Bridging the gap between sustainable urban policies and sustainable urban development projects

A recommendation for public planners

Zuba Adham 4149246 Master thesis February 2nd, 2017 'I am not a product of my circumstances.

I am a product of my decisions.'

- Stephen Covey -

Colofon

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After a year of graduating, prefaced by 4 amazing years at the faculty of Architecture and the Built Environment, I am proud to present to you my master thesis. This concludes my master studies of Real Estate & Housing, presently called Management in the Built Environment.

My research process has been a journey through ups and downs where I have learned much about sustainable urban development, planning tools and policy making. On top of that I have also learned a lot about myself.

Initially I was looking for a subject where I could study the private developer. However after I was introduced to the subject of the planning tools and policy implementation gaps I was intrigued, but not fully convinced. Now, while looking back at the whole process I can say that I am glad that I have chosen to go in this direction.

My mentors, Erwin Heurkens and Fred Hobma, have been an incredible support over the last year. I would like to take this moment to thank you both for your time, supervision and constructive feedback during this time. I would also like to thank all the interviewees who have contributed to this research.

During the past 5 months I have been given the opportunity to do my graduate internship at Brink Management/Advies and I would like to thank everyone there for their kindness, friendly advice and sincere interest. At Brink M/A my personal coach, Maaike van Kats-Schouwerwou, has been a great help. Maaike, I highly appreciated your positive attitude, professional insights and valuable advice. Tristan, Ernst and Arthur, I would also like to thank you for thinking along with me and proofreading several parts of this thesis.

A special thanks goes out to my family and friends for their motivational support and for the occasional (much needed) distraction. I would like to specifically thank my parents for all their support, not just during the past year, but during my whole studies. You are a leading example of perseverance.

Last but not least I would like to thank you very much, Yannick. I started my master studies with you as my boyfriend, I started my graduating year with you as my fiancé and now I am graduating with you as my husband. You have always been so supportive, motivational and sweet and gave me many fresh insights during the writing of this thesis. Now that I have graduated I am looking forward to go on many adventures with you!

Zuba Adham

February 2017, Delft

Management summary

Bridging the gap between sustainable urban policies and sustainable urban development projects A recommendation for public planners

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Abstract – The focus on sustainability in urban development, policy implementation gaps and the role of public planner as 'market actor' have led to this research where we study how the implementation gap between sustainable urban policies and sustainable urban development projects can be bridged with the four planning tools of Adams et al. (2005). By conducting two in-depth case studies with different sizes of implementation gaps, we have looked at the planning tools in practice. The case of RijswijkBuiten had a small implementation gap and many planning tools have been used. In the case of Bruisend Dorpshart Kaatsheuvel the implementation gap was rather large and planning tools have been used to a lesser extent. Human capital supports capacity building, which in turn facilitates the other three planning tools: shaping, regulating and stimulating.

Key words – planning tools, sustainable urban development, public planner, policy implementation gap, RijswijkBuiten, Bruisend Dorpshart Kaatsheuvel

1 Introduction

Dutch urban development and planning practice has seen a focus on developing and selling the highest amount of square meters possible on a location. The economic and financial crisis of 2008 has made an end to this. The focus has since shifted more towards sustainable urban development, which asks for a transition in the spatial planning domain (Buiter & Verschoor, 2014).

On several governmental levels – from global to municipal – there is a demand for more sustainable development, which can also be found in the urban development. In this research we focus on the municipal level. The demand for sustainable urban development is translated into public policies and municipalities rely on market actors to implement their public planning policies (Heurkens & Hobma, 2014). However, in general policies are often not implemented or not implemented correctly (Gerston, 2010).

The role of the public sector has been decreasing as the State-Market relations have become more neoliberal. However, the public sector is not 'losing power' (Heurkens, 2012), but should reposition itself in the government-market-society triangle (Boelens, 2010). This also counts for the public planner, Adams & Tiesdell (2010) state that 'what is required is not for planners to become market actors, but rather realise that they already are market actors, intricately involved in framing and reframing local land and property markets, and act accordingly.'

Public planners can use several planning instruments which have been categorized in four planning tools related to the land and property market by Adams, Watkins & White (2005). Public planners can influence the decision environments of other market actors and bridge the policy-implementation gap with the planning tools: shaping, regulating, stimulating and capacity building (Adams et al., 2005; Adams & Tiesdell, 2010, 2013; Adams & Watkins, 2014; Heurkens, Adams & Hobma, 2015).

The central problem of this research is the implementation gap between sustainable urban polices (SUPs) and sustainable urban development projects (SUDPs). First a literature review is done to provide a theoretical framework. By conducting two in-depth case studies we have studied why such a gap is formed and which planning tools have been used. Then we are able to make a statement about which use of planning tools by public planners seemingly results in a SUDP with a small implementation gap or no gap at all.

This has led to the following research question:

How can public planners use planning tools to bridge the implementation gap between sustainable urban policies and sustainable urban development projects?

With this research we add to the academic content of sustainability on an urban area level and connect it with the academic domains of planning and public administration. This research also provide empirical findings of the planning tools. It has a practical relevance as recommendations for public planners are given on how planning tools can bridge implementation gaps.

2 Methods

In this research we have done literature review and have conducted two in-depth case studies. The theoretical framework has been constructed by a traditional or narrative literature review. This type of literature review provides an objective, exhaustive summary of relevant literature. In this research the used types of literature are scientific articles, books, master's theses and PhD dissertations.

To collect data in the case studies, several research techniques have been used. In qualitative research it is common to use data collection techniques such as document reviews and interviews (Miles & Huberman, 1994).

The choice for two cases is based on the goal to compare the cases. One case should have reached (most of) the pre-formulated sustainable objectives (RijswijkBuiten), while in the second case it looks like it has not reached (most of) the pre-formulated sustainable objectives (Bruisend Dorpshart Kaatsheuvel). This will make it possible to compare the use of the application of the planning tools and the implementation gap.

In the case studies conducted for this research, documents such as indicative plans, contracts, bid books, municipal coalition agreements, master theses, progress reports, news articles and notes of a project have been examined (document reviews).

Semi-structured interviews have been held with key persons from different perspectives to increase the validity of the interviews. Per case study an interview has been held with:

- an Alderman involved with the project
- a municipal project leader
- the developer
- an external consultant of the project.

The interviews have been processed by playback of the recordings and during this the parts relevant for the research were summarized. Then the parts were coded with labels (open coding).

In the case study of RijswijkBuiten it became necessary to conduct a short survey among residents of RijswijkBuiten. The survey was a short online survey that consisted of 7 multiple-choice questions. There have been 25 responses on the survey, so valid conclusions cannot be drawn.

The analytical case study model

The analytical case study model consists of 4 layers or steps: 1. Assessing the case, 2. Identifying the gap, 3. Explaining the gap, and 4. Evaluating the case, see figure A.

- The first layer is a case description with a short introduction about the municipality, the project characteristics and an extensive timeline.
- In the second layer the gap will be identified, by comparing the pre-formulated sustainability ambitions with the realised ambitions. The ambitions will be categorised in the list of sustainable objectives to serve as an objective measurement method. Also the origin of the ambitions will be explored in this layer.
- In the third layer the reasons for the forming of the implementation gap are explained. A project is not only influenced by the use of planning tools, but is set in in a context which influences finances, politics and so on. Therefore the explanation is divided in the use of planning tools and influence of the context.
- Then the fourth layer is put in a separate chapter where a cross case analysis will be made in which the differences and similarities between the cases are evaluated. This will provide the input to give a recommendation about effective ways for public planners to steer on policy implementation.

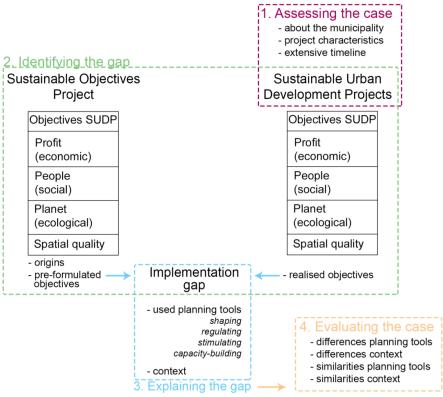


Figure A. The analytical case study model

3 Literature review

This section contains a literature review which provides the theoretical background of the research. In section 3.1 we describe the definition of sustainable urban development and list its objectives. In section 3.2 we list several obstacles for market actors, and in specific developers, which hold them back in realising SUDPs. Section 3.2 explores the gap between decision and implementation and main features of implementation gaps. These are linked to reasons for sustainable urban policy failures. Section 3.4 describes the theory about planning tools that public planners can use to reduce the implementation gap is provided. The conceptual model in section 3.5 summarizes the chapter visually.

3.1 Sustainable urban development characteristics

Sustainability is a broad subject although it has been approached from mainly a technical perspective for a long time. In urban development several disciplines, functions, actors and cash flows are linked to lead to a (re)development of an area with several functions combined, such as infrastructure, housing, parking, working and recreation.

Sustainable urban development has no precise definition but rather consists of several aspects or objectives. A sustainable urban development project aims to realise economic-viable, social-responsible, environmental-friendly urban places (Williams & Dair, 2007).

In this research we have used a list of objectives of sustainable urban development from Buskens (2015) to understand what sustainable urban development comprises (see figure B). This list has enabled us to categorise the sustainability objectives of both case studies.

Objectives sustainable urban development				
Create a favourable location for activity				
D ("./	Stimulate local entrepreneurship			
Profit (economic)	Stimulate local employment			
	Attracting long-term investments			
	Social security			
	Social interaction			
	Comfort and a healthy living environment			
People (social)	Social cohesion			
	Human scale			
	Demand-oriented development			
	Good accessibility			
	Good connection with public transport			
	Stimulating bike-usage and walking			
Planet (ecological)	Self-sufficiency (circular flows)			
Flariet (ecological)	Usage of renewable sources			
	Decrease/prevent environmental pollution			
	Support the living environment and respect ecological structures			
	Varying density			
	Mixed-use			
	Preserving and highlighting distinctive (historical) quality			
Spatial quality	Create identity (place-making)			
	Flexibility: resistant against future changes and innovations			
	Robustness: resistant against changing (weather) conditions			
	Stewardship			

Figure B. Objectives of SUDPs (From Buskens, 2015 based on Puylaert & Werksma, 2011; Adams & Tiesdell, 2010; Lodewijks, 2013; Gehld, 2010; Carmona et al., 2009; Macmilian, 2006)

3.2 Obstacles for market actors to commit to sustainable urban development

There are a number of obstacles for market actors to commit to sustainable urban development which also contribute to the implementation gap between SUPs and SUDPs.

Market actors are not always consulted or are involved too late. Absence of power to enforce achieving sustainability objectives results in variations in the achievement of sustainability, as well as an actor's attitude towards the risks and responsibilities of it and their knowledge of the sustainability issue (Dair & Williams, 2006).

This might also be because the focus on sustainability is relatively new. Sustainability objectives are often applied because of regulation, not mainly from an own belief. Sustainability is often not approached as People, Planet, Profit, but rather as energy efficiency. Therefore the sustainability discussion is primarily focused on the level of real estate instead of the urban area level. Lastly, there is often no integral approach or direction in the development process (Buskens, 2015). Public planners should be aware of obstacles that market actors experience and try to influence them with planning tools.

