?
 - Zo ja, wat houdt dat beleid in? (Verankering in beleidsdoelen? en in middelen + tijdskeuzen = strategie?)
- In hoeverre voert uw organisatie projecten uit om haar vastgoedbezit aan de effecten van de klimaatverandering (klimaatadaptatiebeleid) aan te passen?
- In hoeverre wordt bij nieuwe ruimtelijke projecten (herontwikkeling, vernieuwing, renovatie) ingezet op het integreren van adaptatiemaatregelen?
- In hoeverre komt uw organisatie obstakels tegen bij adaptatiemaatregelen (en doorvragen)?
 - Hulpbronnen (geld, consultancy, ruimte)?
 - Regels, wetten, verplichtingen; protocollen en richtlijnen (beperkend of juist bevorderend)?
 - Informele regels?
 - Actoren of actor coalities die de actie met name bevorderen of remmen (vooral binnen de corporatie, of juist extern)?
 - Specifieke actoren cruciaal vanwege hun hulpbronnen (en wat is het effect van deze afhankelijkheid)?
 - Discoursen?
- In hoeverre en wat denkt u dat er iets zou moeten veranderen die obstakels weg te halen en waarom zou dat werken (waar bent u mee geholpen)?

Vragen uitgebreid (vragen om door te vragen)

- Wat zijn de gevolgen (risico's en kansen) van klimaatverandering voor het vastgoedbezit van uw organisatie?
- In hoeverre brengt uw organisatie de gevolgen van klimaatverandering voor het vastgoedbezit van uw organisatie in beeld?

-Hoe zou u de stand van kennis in uw organisatie, over de gevolgen (risico's, kansen en onzekerheden) van klimaatverandering voor het vastgoedbezit van uw organisatie, en adaptatieopties, beoordelen?

-In hoeverre is uw organisatie bekend met het begrip klimaatadaptatie?

-Wat wordt binnen uw organisatie verstaan onder klimaatadaptatie?

-In hoeverre is klimaatadaptatie een beleidsonderwerp binnen uw organisatie?

-Zo ja, hoe zou u de urgentie van dit beleidsonderwerp binnen uw organisatie beoordelen?

-In hoeverre voert uw organisatie beleid om haar vastgoedbezit aan de effecten van de klimaatverandering (klimaatadaptatiebeleid) aan te passen?

-Zo ja, wat houdt dat beleid in? (Verankering in beleidsdoelen? en in middelen + tijdskeuzen = strategie?)

-In hoeverre voert uw organisatie projecten uit om haar vastgoedbezit aan de effecten van de klimaatverandering (klimaatadaptatiebeleid) aan te passen?

-In hoeverre wordt bij nieuwe ruimtelijke projecten (herontwikkeling, vernieuwing, renovatie) ingezet op het integreren van adaptatiemaatregelen?

-In hoeverre ondervindt uw organisatie belemmeringen bij de implementatie van klimaatadaptatiemaatregelen?

Actoren

-Met welke externe partijen heeft u te maken bij de (toekomstige) integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten van sociale woningbouw?

-Met welke actoren en/of actor coalities is er veel interactie?

-Met welke actoren en/of actor coalities is er weinig/geen interactie?

-Waarom komt interactie/samenwerking al dan niet tot stand?

-Wat betekent het wel/niet bestaan van interactie voor het ontstaan van obstakels bij de integratie van klimaatadaptatiemaatregelen bij (her)ontwikkelings- of renovatieprojecten?

-Welke actoren en/of actor coalities bevorderen momenteel de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten, en waarom is dat?

-Welke actoren en/of actor coalities belemmeren momenteel de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten, en waarom is dat?

-Over welke middelen beschikken de verschillende actoren die eerder zijn besproken?

-Welke actoren zijn gezien hun toegang tot bepaalde middelen cruciaal (bent u afhankelijk van) voor de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten, en waarom is dat?

-Wat betekenen deze afhankelijkheden voor het ontstaan van obstakels bij de integratie van klimaatadaptatiemaatregelen bij (her)ontwikkelings- of renovatieprojecten?

Spelregels

-Welke formele regels zijn van belang voor de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten?

-Welke formele regels bevorderen momenteel de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten, en waarom is dat?

-Welke formele regels belemmeren momenteel de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten, en waarom is dat?

-Welke informele regels zijn van belang voor de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten?

-Welke eventuele informele regels bevorderen momenteel de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten, en waarom is dat?

-Welke eventuele informele regels belemmeren momenteel de integratie van klimaatadaptatiemaatregelen bij herstructureringsprojecten en renovatieprojecten, en waarom is dat?

Discoursen

-Wat zijn verschillen tussen wat binnen uw organisatie wordt verstaan onder klimaatadaptatie, en wat hieronder wordt verstaan door de andere actoren/actor coalities waarmee u te maken heeft?

-Welke obstakels zouden deze verschillen in definitie kunnen veroorzaken bij de integratie van klimaatadaptatiemaatregelen bij (her)ontwikkelings- of renovatieprojecten?

-Wat is de ambitie binnen uw organisatie met betrekking tot klimaatadaptatie (wat zou er moeten gebeuren: beleidsdoelen)?

-Wat zijn op dit gebied verschillen in opvatting tussen uw organisatie en de andere actoren/actor coalities waarmee u te maken heeft?

-Welke obstakels zouden deze verschillen in opvatting kunnen veroorzaken bij de integratie van klimaatadaptatiemaatregelen bij (her)ontwikkelings- of renovatieprojecten?

-Wat is de opvatting binnen uw organisatie over de wenselijke strategie met betrekking tot klimaatadaptatie?

-Wat zijn verschillen tussen de opvattingen binnen uw organisatie over de wenselijke strategie met betrekking tot klimaatadaptatie, en de opvattingen hierover bij de andere actoren/actor coalities waarmee u te maken heeft?

-Welke obstakels zouden deze verschillen in opvatting kunnen veroorzaken bij de integratie van klimaatadaptatiemaatregelen bij (her)ontwikkelings- of renovatieprojecten?

Afsluiten interview

-Dit waren alle vragen.

-Heeft u nog opmerkingen of aanvullingen op wat er is besproken?

-Wilt u een rapport ontvangen van de uitkomsten van het onderzoek?

-E-mailadres vragen indien nog niet in bezit.

-Herinnering vertrouwelijkheid.

-In hoeverre wenst u anonimiteit bij de verwerking van uw antwoorden (e.g. quotes) in het onderzoeksrapport?

-Bedankt voor uw tijd en medewerking!

-Ik stop nu de audio opname.