3.3 The gap between decision and implementation in sustainable urban policies

This section describes the theory about the gap between decision and implementation and main features of implementation gaps, according to the dissertation of Oosterwaal (2011). These are linked to reasons for the limited success of sustainable development policies, as described by Van Bueren & De Jong (2007).

The definition of implementation is 'accomplishing, carrying out, fulfilling, producing or completing a decision. The decision is implemented with a certain level of compliance which can range from implementing a decision completely in conformity with the decision (full compliance) to implementing a decision totally different than prescribed (noncompliance)' (Hill & Hupe 2002: in Oosterwaal, 2011).

Oosterwaal (2011) divides the process from decision making to implementation into three stages: decision making, delegation and implementation (see figure C). This is a schematic representation, in reality some stage may be repeated or skipped.

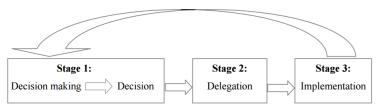


Figure C: The three stages from decision making to implementation (source: Oosterwaal, 2011)

Issues with implementer compliance can rise in all three stages and thus (in)directly affect each other. In each stage Oosterwaal (2011) has identified main features which affect compliant implementation of decisions, see figure D.

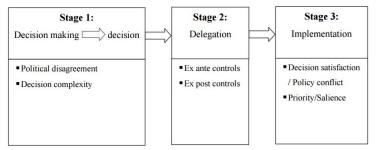


Figure D: The main features (source: Oosterwaal, 2011)

Main features of implementation gaps

- When there is political disagreement this means there are diverging preferences of decision makers about the proper course of action.
- Decision complexity arises when decision makers to not know what decisions to make in order to achieve a desired outcome.
- Ex ante controls are the rules for the methods and procedures used to specify how a decision should be implemented. The more ex ante controls there are and the higher their level of strictness, the less room there is for interpretation of the implementer.
- Ex post controls can also be added to realise compliance, because they increase the threat of detection and sanctioning of noncompliant implementation.
- There are also features of implementers that affect implementation. Policy conflict refers to the difference between the preferred decision of an implementer and the decision he or she has to implement.
- Salience of a decision is about how important a decision is to the implementer.

Reasons for limited success of SUP implementation

- Sustainable development is a contested or wicked concept (Rittel and Webber, 1973; Connolly, 1983 in Van Bueren & De Jong, 2007), which means it has an indefinite and ambiguous character.
 It is hard to know what decisions to make in order to achieve a desired outcome, this is decision complexity.
- The institutional systems in which policies are developed, lead to systemic barriers to sustainable development. Institutions are the 'rules of the game' and can be recognized as ex ante controls. Political institutions as part of the failure of sustainability policies, can be seen as political disagreement.
- A developer should invest in for example low-maintenance materials, but is not the one who reaps the benefits of lower maintenance costs, the owner is. This can result in low attraction for developers to develop sustainable buildings. This is a feature of the implementer affecting the implementation, policy conflict.
- Sustainability is often put on the agenda too late, when decision-making is well under way, which makes it harder or no longer possible to integrate sustainability measures in the project. In these situations it would seem that sustainability is not of importance for the implementer, so we recognize salience of a decision.

In table A below an overview of the relations between the stages, main features of the gaps, and the several reasons for limited success of SUPs has been made.

Table A: the relations between the stages, main features of gaps and reasons for SUP failure

Stage	Main feature	SUP reason
	Political disagreement	Institutional systems
Decision making	Decision complexity	Sustainability as a wicked concept
	Ex ante controls	Institutional systems
Delegation	Ex post controls	
Implementation	Policy conflict	Asymmetry of costs and benefits
implementation	Salience of a decision	Too late put on agenda

However, these are not the sole explanations for sustainable urban policies to fail to implement with compliance. Policies cannot be seen in isolation from the context it operates in (Bressers, 2004), which means that the context also influences whether policies are or can be implemented or not.

3.4 The planning tools

Adams et al. (2005) have made a typology which identifies four basic types of policy instruments or tools, in this research called 'planning tools'. The four tools, shaping, regulating, stimulating and capacity building, can be deployed to influence market decision-making. With related planning actions the public planner can transform market operations.

The decision environment can be seen as a space which gives the actor more room or less room to manoeuvre and is constrained by the context.

Shaping tools encourage market actors to see benefit for themselves in meeting policy objectives. In the land and property market context, the principal directive shaping tool can be considered plans. Some plans are more effective than others in shaping decisions of market actors. Adams & Watkins (2014) suggest a few plan characteristics which usually successfully influence markets.

The market shaping tool in the form of a plan can help reducing the implementation gap if they contain the variables of successful plan characteristics:

Clear and apparent evidence base	Plan maker's capacity to marshal wider resources
Plan's persuasive logic and rationale	Attractive communication and presentation
Identity of plan maker	Stakeholder engagement
Charismatic, persuasive advocates	Community support

Endorsement by higher-level actors

Regulating tools limit the actors' scope for autonomous action by regulating and controlling market actions and transactions. There are 'state' regulations which in principle apply universally, and 'contractual' regulations which apply to the parties covered in the contract. There are several regulatory instruments such as standards, certifications, controls, permits and licenses that might lead to more sustainable outcomes in urban area development projects (Hendrickson et al., 2011 in Heurkens, 2016).

Stimulus tools encourage market actors to produce more desirable outcomes. This can be done with direct state action (state intervention such as compulsory purchase) or the indirect actions price-adjusting (development grants, tax incentives, project bonuses), risk-reducing (accurate market information, policy certainty and stability) and capital-raising (loan guarantees, public-private partnerships).

Capacity building supports market shaping, regulation and stimulus but is a separate planning tool. There are four areas in capacity building:

- Market-shaping cultures, mind-sets and ideas
 This is about how 'things' are perceived and the need to think 'outside of the box'
- Market-rich information and knowledge
 This is needed to create better places by influencing the market and development processes
- Market-rooted networks

 This is about relations across the development spectrum. It is beneficial to have informal debates and share knowledge across the sectors, so planners know how to best shape, regulate and stimulate real estate markets.
- Market-relevant skills and capabilities
 This is about the individual skills of key persons and organisations the human capital in the development process. Adams & Tiesdell (2013) state that 'planning tools are only as effective as the individuals and organisation charged with their delivery'.

Table B gives an overview of the four planning tool, their impact on market decision environment and the sub-types.

Table B. Planning tool types and intended market effect (source: Adams et al., 2005: 64; Adams and Tiesdell, 2013: 134-35; in Heurkens, Adams & Hobma, 2015)

Instruments	Impact on markets	Sub-types and examples
		Development/investment plans
	Shape decision environment of	Public (infrastructure) investment plans
Oh '	development actors by setting broad	Regulatory plans
Shaping	context for market actions and	Statutory plans, policies, strategies
	transactions	Indicative plans
		Non-statutory plans, policies, strategies
	Constrain decision environment of	State/third party regulation
Demulation	development actors by regulating or	Planning permission, property rights
Regulating	controlling market actions and	Contractual regulation
	transactions	Development, section 106 agreements
	Expand decision environment of development actors by facilitating market actions and transactions	Direct state actions
		Reclamation, infrastructure, land acquisition
		Price-adjusting instruments
Stimulus		Grants, tax incentives, bonuses
Sumulus		Risk-reducing instruments
		Policy certainty, place management
		Capital-raising instruments
		Loan guarantees, funds, partnerships
		Market-shaping cultures, mind-sets, ideas
		New perspectives, ways of thinking
	Enable development actors to operate	Market-rich information and knowledge
Capacity building	more effectively within their decision environment and so facilitate the operation of other policy instruments	Market and development process logics
		Market-rooted networks
		Formal and informal interaction arenas
		Market-relevant skills
		Human capital, individuals

3.5 Conceptual model

This conceptual model (figure E) is how in this research the problem, the implementation gap, is explored. There are several influences on the size of the implementation gap: obstacles for market actors to commit to SUDPs and from the policy side there are reasons too. However, if the planning tools (section 3.4) are used successfully it can be the bridge between SUPs and SUDPs and thus no implementation gap should form. All happens in the context of the urban development practice.

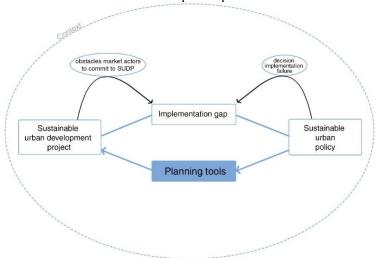


Figure E. The conceptual model

4 Case studies

Two in-depth case studies have been conducted. The first case is RijswijkBuiten in Rijswijk which has been selected as a project where highly ambitious sustainability objectives are being realised. The second case is

Bruisend Dorpshart in Kaatsheuvel where the level of ambition for most of the sustainability objectives was not as high and not all objectives have been realised.

4.1 RijswijkBuiten

RijswijkBuiten is part of the municipality of Rijswijk, a city located in the Southwest of the Netherlands between The Hague and Rotterdam. RijswijkBuiten is divided into three sub-areas: Sion, 't Haantje and Pasgeld. The whole area covers ca. 230 hectares greenfield, including the parks. Until recently the area was used for the greenhouse industry, but the history of this southern part of Rijswijk goes back to the 15th century. A monastery named Sion was build there and stood there for 140 years. The contours of the monastery's garden are still visible in the water structure of the area (Gemeente Rijswijk, 2009).

Because there was no future anymore for the greenhouse industry the municipality set up a new vision for the area with mainly housing. A separate division within the municipality was set up in 2009 to oversee the development: 'Programmabureau RijswijkBuiten' (English: Program office RijswijkBuiten). In March 2011 the Programmabureau RijswijkBuiten issued a tender to look for a development partner, which has been awarded to Dura Vermeer. The municipality wanted more than a developer, they were looking for a partner who would help guide in the process from wasteland to a residential area (Dossier 2, 2013).

The implementation gap

The pre-formulated objectives have been found in the Masterplan Rijswijk-Zuid (Gemeente Rijswijk, 2009) and based on the interviews, an online survey, and (news) articles the information about the realised objectives has been gathered. In table C we see the overview of the pre-formulated and realised objectives, which depicts the implementation gap.

Although not all objectives are implemented (yet), overall it can be stated that the implementation gap is fairly small in RijswijkBuiten. An objective which is often the obstacle in implementation is the usage of renewable sources. Its implementation and also of the social objectives have contributed to the successfulness of RijswijkBuiten (www.hetgroteduurzaamheidscongres.nl).

Table C. Overview of pre-formulated and realised sustainability objectives in RijswijkBuiten (n.a.y.: not available yet)

	Objectives sustainable urban development	Pre	Realised
	in RijswijkBuiten	formulated	
Profit	Create a favourable location for activity	Yes	n.a.y.
(economic)	Stimulate local entrepreneurship	Yes	n.a.y.
	Stimulate local employment	No	No
	Attracting long-term investments	Yes	n.a.y.
People	Social security	Yes	(indication) Yes
(social)	Social interaction	Yes	(indication) Yes
	Comfort and a healthy living environment	Yes	(indication) Yes
	Social cohesion	Yes	(indication) Yes
	Human scale	No	No
	Demand-oriented development	Yes	Yes
	Good accessibility	Yes	Yes
Planet (ecological)	Good connection with public transport	Yes	n.a.y.
	Stimulating bike-usage and walking	Yes	Yes
	Self-sufficiency (circular flows)	Yes	Yes
	Usage of renewable sources	Yes	Yes
	Decrease/prevent environmental pollution	Yes	n.a.y.
	Support the living environment and respect ecological structures	Yes	n.a.y.
Spatial	Varying density	Yes	n.a.y.
quality	Mixed-use	Yes	n.a.y.
	Preserving and highlighting distinctive (historical) quality	Yes	Yes
	Create identity (place-making)	Yes	Yes
	Flexibility: resistant against future changes and innovations	No	No
	Robustness: resistant against changing (weather) conditions	Yes	n.a.y.
	Stewardship	No	No

The used planning tools

In the RijswijkBuiten case the development conditions of the project have mainly been *shaped* in the form of an extensive masterplan which outlines the ambitions, and functions as a guide for the development.

Many parties have been involved in the plan making process of the Masterplan. When looking at the key variables of a persuasive plan we see many variables have been present, see table D.

Table D. Key variables of a persuasive plan in RijswijkBuiten

Masterplan Rijswijk-Zuid 2009 (RijswijkBuiten)			
Clear and apparent evidence	Energy ambitions (EPC 0) are checked and substantiated by a consultancy firm		
base	specialized in sustainable energy and turned out to be realistic		
Plan's persuasive logic and rationale	Aware of risks of area development and how markets operate by steering on demand oriented development		
Identity of plan maker	Plan maker is a government body (municipality)		
Charismatic, persuasive advocates	Not clear		
Endorsement by higher-level actors	Province was involved in making the Masterplan		
Plan maker's capacity to marshal wider resources	Slight expansions of the basis plan have been added, which would need financial cooperation		
Attractive communication and presentation	Attractively presented as a brochure with many images, in a clear and simple language		
Stakeholder engagement	During an interactive process with civil servants, the executive board and the city council the Masterplan was set up. Other stakeholders such as the neighbouring municipality of Delft, the Province of South-Holland, the Metropole region of Rotterdam and The Hague, ProRail and social organisations have been involved in the process as well. Besides these stakeholders, external consultants from the TU Delft, the regional water authority and an urban design firm have given specific advices about for example the urban design, sustainability and the water aspect.		
Community support	Community aspirations not known		

The land-use plan (*regulating*) has been made with the support of the Province, which asked to use the DPL instrument (Dutch: DuurzaamheidsProfiel van een Locatie, English: Sustainability Profile of a Location). This instrument comprises 25 aspects of sustainability and gives a score on these aspects by comparing the development with a default area.

In the tender the market actors were asked to provide a low as possible EPC score. Dura Vermeer who has won the tender had offered an EPC 0, which has been put in the contract on a voluntarily basis.

Several *stimulating* measures have been used in the RijswijkBuiten development:

- Direct state action: Municipal PreEmption Rights Act. Resulting in that the majority of the land is owned by the municipality and fragmentation of land is small. The municipality can keep control of the site and have an active land policy
- Capital-raising action: 'Rijswijk Model'. In this cooperation model the land ownership remains with the municipality, the development partner gets the right to build on developed land. The development partner does not have to pay a large amount of money upfront to buy land and thus take a lot of risks, but is still able to build.
- Risk-reducing action: accurate market information. The energy ambitions of the municipality have been checked by external consultants to find out if they were feasible.
- Capital-raising action: 'self-subsidy'. To prevent that objectives would not get implemented, the firs dwellings have been 'self-subsidised' from the land exploitation. The land price was set lower, to finance the sustainable energy measures without raising the selling price.
- Risk-reducing action: stability. Continuity of the people in the process.

Many *capacity building* actions can be recognised in RijswijkBuiten. They have not followed the common way of thinking of selecting a developer, but chose a development partner that besides the usual activities of a developer also gives advice and brings in their knowledge as an equal partner. The planners have good information and knowledge about the market, also partly as a result of the cooperation with a development partner. There is a close engagement between the planners of RijswijkBuiten and the city council and with other market actors. The main characteristics of the human capital in RijswijkBuiten are the strong personality of the public planners and their determination of implementing the ambitions.

The influence of the context

There are also external factors which positively and negatively influence the degree of success of the RijswijkBuiten development.

- The location of RijswijkBuiten is attractive
- The tender was issued during the crisis: developers were eager to find work
- The products that are offered are very much in demand
- There is no public transport yet, because this is not organised by the municipality

4.2 Bruisend Dorpshart Kaatsheuvel

Bruisend Dorpshart (English: Lively Village's Heart) is part of the town centre of Kaatsheuvel, a village in the South East of the Netherlands. The municipality had the wish to redevelop the area in the centre of Kaatsheuvel, so it would get a quality boost and strengthen the identity of the town centre by creating a 'Lively Village's Heart' on and around the market square.

The redevelopment consisted of the construction of a new town hall, a multifunctional accommodation as a social and cultural centre, housing with commercial space in the plinth and the public space. A non-public procurement procedure was started which led to an award of a group of developers consisting of Heijmans, Proper Stok and the housing corporation WSG.

Soon after the agreement was signed, WSG had to be replaced because of internal issues. Housing corporation Casade came on board. Prompted by this change and financially hard times at the municipality and the market in general, the plans were revised. The town hall would be placed within the multifunctional accommodation and more housing would be added by Casade.

The implementation gap

The pre-formulated objectives have been found in the Bid book (Gemeente Loon op Zand, 2009) of the project and the document Duurzaam Verbindend¹, an ambition document concerning sustainability. The information for the realised objectives has been gathered via news articles, interviews and documents.

The gap in table E does not look large, however it should be kept in mind that a large sustainability objective, a thermal energy storage system under the whole development, has not been implemented. Furthermore, the ambition level of many other objectives was not very high.

Table E. Overview of pre-formulated and realised sustainability objectives in Bruisend Dorpshart

	Objectives sustainable urban development in Bruisend Dorpshart Kaatsheuvel	Pre formulated	Realised
Profit	Create a favourable location for activity	Yes	Yes
(economic)	Stimulate local entrepreneurship	Yes	Yes
	Stimulate local employment	No	No
	Attracting long-term investments	Yes	Yes
People (social)	Social security	Yes	partly
	Social interaction	Yes	Yes
	Comfort and a healthy living environment	Yes	Yes
	Social cohesion	Yes	Yes
	Human scale	Yes	Yes
	Demand-oriented development	No	No
	Good accessibility	Yes	Yes
Planet	Good connection with public transport	Yes	Yes
(ecological)	Stimulating bike-usage and walking	Yes	Yes
	Self-sufficiency (circular flows)	No	No
	Usage of renewable sources	Yes	partly
	Decrease/prevent environmental pollution	Yes	partly
	Support the living environment and respect ecological structures	Yes	Yes
Spatial quality	Varying density	No	No
	Mixed-use	Yes	Yes
	Preserving and highlighting distinctive (historical) quality	No	No
	Create identity (place-making)	Yes	Yes
	Flexibility: resistant against future changes and innovations	Yes	No
	Robustness: resistant against changing (weather) conditions	Yes	Yes
	Stewardship	No	No

The used planning tools

The basis for the *shaping* tools has been to create a lively town centre in Kaatsheuvel. This main ambitions and others have been set out in the Bid book of the tender and in the sustainability ambition document

¹ Internal document accessed via Brink Management/Advies

Duurzaam Verbindend². A visual quality plan was made during creative sessions with a group of city council members, residents and professionals. The table with the key variable of a persuasive plan has been filled in for both documents, see table F.

Table F. Key variables of a persuasive plan in Bruisend Dorpshart

	Bid book Bruisend Dorpshart Kaatsheuvel (2009)	Duurzaam Verbindend Bruisend Dorpshart Kaatsheuvel (2009)
Clear and apparent evidence base	Is based on studies of urban design and architecture firms	WKO seems to be put in the ambition for the plan, without sufficient (financial) analysis
Plan's persuasive logic and rationale	It does not have signs of misunderstanding markets	It does not have signs of misunderstanding markets
Identity of plan maker	Two aldermen and interim managers	Plan maker is an installation consultancy, client is municipality
Charismatic, persuasive advocates	Not clear	Not clear
Endorsement by higher- level actors	No signs of endorsement by higher-level actors	No signs of endorsement by higher-level actors
Plan maker's capacity to marshal wider resources	Not clear	Not clear
Attractive communication and presentation	A clear presentation as a brochure. However, it is not publicly available, only used in tender procedure.	An appendix to the bid book, with mainly text and technical explanations. No special lay-out, not publicly available
Stakeholder engagement	Involvement of residents in visual quality plan	No signs of engagement of other stakeholders
Community support	Community aspirations not known	Community aspirations not known

Duurzaam Verbindend was an appendix of the development agreement, so a *regulating* tool. After negotiations with the developers, the WKO (thermal energy storage system) was taken out of Duurzaam Verbindend, because the developers have had negative experiences with it.

Stimulating tools have not really been used in Bruisend Dorpshart: some parts have had to be purchased compulsory and a governmental subsidy for urban renewal had been requested. The impact of these stimulating tools do not seem to have influenced the decision environment.

A few capacity building tools have been used, but are not very strongly dominating. Mostly the market relevant skills can be found, since the collaboration between actors has been mentioned as an essential success factor several times in the interviews. As a small municipality it was good to hire a consultancy firm and use market expertise for the tender.

The influence of the context

Several external factors have influenced the development of Bruisend Dorpshart Kaatsheuvel.

- The housing corporation WSG had to withdraw itself from the development, after internal issues became clear. WSG was replaced by Casade
- After Casade joined the development negotiations started about possible plan changes within the boundaries of the tender. The town hall was removed from the plan and would be placed in the multifunctional accommodation. On the site where the town hall would have been build, Casade would now build housing apartments.
- The exploitation of the multifunctional accommodation would have been done by WSG, but after the renegotiations the municipality took the exploitation upon itself.

5 Cross case analysis

The use of planning tools of both cases have been compared with each other, as well as the contextual influences. Table G makes it clear that there have been more planning tools used in RijswijkBuiten than in Kaatsheuvel to influence market decisions.

² Internal documents accessed via Brink Management/Advies

Table G. Planning tools used in RijswijkBuiten and Bruisend Dorpshart Kaatsheuvel

Tools	RijswijkBuiten	Bruisend Dorpshart Kaatsheuvel
Shaping	Development/investment plans	Development/investment plans
	Regulatory plans	
	Land-use plan (with DPL instrument),	Regulatory plans
	Indicative plans	Land-use plan
	Masterplan	Indicative plans
	Project plan by Merosch	Bid book, Visual quality plan, Duurzaam Verbindend
Regulating	State/third party regulation	State/third party regulation
	Development permit (Omgevingsvergunning)	Development permit (Omgevingsvergunning)
	Contractual regulation	Contractual regulation
	EPC 0 in contract development partner	Duurzaam Verbindend part of contract
Stimulus	Direct state actions	Direct state actions
	Municipal PreEmption Rights Act	Compulsory purchase
	Price-adjusting actions	Price-adjusting actions
	Governmental subsidy for 5 NOM dwellings	ISV subsidy (Investeringsbudget Stedelijke
	Risk-reducing actions	Vernieuwing)
	Rijswijk model ('bouwclaim nieuwe stijl')	Risk-reducing actions
	Municipal PreEmption Rights Act	
	Continuity in team	Capital-raising actions
	Ambition check	
	Capital-raising actions	
	Rijswijk model ('bouwclaim nieuwe stijl')	
	'Self-subsidy' from land exploitation	
Capacity	Market-shaping cultures, mind-sets, ideas	Market-shaping cultures, mind-sets, ideas
building	Using a development partner, active participation	
	Market-rich information and knowledge	
	Knowledge of the real estate market, trends and	Market-rich information and knowledge
	developments, understanding each other's motives	Consultancy firm
	and risks.	
	Market-rooted networks	
	Good cooperation, trust, transparency	Market-rooted networks
	Market-relevant skills	Fairly good cooperation
	Tenacity, strong personality	Market-relevant skills
		Perseverance

The process of when which planning tools and actions have been used is constructed in figure F, which gives us insight in the relation between the planning tools and actions and their influences on each other.

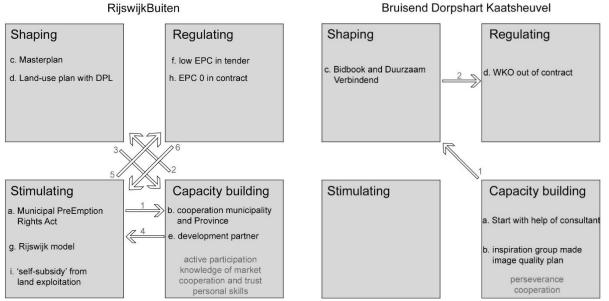


Figure F. Process and relation of planning tools and actions in case studies (based on Heurkens et al., 2015)

In RijswijkBuiten we can see that the tools and actions are all related to each other. There is a kind of iterative process where capacity-building is a stopover between almost every other action. We have seen in

the case study analysis that active participation, knowledge of the market, cooperation and trust, and personal skills have been present during the whole process.

According to the analysis of Bruisend Dorpshart Kaatsheuvel in this research, there are hardly any relations between the tools and the process is quite traditional. The stimulating tools have not been integrated, because they did not seem to have influenced the decision environment. During the whole process, the municipality was perseverant to realise the project and according to the interviewees there was a good cooperation between the actors.

Differences in planning tools

Shaping

The plan making process has been different in both cases:

- In RijswijkBuiten many stakeholders were involved in writing the masterplan, while this has not been the case in Kaatsheuvel.
- There is a difference in the communication about the sustainable objectives and the content of the objectives. The masterplan of RijswijkBuiten is publicly accessible and is an attractive document in which objectives are named in the broad perspective of people, planet and profit. There are other objectives stated in the masterplan besides the sustainability objectives, it also serves as a guide for the whole development.
- The bid book and sustainable objectives document of Kaatsheuvel were only part of the tender and agreement, not publicly available and mainly consists of sustainable objectives translated into technical objectives.

Regulating

In both case studies the sustainability objectives have been taken into the contract, however:

- In the case of Kaatsheuvel the developers negotiated about taking the WKO out, resulting in a smaller objective.
- In the tender that was issued in RijswijkBuiten, the market has been stimulated to set the bar higher by asking for a low as possible EPC score. Consequently, the development partner came up with a higher EPC objective than initially asked by the municipality. This higher objective is part of the contract.

Stimulating

- The public planner has taken a more active role in RijswijkBuiten than Kaatsheuvel, mainly because of the fact that the municipality of Rijswijk deployed the Municipalities Preferential Rights Act in 2006.
- Another stimulating tool in RijswijkBuiten was a capital-raising instrument with a different approach of risk division which made it possible for the development partner to enter the large urban development without paying a large amount of money upfront.
- A 'self-subsidy' from the land exploitation has been used by the municipality of Rijswijk to prevent that sustainable objectives would not get implemented for financial reasons.

Capacity building

- In RijswijkBuiten the planners have a good knowledge of the real estate market.
- Both the development partner and the Programmabureau RijswijkBuiten know each other's risks and motives, which has been the basis for the trust and transparency between them.
- The planners in Rijswijk are actively involved in all aspects of the development process.
- There is a good cooperation with the city council of Rijswijk and the market and from the beginning support was created with surrounding actors and other public bodies.
- In Kaatsheuvel it would seem the knowledge of the market was not that well. This appears from the demand of a WKO although it was not financially feasible and it did not attract market parties.
- After the agreements were signed with the developers, the public planners of Kaatsheuvel were not part of the development team and process of the non-public buildings anymore.

Differences in context

- The attractiveness of the locations is different
- In Kaatsheuvel one of the developers had to withdraw itself from the development which led to a delay and renegotiations
- There is a difference in the size and financial position of both municipalities
- The municipality of Rijswijk has an active attitude towards sustainability in general, while the municipality of Loon op Zand has a passive attitude.

Similarities in planning tools

There are not many similarities in the use of planning tools, except that in both cases the market-relevant skills have been present. All the interviewees, of both cases, have mentioned that there has been a good cooperation and determination from the actors.

Similarities in context

- The timing of both projects was similar. Concrete plans have started in 2006 for Rijswijk and in 2007 for Kaatsheuvel. Construction started during the financial crisis: in Rijswijk in 2013 and Kaatsheuvel in 2012.
- The city councils of both municipalities were determined to make the development a success.
- Both cases had no municipal framework or policy about sustainability objectives in SUDPs

Cross case conclusion

In this cross case analysis we have compared the collected case material of this research and have seen that there are differences and similarities in the used planning tools and the context. A few conclusion have been made:

- There have been more planning tools and actions used in RijswijkBuiten than in Bruisend Dorpshart Kaatsheuvel
- Capacity building actions have been more present in RijswijkBuiten than in Bruisend Dorpshart Kaatsheuvel. Also in RijswijkBuiten there has been more interaction between the planning tools and actions
- There is a difference in the attitude of the municipalities towards sustainability in general. The municipality of Loon op Zand (Bruisend Dorpshart Kaatsheuvel) has a passive attitude, while the municipality of Rijswijk has adopted an active attitude.
- Contextual influences that could not have been bridged with planning tools have had an impact on the implementation gap
- In both cases it is mentioned that cooperation, determination and the people involved in the process have been essential for the realisation of the project.

6 Conclusion

To answer the main research question:

How can public planners use planning tools to bridge the implementation gap between sustainable urban policies and sustainable urban development projects?

The following table (table H) is based on the theoretical framework and empirical findings and gives the answer on the main research question.

Table H. overview of how planning tools can bridge the gap between SUPs and SUDPs

Peacone for				Stimulating	
Reasons for limited success SUP implementation	Main feature of implementation gap	Shaping	Regulating	Stimulating	Capacity-building
Sustainability as a wicked concept	Decision complexity	Make substantive analyses of socio-economic trends to have a clear and apparent evidence base. Engage other stakeholders in the process to gather information. This enables to operationalize sustainability into concrete goals. e.g. Masterplan Rijswijk-Zuid			Information and knowledge about sustainability, the market and development process is needed to be able to operationalize sustainable goals. Networks/relations can be beneficial to share knowledge and precedents e.g. help from consultants, cooperation with a market actor
Institutional systems	Ex ante controls	Give clear explanations of what the intentions of the plan are to have less room for interpretation by the developer e.g. Bid book Bruisend Dorpshart Kaatsheuvel	Regulation should be beneficial for sustainability objectives instead of conflicting. Rules for methods and procedures should be clear e.g. 'Change building codes and zoning standards to support sustainable outcomes, link planning applications and development approval processes to sustainable objectives, and create non-financial incentives for sustainable behaviour.' (Heurkens, 2016)	Price-adjusting and capital-raising actions can help overcome conflicting formal (financial or economic) institutions. e.g. Rijswijk Model and 'self-subsidy' from land exploitation	A change of mind-set could help to bypass formal and informal institutions. Knowledge of the institutional system is necessary for this. e.g. cooperation with a development partner as in Rijswijk
	Political disagreement	Shape an institutional framework which encourages sustainability that can serve as a basis for decisions to make e.g. municipal policy on sustainability objectives	'Social sanctions' can help to turn political disagreement into compromise, which has a positive effect on implementation e.g. harmed self-interest, (public) image		Information and knowledge about the issue can help decrease the disagreement. Personal skills as being convincing can also result in more agreement between decision-makers e.g. cooperation with higher governmental levels (Province and RijswijkBuiten)
Asymmetry of costs and benefits	Policy conflict	Shaping tools encourage developers to see benefit for themselves in meeting policy objectives. e.g. a logical and realistic masterplan with an evidence base	Use regulation to persuade developers to adapt their ideas according to the policy, instead of sanctioning e.g. stimulate developers to set the bar higher during the tender procedure	To reduce non-compliance because of financial reasons can be done with price-adjusting and capital-raising instruments. This for example can also be public-private partnerships where risks and rewards are shared. e.g. Rijswijk Model and 'self-subsidy' from land exploitation	The implementation of a decision should not be completely delegated to the developer (the implementer), but there should be a form of collaboration. Trust, knowledge and personal skills are needed here. e.g. RijswijkBuiten with the mind-set to collaborate with a development partner and use of Rijswijk Model in financial hard times
Put on agenda too late	Salience of a decision	Create an institutional framework that encourages and rewards integration of sustainability in the development process. Translate abstract sustainability policy aims into project goals or objectives. e.g. Project plan of Merosch in RijswijkBuiten and Duurzaam Verbindend in Kaatsheuvel		Financial incentives could make it stimulating to integrate sustainability in the process. A risk-reducing action such as having accurate market information to match perceived risks to real returns, could also create interest in the subject as it builds confidence for developers. e.g. check the feasibility of ambitions by experts/consultants. Also continuity in the team to build a collective memory and knowledge base	By being an active participant in the development process as a public planner, influence can be exerted on integrating sustainability measures in the process. e.g. planners of RijswijkBuiten were early involved in the whole process

Several concluding statements have been made based on this research, but are not all validated because we have conducted only two case studies:

- There are several planning tools for public planners to use (Adams et al., 2005)
- A combination of actions of the planning tools is needed to be able to effectively bridge an implementation gap
- Capacity building plays a facilitating role for the other tools and bridging the implementation gap and should be present during the whole process
- Contextual influences can have an impact on implementation gaps that cannot always be bridged with the planning tools

- Also it would seem that the presence of *only individual skills* does not lead to an effective use of capacity building. We might say that the individual skills should *support the other forms* of capacity building, and are important to have *as a basis* to be able to change mind-sets, be open to gain and share knowledge and to cooperate with others. Then capacity building can facilitate the better operation of the other planning tools.

7 Recommendations

Besides the answer in the conclusion, in this chapter several recommendations for public planners are given related to the use of the planning tools: shaping, regulating, stimulating and capacity building. Overall, the pillar of these recommendations is the human capital of the people involved. This supports capacity building, which in turn facilitates the other three tools and actions.

The recommendation is that the public planner should have certain competences such as negotiating skills, the ability to convince others, be able to cooperate with others, trust others and be trusted, be determined and stand their ground, but also to be open for new ways of thinking, knowledge and compromise. The individual skills of the public planner are essential for the effective use of capacity building and should be present during the whole process. The concluding table of this research can be used as a guide to bridge implementation gaps between SUPs and SUDPs.

The recommendation is to have a certain framework in place that can serve as a guideline when the objectives for a SUDP are drawn. This can be in the form of a municipal policy document or by using an elaborate instrument where one can check the influence of the objectives on the sustainability level of the whole development. Preferably there should be a municipal framework with set goals to draw objectives that contribute to these goals.

The recommendation is to incorporate the following points in the plan making process:

- a clear and apparent evidence base
- awareness of risks
- stakeholder engagement
- endorsement by higher level actors

The recommendation is to not formulate sustainability objectives that are too ambitious, which could not be implemented by the market actor. Sustainability objectives should be ambitious, but realistic and feasible as well.

The recommendation is to not provide too many restrictions in the tender procedure. This offers market actors freedom of how objectives should be realised. *However*, it should be very clear what the goal of the objective is, because too much room for interpretation may result in that an objective is not reached at all.

Table of Contents

С	Colofon	3
F	oreword	4
V	//anagement summary	5
1	. Introduction	23
	1.1 Research motives	23
	1.2 Problem statement	26
	1.3 Research goal	27
	1.4 Research questions	27
	1.5 Research design	28
	1.6 Research demarcation	30
	1.7 Relevance	31
2	. Theories	33
	2.1 Sustainable urban development characteristics	33
	2.2 Obstacles for market actors to commit to sustainable urban development	35
	2.3 The gap between decision and implementation in sustainable urban policies	36
	2.4 The planning tools	39
	2.5 Conceptual model	44
3	. Case study methodology	46
	3.1 Analytical case study model	46
	3.2 Research techniques case studies	49
	3.3 Method: case studies	51
4	. Case 1: RijswijkBuiten, Rijswijk	53
	4.1 About the municipality	53
	4.2 Project characteristics	53
	4.3 Extensive timeline of Rijswijk-Zuid to RijswijkBuiten	54
	4.4 Identifying the implementation gap	55
	4.5 Explaining the implementation gap	62
5	. Case 2: Bruisend Dorpshart, Kaatsheuvel	69
	5.1 About the municipality	69
	5.2 Project characteristics	69
	5.3 Extensive timeline Bruisend Dorpshart Kaatsheuvel	71
	5.4 Identifying the implementation gap	71
	5.5 Explaining the implementation gap	77
6	. Cross case analysis	82
	6.1 Differences in planning tools	84
	6.2 Differences in context	86
	6.3 Similarities in planning tools	87
	6.4 Similarities in context	88
	6.5 Cross case conclusion	22

7.	Conclusion	89
	7.1 Sub-questions	89
	7.2 Conclusion main research question	90
	7.3 The relation between human capital and capacity building	94
8.	Recommendations	96
	Throughout the whole process	96
	A coherent (municipal) sustainability framework	97
	Drawing project objectives in a plan	97
	Think about the implementer	98
	Tender not too tight	98
	In conclusion	99
	8.1 Recommendations for further research	99
9.	Reflection	100
	Theory	100
	Case study methodology	100
	Case study analysis	100
	Relation with graduation lab	100
	Process	100
10	D. References	100
Appe	endix I: Case references	103
Appe	endix II: Interview schemes	105
Appe	endix III: Interview analyses with open coding Fout! Bladwijzer niet gedefin	nieerd.
Anne	endix IV: Survey guestions and results RiiswiikBuiten	114

1. Introduction

The economic and financial crisis of 2008 has revealed flaws in the spatial planning of the Netherlands; outdated legislation, modernistic planning and architecture, high administrative densities and an illusion of manageability. Since these flaws have been revealed, it meant the end for urban area development that was only focused on developing and selling the highest amount of square meters possible on a location. The beaten track of urban development practice is being questioned since the crisis. The focus has shifted more towards *sustainable* urban development which asks for a transition in the spatial planning domain (Buiter & Verschoor, 2014).

Often it is thought that sustainability is only a technical issue, with much emphasis on subjects as materials, energy and technical innovations. Although these are important too, the main approach of sustainable urban development is that all stakeholders act wisely. This provides the best foundation for an urban development with distinctive quality (Puylaert & Werksma, 2011).

Municipalities want and need to deliver sustainable urban development projects and translate this to public policies. But in the Netherlands, as in many of other Western countries, the dependence of local authorities on private-sector development and investments is increasing. However, this still requires a formal and informal relationship between the public and private sector (Heurkens, Adams & Hobma, 2015). Municipalities rely on market actors to implement their public planning policies (Heurkens & Hobma, 2014). It is a known issue that policies are often not implemented or not implemented correctly (Gerston, 2010), which is known as the policy-implementation gap.

Public planners have several planning instruments at their disposal. Adams, Watkins & White (2005) have categorised four planning tools related to the land and property market and these have been further developed ever since (Adams & Tiesdell, 2010, 2013; Adams & Watkins, 2014; Heurkens, Adams & Hobma, 2015). With the planning tools, shaping, regulating, stimulating, and capacity building, public planners can influence the decision environments of other market actors and bridge the policy-implementation gap.

In this research we will explore several theories and look at how the planning tools are used in practice in two in-depth case studies. This enables us to give a recommendation for future use of planning tools to bridge policy implementation gaps between sustainable urban policies (SUPs) and sustainable urban development projects (SUDPs).

This first chapter describes the scope of the research by explaining the research motives, the problem statement, the research goal, the research questions, the research design, the research focus and the relevance. Chapter 2 provides the theoretical framework about SUDPs, obstacles for market actors to commit to SUDPs, the gap between decision and implementation, and the planning tools, resulting in a conceptual model. Then chapter 3 describes the case study methodology and also provides the analytical case study model. In the chapters 4 and 5 the case studies can be found. Chapter 4 is about the case study in RijswijkBuiten, Rijswijk and chapter 5 about the case study Bruisend Dorpshart, Kaatsheuvel. In chapter 6 a cross case analysis is conducted. Then in chapter 7 the conclusion is made and finally in chapter 8 the recommendations are given.

1.1 Research motives

The demand of sustainability on several governmental levels, the policy-implementation gap and the changing State-Market relations have been the motives to set up this research. These three motives are further described below.

1.1.1 The demand of sustainability on several governmental levels

Structural issues concerning energy supply, climate change and globalisation demand a more sustainable way of dealing with space. There is a need for ecological, economic and social sustainable urban development (Puylaert & Werksma, 2011).

On several levels of governments there are ambitions for a more sustainable world. This happens on a global scale to municipal scale. Ambitions and laws are specified more and more on every lower level of government. Often policies, laws and agreements are about the climate and the environment, although sustainability also comprises the social and economic domains.

An example of sustainability issues tackled on a global level is the Climate Change Conference which is held annually by the United Nations. The most recent conference was in Paris in December 2015. The conference's goal was to agree to a legally binding and universal agreement about the climate, for all countries in the world. Mainly, it was about agreements to decrease the emission of greenhouse gases. Besides this, the use of fossil fuels should stop soon. This agreement demands the participating countries to set ambitious national climate plans (Wikipedia, n.d.)

The European Union started its environmental policies in 1972, because it saw a joint approach of environmental issues was necessary to keep the air and water in Europe as clean as possible. Nowadays an important share of Dutch environmental law is determined by European environmental directions (Milieuloket, n.d.)

It is up to national governments in the EU to determine the way European norms are reached. On a national level sustainability often refers to energy efficiency, environmental issues and greenhouse gas emissions, directed by regulation.

In 2011 the Dutch national government has set up 'Green Deals'. These are collaborations between the government, companies, organizations and involved citizens, on the level of local sustainability. Possible obstacles when setting up such projects are less difficult to overcome because of the cooperation of the government (Milieuloket, n.d.)

The province used to check municipal plans to see if provincial policy and national or European regulation were applied. Since the new Spatial Planning Act of 2008 every governmental level is responsible for its own policies. The province can record a provincial (environmental) concern in the structural vision which can then continue in an administrative or juridical way. Provinces use an 'integration plan' (Dutch: inpassingsplan) like a land-use plan, but the integration plan can overrule the municipal land-use plan (Rothengatter & Mathijsen, 2008).

The last governmental level and the closest to project developments is the municipality, because it is often the initiator or facilitator for area and real estate development. Provinces and municipalities can receive subsidies to realize their sustainability policies. On the municipal level most policies are about environmental sustainability as well. Many municipalities have the ambition to be CO2 neutral by 2050.

An example of how a municipality stimulates sustainable development of real estate is the way tenders in Amsterdam are rewarded. The tenders published by the municipality of Amsterdam reward tenderers on two points: the bid they make and the 'EPC' value. EPC is short for 'Energie Prestatie Coëfficient' (English: Energy Performance Coefficient), which is the ratio of energy efficiency in comparison with 1990. In the tender a EPC value will be given lower than the legal criterion. The lower the EPC of the plan submitted by the tenderer, the higher its rewarding points. If the EPC is not met, the tenderer gets no points for the EPC part and can only score points on his bidding (but will never get the highest points available because the two parts combined equal 100%).

This short overview shows that there is a demand for sustainable development on several governmental levels. This continues in the urban development and planning practice as well, which means there is a need for sustainable urban development projects.

1.1.2 Public policy and the policy-implementation gap

As described there is a demand for sustainable development on several governmental levels. This is translated into policies and regulation. However, often policies (in general) are not implemented or not implemented correctly (Gerston, 2010). Therefore this research motive is about public policy and the policy-implementation gap. Gaps between decisions and implentation will later be explored in section 2.3.

There are many different definitions of 'public policy', but one general definition could be: 'A system of laws, regulatory measures, courses of action, and funding priorities concerning a given topic promulgated by a governmental entity or its representatives' (Kilpatrick, 2000).

There may never be one single definition developed, but there are some universal key attributes of public policy:

- Policy is made in response to some sort of problem that requires attention.
- Policy is made on the 'public's' behalf.
- Policy is oriented toward a goal or desired state, such as the solution of a problem.
- Policy is ultimately made by governments, even if the ideas come from outside government or through the interaction of government and non-governmental actors.
- Policy is interpreted and implemented by public and private actors who have different interpretations of problems, solutions and their own motivations.
- Policy is what the government chooses to do or not to do. (Birkland, 2011)

Policies are a reflection of goals and values and are simply put commitments to something. But they do not set a movement in action as much as they steer movement. To make a policy work, it must be converted into practice via a process (Gerston, 2010).

Birkland (2011) presents the 'Stages Model of the Policy Process' (figure 1). The first step of this process is the emergence of an issue. This can come from various sources such as sudden events like disasters, advocacy activities of concerned citizens or imposition from another governmental level. Then the issue is put on the agenda if it gains enough attention. The next stage is the alternative policy selection, which is the choice of policy tools that will be used to address the problem after which policies are enacted. Enactment means a formal decision is reached to take a particular action to solve a problem. After this decision the implementation of the policy can begin. Then the policy is evaluated which provides feedback for the whole process.

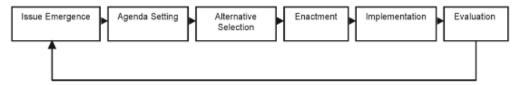


Figure 1. The Stages Model of the Policy Process (Birkland, 2011, p.26)

We will now further focus on the 'implementation'. Implementation represents 'the conscious conversion of policy plans into reality' (Gerston, 2010). This may sound simple and a logical consequence of directives stated in the policy. However, often there exists a substantial gap between policies and their application (Gerston, 2010). In the land and property market developers are the main implementers. And it is mainly the municipality that creates policies with ideas, directions and ambitions on how land should be used. There will not be much accomplished if the side that is charged with the implementation (the developer) lacks the will or capacity to apply the ideas and directions of the public policy (Nadgrodkiewicz et al., 2012).

Sustainable urban policies are often influenced by other policies and also can be found in other policies. These other policies are for example housing policy, visions, climate initiatives, urban renewal policy, land use policy, health policy, and municipal investment policy (Needham, 2014). Policy is not always written down, another form of policy is verbal policy for example presentations during meetings.

1.1.3 Changing State-Market relations

Changing State-Market relations might have led to more difficult implementation of policies, because of the decreasing role of the public sector.

In the Dutch urban development practice there has been a shift towards neoliberalism, which started in the 1980s but increased since the 2000s. The Netherlands is rooted in the Rhineland model which is characterized by a hierarchical government, but neoliberal influences are increasing. This results in privatization and decentralization, an increasing role of the private sector and a decreasing role of the public sector. The relationship between the State and Market has shifted to a more network-oriented relationship (Heurkens, 2012).

Fundamental developments within the Western society have been the starting point for this shift. In general there are two types of capitalism in Western countries: the Anglo-Saxon model can be found in

the USA, UK, Canada and others, and the Rhineland model which can be found in most Continental European countries. To shortly describe the two, the Anglo-Saxon model has free market economies and limited government control, while the Rhineland model had regulated market economies and a form of government control (Heurkens, 2012).

As stated before, neoliberal influences are increasing in the Netherlands. In political aspects this started in the 1980s by privatizing governmental companies and institutions. The global economy and further global (social) connection via Internet has accelerated this shift (Heurkens, 2012). The Anglo-Saxon way of thinking is becoming more dominant (Bakker et al., 2005). Limited government control and privatization makes it possibly harder for the public sector to have their policies implemented by the private sector.

In planning practice and urban area development these influences are visible as well, as since 2000 the influence of property developers in spatial decision-making and urban projects has increased (Heurkens, 2008). This means the Dutch local planning authorities have a less dominant role and that the collaborative relationship between public and private actors has become different (Heurkens & Hobma, 2014).

The private sector has gained more power within society, as well as formal and informal civic organizations. The public sector is not 'losing power' (Heurkens, 2012), but should reposition themselves in the government-market-society triangle (Boelens, 2010). The public sector should position itself within the actor-network as part of the market, instead of an outside position. Alexander (2001) and Adams & Tiesdell (2010) share this statement from a planning perspective, saying the State should not be positioned opposed the Market, because Planning and Markets are impossible to separate. Adams & Tiesdell (2010) state that 'what is required is not for planners to become market actors, but rather to realise that they already are market actors, intricately involved in framing and re-framing local land and property markets, and act accordingly'.

The position of the planner as a market actor reappears in the capacity building tool of the planning tools of Adams et al. (2005), see section 2.4. In capacity building relationships between the public planner and the market are built where the planner should have knowledge of the market and development processes to participate effectively.

1.2 Problem statement

On several governmental levels there is a demand to deliver sustainable urban area development. This need does not only originate from a climate point of view, but is also included in regulation and sustainable urban policies of the public sector.

Often policies (in general) are not implemented or not implemented correctly (Gerston, 2010), which in this case could lead to an implementation gap between sustainable urban policies and sustainable urban development projects. Changing State-Market relations, where the public sector role is decreasing, might make it even more difficult to avoid or reduce implementation gaps.

The public planner is positioned as a market actor according to Adams & Tiesdell (2010) and has planning tools to influence the decision space of private actors, in this case developers in sustainable urban area development projects. The planning tools should be applied in such a way that sustainability objectives are reached, thus reducing the implementation gap.

Implementation is to convert a decision or policy into concrete actions (Oosterwaal, 2011). In this research we consider the objectives that are stated in for example a masterplan or tender as decision or policies (SUP). The concrete actions are realisations of these objectives in a SUDP. So, the implementation gap in this research is the gap between objectives (SUP) and their realisation (SUDP). Objectives are not always realised, so often there exists an implementation gap, which is also influenced by the level of ambition. However, the size of the implementation gap can differ and be reduced.

The implementation gap between sustainable urban policies and sustainable urban development projects is the central problem of this research. The research studies, by conducting case studies, why such a gap is formed and how the implementation gap could be reduced with the deployment of planning tools.

1.3 Research goal

The goal of this research is to better understand why implementation gaps between sustainable urban policies and sustainable urban development projects exist, what planning tools are and how planning tools are used by public planners in practice. Then it is the goal to give a recommendation for public planners on the use of planning tools to better implement sustainable urban policies (SUPs) and so steer on delivering sustainable urban development projects (SUDPs).

The results that are aimed at are the following:

- An explanation of the forming of implementation gaps between SUPs and SUDPs
- An assessment of used planning tools by public planners in two case studies
- A statement on which use of planning tools by public planners seemingly results in a SUDP with a small implementation gap or no gap at all

1.4 Research questions

Here we elaborate on the research questions which are based on the problem statement and research goal.

As mentioned in the problem statement the implementation gap between sustainable urban policies and sustainable urban area development projects is the central problem of this research. Together with the research goal of giving a recommendation for public planners this has led to the following main research question:

How can public planners use planning tools to bridge the implementation gap between sustainable urban policies and sustainable urban development projects?

To be able to give a structured answer to the main question, several sub-questions will be answered first. The sub-questions are related to parts of the main question and the research goal.

- What are the characteristics of sustainable urban development projects?
 This sub-question explains what sustainable urban development project means in this research and provides a table of aspects which is later used in the case studies. This is based on academic literature.
- 2. What are current obstacles for market actors to commit to sustainable urban development projects?

The reason for the small number of SUDPs is not only caused by the public sector, market actors experience obstacles that prevents them from committing to SUDPs. This sub-question gives a glimpse of the market sector, based on empirical findings in academic literature. There is a lack of similar empirical findings on the public sector, which partly explains the focus on the public planner.

- 3. What are reasons for decision implementation failure in sustainable urban policies?

 This sub-question answers the goal of better understanding why implementation gaps exist in SUDPs, by giving an theoretical explanation of decision implementation failure in general and applied to SUPs.
- 4. Which planning tools can a public planner use to influence the decisions by developers on sustainable urban development projects and reduce implementation gaps?

 Based on academic literature this sub-question explains what planning tools are, which is both part of the research goal and the main question.
- 5. How are planning tools used in practice to bridge sustainable urban policies and sustainable urban development projects?

This sub-question is answered empirically by conducting two in-depth case studies. This sub-question is an assessment of how planning tools are used in practice, part of the research goal.

The relation between the several sub-questions and their aims and research methods are shown in the table below (table 1). The four questions answered by literature review correspond to sections 2.1 till 2.4. They provide the theoretical background for the case studies, where the gap will be identified and explained (see section 3.1).

Table 1: Overview of sub-questions and relation with the case studies

e review	Question	What are the characteristics of sustainable urban development projects?	2. What are current obstacles for market actors to commit to sustainable urban development projects?	3. What are reasons for decision implementation failure?	4. Which planning tools can a public planner use to influence the decisions by developers on sustainable urban development projects and reduce implementation gaps?	
Literature review	Aim	To know what SUDPs are and what its objectives are	To know why SUDPs are not often realised, from the market perspective	To know why there is a implementation gap of policies in general and in SUPs	To know what the planning tools are, how they influence developers' decisions and how they can reduce implementation gaps in SUDPs	
		Identification	Explanation: context		Explanation: planning tools	
dy	Question	How are planning tools used in practice to bridge sustainable urban policies and sustainable urban development projects? (Evaluation)				
Case study	Que	Case study sub-question: What does the implementation gap between the objectives and the project result consist of and why did the implementation gap develop? (Identification and explanation)				
Ca	Aim	To have empirical data about the use of planning tools in SUDPs and to be able to make a recommendation for future use of planning tools				

1.5 Research design

The figure below (figure 2) shows the research design of this research. It shows the chapters and connections between them, the used methodologies and the phases according to the graduation process.

First of all the introduction defines the scope of the research. Then the theories chapter is structured of the first four sub-questions, resulting in a conceptual model. In the case study methodology chapter the analytical case study model is explained, the research techniques are described and the case study methodology is further elaborated on.

The theoretical framework, the conceptual model and the analytical case study model are the basis for the two conducted case studies in chapter 4 and 5. These case studies are compared with each other in the cross case analysis, chapter 6.

After the cross case analysis it is possible to write an overall conclusion on the research, which will ultimately result in a recommendation.

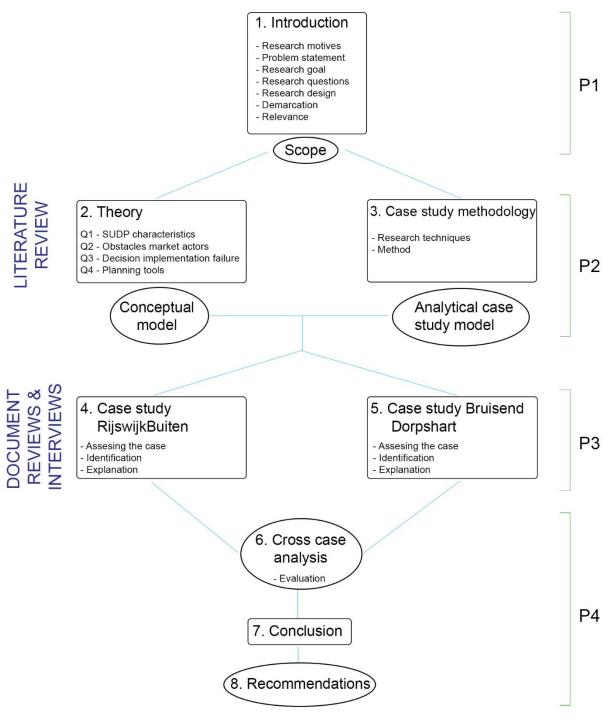


Figure 2. Research design

1.5.1 Research techniques

The theoretical framework (Chapter 2) has been constructed by a traditional or narrative literature review. This type of literature review provides an objective, exhaustive summary of relevant literature. It is a critical analysis of research and non-research literature on the topic (Hart, 1998 in Cronin, Ryan & Coughlan, 2008). Literature review often forms the basis for another goal, namely to give the reader a background for understanding current knowledge and to justify future research on the topic (Cronin et al., 2008). In this research the used types of literature are scientific articles, books, master's theses and PhD dissertations.

To collect data in the case studies, several research techniques have been used. In qualitative research it is common to use data collection techniques such as document reviews and interviews (Miles & Huberman, 1994).

In the case studies conducted for this research, documents such as indicative plans, contracts, news articles and notes of a project have been examined (document reviews). Furthermore, semi-structured interviews have been held with key persons within the projects. These research techniques will be used to construct an overview of the implementation gap, the applied planning tools and to describe the context of the project. Further elaboration of the research techniques in the case studies can be found in chapter 3: Case study methodology, pages 49-51 of this thesis.

1.6 Research demarcation

First of all, it should be made clear that the 'public planner' is a role, rather than an exact job function. Needham (2007, 2014) uses the term 'planning agency' to refer to a body of the public administration which has the task and responsibility, and the statutory powers of preparing and executing a land use policy for its area. There are planning agencies on three levels of government: the national, provincial and municipal government.

People outside of the Netherlands often assume the national government is the most important for spatial planning. This is because they publish attractive reports about its policy which is often translated into English. However, it is the body that can grant development permits which has the most influence, because nothing can be built without a permit. This body is the municipality (Needham, 2014).

Since the new planning act of 2008 the municipality is not the only one to grant a building permit (Dutch: bouwvergunning). Since 2008 the development permit (Dutch: omgevingsvergunning) has replaced the building permit. Although it is no longer only the municipality who can grant this permit, in most cases it is their task. When for example an environmental permit for large companies is needed, the Province is also the granting authority (Needham, 2014).

The executive board of a municipality consists of the Mayor and the Aldermen (Dutch: College van Burgermeester & Wethouders) and is not elected by the public, but by the municipal council. The elected representatives are the municipal council. The municipal council has the responsibility for the general content of policy and the executive board for working out that policy and implementing it (Needham, 2014).

In the Netherlands there is usually an active land policy, where the municipality acquires the land for development by voluntary purchase. It is also possible to do this with compulsory purchase, although this is not often used (Van der Krabben and Needham, 2008: in Hartmann & Spit, 2015). The land is then serviced and developed by the municipality, before selling it to housing associations, developers or others (Buitelaar, 2010: in Hartmann & Spit, 2015). Dutch municipalities implement spatial policy by getting involved with operational matters (Louw, Van der Krabben & Priemus, 2003). The difference between this and normal real estate development is that active land policy also involves the use of public power and instruments (Buitelaar, 2010: in Hartmann & Spit, 2015).

A set of instruments is available for municipalities which enables them to put spatial planning in place (Louw et al., 2003). Dutch urban development is very result-driven and aims to finalize a project within a certain timeframe. This pressure can be explained by looking at the financial involvement of municipalities. Municipalities have to pay interest on land they have in possession, so they bury a financial risk in the process (Tennekes & Harbers, 2012: in Hartmann & Spit, 2015). The Dutch approach is summarized by Needham (2007b) as follows: "Planning agencies make things happen, rather than wait passively until someone comes along who wants to implement their plan."

The system of active land policy has functioned fairly well in the Netherlands for decades, although in the last couple of years there is a growing interest of private actors in the land development process (Louw et al., 2003). For municipalities this means they increasingly rely on market actors to implement public planning policies (Heurkens & Hobma, 2014).

There is a shift towards private sector-led urban development. The directing role of public planners has become more complex and they cannot influence the development process only with land management anymore, but other competences such as negotiating and networks are increasing in importance (Heurkens, 2013). Public planners should realise they are part of the market, rather than outsiders. According to Adams (2005, 2013) planners can (in)directly influence market actors' decisions with four tools: shaping, regulating, stimulus and capacity-building. These will be further explained in section 2.4.

The perspective of the public planner is chosen for this research, because of its role 'to assess the short-term and long-term social, environmental, and economic impacts of development proposals in the context of the immediate locality and within the wider geographical area, and to advise on their suitability' (Dair & Williams, 2006, p. 1356). The planner has a wide area of responsibility and also a large potential to influence on sustainability, because of their direct impact on matters such as design, materials and the implementation of local policies (Dair & Williams, 2006).

When in this research the 'planner' is named, the municipal actors involved in spatial planning are meant.

It should be noted that in practice SUDPs do not always form only via public planners and planning tools. There are several examples of SUDPs in the Netherlands which have been developed or are being developed with someone other than a public planner leading the development.

EVA-Lanxmeer in Culemborg is an example of a neighbourhood which has been based on ecological, circular and societal values. In this sustainable neighbourhood there are more than 200 dwellings, several offices and commercial spaces, and facilities such as primary schools. The development was initiated by the EVA foundation around 1994 and found support within the municipality of Culemborg. The development has been realised as a joint commissioning between the EVA foundation and the municipality and future residents were also very involved. The first dwellings were inhabited in 2000 (EVA-Lanxmeer, n.d.).

In Eindhoven the area of Strijp R is in (re)development at the moment, led by a private developer. This private developer became the owner of the land after a tender and became responsible for the vision and plan making. Local residents and those interested were invited to be a part of the vision and plan making process. Transformation of existing buildings is part of sustainability in the area as well as implementing a WKO and involving (future) residents in the process (Strijp R, n.d.; Kennisbank Herbestemming, n.d.).

A small sustainable neighbourhood of 20 dwellings can be found in Zonnespreng, Driebergen. This project is realised with collective private commissioning, by the future residents. Many ecological and re-used materials have been used, solar panels have been placed as well as a sedum roof. The idea started in 1999 and was realised in 2010. The project received a financial subsidy of the Province of Utrecht (Zonnespreng, 2015).

As stated before, in this research the focus will be on SUDPs that are initiated and led by a public planner, to be able to research the use of planning tools in practice.

The words ambition and objective are used often in this research. The definition of these words are close, but there is a difference. In an ambition there lies a desire for some type of achievement, it is a result that is sought after (dictionary.com, 2016). An objective is something that takes effort or actions to accomplish, there is a clear target (dictionary.com, 2016). Therefore in this research we use ambition to describe a result that is desired and objective is used when there is a clear action related to the target. The word objective is used in the description of the case studies, because these have been stated in the plans for the development projects as targets to reach.

1.7 Relevance

The relevance of this research is explained below, divided in the scientific, practical and societal relevance.

1.7.1 Scientific relevance

In the academic spatial planning domains there is a lot of attention towards sustainable development (e.g. Dempsey et al., 2012; Jenks & Jones, 2010; Rydin, 2010; Pearson et al., 2014; in Heurkens, 2016), but this is mainly about sustainable development on real estate level. On sustainability on an urban area level there is little academic content and there have been few sustainable urban development projects (SUDPs) delivered (Heurkens, 2016).

At the moment more than half of the world population lives in cities and this will only increase in the near future (UN, 2014). Researchers are encouraged to think about sustainable urban planning, because cities are large consumers of resources and show signs of unsustainable behaviour (Sofeska, 2016).

Traditionally these problems have been addressed with policies regulating the location and intensity of urban activities (Alberti, 1999; Chin, 2002; Ewing, 1994, 1997; Neuman, 2005 in: Zellner et al., 2008). Urban decision-makers should need to know about the fuller understanding of the dynamic (spatial) interactions among the components and stakeholders in the urban system to respond to urban needs (Zellner et al., 2008).

A previous paper about planning tools recommends to understand and explain how planning tools are used in practice to generate new insights for planning research (Heurkens et al., 2015). This offers potential to connect the academic domains of planning and public administrations, which in this research is also tried to achieve.

1.7.2 Practical relevance

The gap or bridge between policy and its implementation should be closed to deliver SUDPs. There are planning tools for public planners (Adams et al., 2005; Adams & Tiesdell, 2013) to influence market decision-making, despite of changing State-Market relations where the public sector has a decreasing role (Heurkens, 2012). From an empirical viewpoint the use of planning tools to bridge sustainable urban policies and SUDPs is barely researched. Therefore this research will conduct two in-depth case studies where the implementation gap between sustainable objectives and SUDPs will be established and the reasons behind it. The case studies will be compared to be able to give a statement about effective use of planning tools.

1.7.3 Societal relevance

Urban environmental problems such as air pollution and excessive fuel consumption create a need for urban sustainability (Van Dijk & Mingshun, 2005). Besides the environmental aspect, sustainable urban developments are also beneficial for society, because they are economic-viable, social-responsible and environmental-friendly urban places with great potential to face socio-environmental challenges (Heurkens, 2016 based on Williams & Dair, 2007) such as good public transportation, facilities within walking distance and local entrepreneurship. It is for the public's interest to deliver sustainable urban development projects.

2. Theories

This chapter provides the theoretical background of the research. It answers the first four sub-questions by literature reviews. The first section describes the definitions of sustainability and urban development leading to a definition of sustainable urban development and a list of its aspects. The second section is about obstacles that market actors, and in specific developers, face which hold them back in realising SUDPs. It describes the reasons for the implementation gap as seen from the private sector's side. Then section 2.3 looks at the main features of implementation gaps from the policy side, by describing reasons for sustainable urban policy failures. In section 2.4 the theory about planning tools that public planners can use to reduce the implementation gap is provided. The conceptual model in section 2.5 summarizes the chapter visually.

2.1 Sustainable urban development characteristics

For a long time sustainability has been approached from a technical perspective, focussing on materials, energy and technical innovations. However, sustainability means more than that. The common starting point for the definition of sustainable development is from the Brundtland commission (1987 in Puylaert & Werksma, 2011): 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

John Elkington (in Puylaert & Werksma, 2011) further elaborated on the definition of the Brundtland commission by introducing the *Triple P* approach: people, planet, profit. People represents the social-cultural and human dimension, planet the ecological aspect and profit the economic and financial dimension. Sustainable development is the 'art of connecting' the triple P, according to Elkington. The Brundtlandt commission also speaks of a balance, which Elkington calls the win-win-win situation.

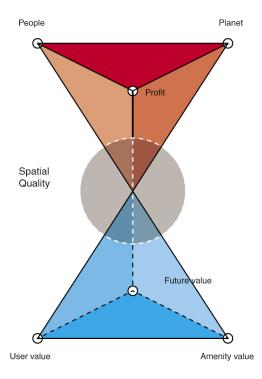
The definitions above are about sustainable development in general. But what is sustainable *urban development*? First of all, urban development is about the social, cultural, economic and physical development of cities, as well as the underlying causes of these processes (UiO, 2016). Urban development is a complex form of development and there are many definitions for it. Some definitions focus on the product while others focus on the process of urban development. This research focuses on the implementation gap which is a consequence of the product but can be influenced during the process. Therefore the definition constructed by Buskens (2015) is used, where he combined both focuses of definition:

Urban development is about linking disciplines, functions, actors, interests and cash flows in which the integration of planning and spatial investments must lead to (re)development of areas where several functions, such as infrastructure above and underground, housing, working, recreation, parking, green and water are combined. (Buskens, 2015, based on Franzen & De Zeeuw, 2009, p.6; De Zeeuw, 2007, p.6; Joolingen, Kersten & Franzen, 2009, p.6).

There is no consensus about the precise definition of sustainable urban development, but there is a general understanding that it consists of several aspects or objectives. A sustainable urban development project aims to realise economic-viable, social-responsible, environmental-friendly urban places (Williams & Dair, 2007).

Duijvestein (2004, in Puylaert & Werksma, 2011) poses to link the triple P with the spatial domain. Besides environmental quality, social and economic quality should be recognisable as well and spatial quality should be based on these qualities.

The spatial quality aspects are *user value*, *amenity value/experience value* and *future value*. User value refers to the functional usage and the accessibility of space, amenity value refers to the subjective experience of the space in the present. These two are strongly linked with each other. Future value refers to the valuation of spatial functions throughout time.



Duijvestein states that sustainable urban development is then where the societal component (triple P) and the spatial component meet and are in balance (figure 3). Sustainable urban development leads to high spatial quality.

To be able to deliver sustainable urban development there is more needed than a definition. The triple P and spatial quality each have objectives that contribute to sustainable urban development. In his thesis, Buskens (2015) has made an overview of these objectives based on several sources (figure 4). This overview of objectives will be used for the analyses of the case studies (section 3.2).

Figure 3. Spatial quality in sustainable urban area development (source: Puylaert & Werksma, 2011)

(Objectives sustainable urban development		
Profit (economic)	Create a favourable location for activity		
	Stimulate local entrepreneurship		
	Stimulate local employment		
	Attracting long-term investments		
People (social)	Social security		
	Social interaction		
	Comfort and a healthy living environment		
	Social cohesion		
	Human scale		
	Demand-oriented development		
	Good accessibility		
Planet (ecological)	Good connection with public transport		
	Stimulating bike-usage and walking		
	Self-sufficiency (circular flows)		
	Usage of renewable sources		
	Decrease/prevent environmental pollution		
	Support the living environment and respect ecological structures		
Spatial quality	Varying density		
	Mixed-use		
	Preserving and highlighting distinctive (historical) quality		
	Create identity (place-making)		
	Flexibility: resistant against future changes and innovations		
	Robustness: resistant against changing (weather) conditions		
	Stewardship		

Figure 4. Objectives of SUDPs (From Buskens, 2015 based on Puylaert & Werksma, 2011; Adams & Tiesdell, 2010; Lodewijks, 2013; Gehld, 2010; Carmona et al., 2009; Macmilian, 2006)

2.2 Obstacles for market actors to commit to sustainable urban development

Sustainable (private sector-led) urban development projects seem to rarely materialize (Heurkens, 2016). In the Netherlands there are not many sustainable urban area developments where an integral approach to sustainability was taken (Buskens, 2015). Besides that, there are variations in achievements of sustainable urban area development objectives in projects. Dair & Williams (2006) have identified five key reasons for these variations in brownfield developments in England. These key reasons are based on the influence of different stakeholders in general. Buskens (2015) has researched obstacles specifically for developers to commit to sustainable urban area development.

The first key reason Dair & Williams (2006) found is that stakeholders have to know of the existence of a development proposal if they wish to influence a project, because they need to participate in discussions and decision-making. On some occasions some stakeholders are not consulted, while they should be consulted, resulting in them being absent from the project. Inclusion or exclusion of different stakeholder types from development projects is a likely cause for variations in the achievement of sustainability objectives.

The second key reason is related to the first and is about the timing of stakeholder involvement. Some stakeholder types can introduce sustainability objectives, of course they then do have to participate in the process. The timing of this participation is crucial, because when the involvement is too late a significant impact on sustainability (objectives) may not be achieved as decisions might already have been made.

Absence of power to enforce achieving sustainable objectives is the third reason for variation in the achievement of sustainability. Stakeholders can have the desire to achieve a sustainable outcome, but may not have the power to do so. When the stakeholders share a common aim for sustainability, the power of enforcement is not needed. 'Commitment and power are clearly two important components in the achievement of sustainability' (Dair & Williams, 2006, p. 1363).

The fourth reason is that some stakeholders have a different attitude towards the use of sustainable materials and technology than others. If there are many risks, such as failure or material inadequacies, to this use the stakeholder is likely to avoid it. Sometimes stakeholders are also reluctant because of unknown and additional responsibilities.

The fifth reason may be the most fundamental explanation for variation in sustainability achievements, which is stakeholders' attitudes towards and knowledge of the sustainability issue. In the case studies conducted by Dair & Williams (2006) almost all the stakeholders aimed for a 'successful' development. However, each stakeholder had a different idea about whether 'success' had anything to do with sustainability.

This last reason may be a consequence of one of the obstacles Buskens (2015) mentions: the focus on sustainability is relatively new. Recent changes in the market which have resulted in i.a. a more neoliberal way of thinking, organic urban area developments, brownfield developments and demand-oriented developments, meant that stakeholders were and are searching for new interpretations of their roles. The same counts for commitment to sustainable urban area development. Developers are yet trying to form this commitment.

Within the context of the Dutch development practice four obstacles are found by Buskens (2015). The first of these obstacles is that sustainability is mainly directed from the government, although responsibility for the focus on sustainability lies with the private sector since the changing State-Market relation (see section 1.1.3). However, sustainability objectives are often applied by developers because of requirements and legislation set by governments. These requirements are related to renewable energy sources and energy-efficient real estate. It seems that in most cases legislation (for example the Energy Performance Coefficient, EPC, for housing) is the guiding principle for developers. The focus on ecological aspects is because municipal decision-making is directing this, which can explain the increasing focus on sustainability by developers. But it seems the intrinsic motivation for developers is lacking and they are hesitant to take an extra step.

The next obstacle is that it seems sustainability has been reduced to energy efficiency. The discussions are mainly about the 'green' side of sustainability; energy efficiency and the use of renewable sources.

Sustainability is not approached in the broad sense of People, Planet, Profit. This has a relation with the previous obstacle where requirements and legislation are mainly about the ecological aspects (Buskens, 2015).

In relation with the aforementioned points, the next obstacle is that the sustainability discussion is primarily focused on the level of real estate instead of the urban area level. On the level of real estate the focus is on low EPC values, use of renewable energy sources and passive housing. Although these are important points as well in sustainability objectives, sustainable urban development focuses on creating a long-lasting and viable area for the present and the future (Buskens, 2015).

The last obstacle is about the execution of sustainable urban development. Often there is no explicit direction and no integral approach of sustainability in the development process. Because sustainability is not seen as measurable and it is sometimes not possible to forecast its performance, it is not seen as part of the development process, but rather as a result of a development. Generally this leads to a reactive approach, while it should be pro-active and integral. However this approach differs per project (Buskens, 2015).

Several obstacles for market actors and specifically for developers were mentioned in this section which have led to few realisations of sustainable urban development projects:

- Not knowing the existence of a development proposal
- Timing of stakeholder involvement
- Absence of power
- Focus on sustainability is new
- Sustainability is mainly directed from the government
- Sustainability is reduced to energy efficiency
- Focus on real estate level
- No integral approach of sustainability

'Champions' of sustainability can be found amongst most stakeholders, including developers, despite the obstacles. This means the willingness for sustainable urban area development is equal between public planners and developers (Dair & Williams, 2006).

The public sector makes sustainable urban policies which, in the case of sustainable urban development projects, the private sector should implement. However, we established that these projects rarely materialize, thus an implementation gap is formed. Adams et al. (2005) developed a categorisation of four planning tools which planners can use to influence market decision-making, so possibly reducing the implementation gap. These will be described in section 2.4. First, the next section explains why sustainable urban policies are often not implemented.

2.3 The gap between decision and implementation in sustainable urban policies

We have described public policy and policy-implementation gaps and the previous section described the formation of implementation gaps originating from the project side. But why are sustainable urban *policies* often not implemented? The implementation of governmental decisions has been studied intensively since the 1970s (Pressman & Wildavsky, 1973; Van Meter & Van Horn, 1975; Hargrove, 1975 in Oosterwaal, 2011).

Firstly, it is essential to know the definition of 'implementation'. Broadly defined, it means converting a decision into concrete actions. Hill and Hupe (2002: in Oosterwaal, 2011) refer to implementation as 'accomplishing, carrying out, fulfilling, producing or completing a decision. The decision is implemented with a certain level of compliance which can range from implementing a decision completely in conformity with the decision (full compliance) to implementing a decision totally different than prescribed (noncompliance)'.

This section describes the theory about the gap between decision and implementation and main features of implementation gaps, according to the dissertation of Oosterwaal (2011). These are linked to reasons for the limited success of sustainable development policies, as described by Van Bueren & De Jong (2007).

In Oosterwaal (2011) the process from decision making to implementation is divided into three different stages: decision making, delegation and implementation (see figure 5). This is a schematic representation, in reality some stage may be repeated or skipped.

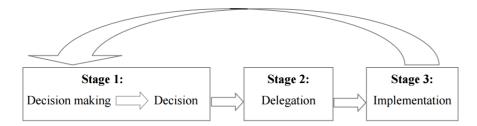


Figure 5: The three stages from decision making to implementation (source: Oosterwaal, 2011)

Issues with implementer compliance can rise in all three stages and thus (in)directly affect each other. According to the stages Oosterwaal (2011) has identified main features in each stage which affect compliant implementation of decisions, see figure 6. Two main features of the decision making stage which affect the delegation stage and indirectly also implementation are political disagreement and decision complexity. In the delegation stage we see ex ante and ex post controls affecting implementation. Lastly, in the implementation stage policy conflict and salience of a decision influence implementers of governmental decisions.

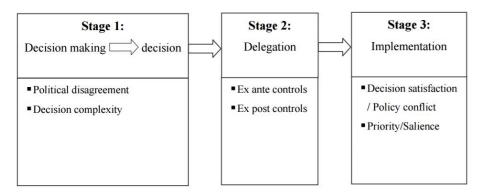


Figure 6: The main features (source: Oosterwaal, 2011)

When there is political disagreement this means there are diverging preferences of decision makers about the proper course of action. Political disagreement can have a positive effect assuming that it increases the likelihood of compromise, resulting in higher levels of authority delegated. A negative effect is that political disagreement shows there are conflicting preferences between the decision makers. Implementers are likely to implement a decision which aligns their own preference, so if implementers face multiple decision makers who prefer different decisions they choose the one in accordance with their own preference. This means there will be different implementations (Oosterwaal, 2011).

There are a number of reasons for decision complexity, such as the scope or technical aspects of the decision. It may be hard for decision makers to know what decisions to make in order to achieve a desired outcome (Oosterwaal, 2011).

In the delegation stage we see ex ante and ex post controls in figure 6. Ex ante controls are the rules for the methods and procedures used to specify how a decision should be implemented, the operation of a decision. The more ex ante controls there are and the higher their level of strictness, the less room there is for interpretation of the implementer, hence it is more likely the implementer complies with the decision. If there is not much specification, implementers may interpret the implementation of a decision in an undesirable way. Ex post controls can also be added to realise compliance, because they increase the threat of detection and sanctioning of noncompliant implementation (Oosterwaal, 2011).

Then there are also features of implementers that affect implementation. Policy conflict is one of the main factors here. This refers to the difference between the preferred decision of an implementer and

the decision he or she has to implement. If there is a policy conflict this negatively affects the willingness of the implementer to implement the decision in compliance.

Salience of a decision is another feature which affects compliant implementation. This is about how important a decision is to the implementer and defines actors' distribution of attention to different aspects of decisions.

Next we will look at reasons Van Bueren & De Jong (2007) list which limit success of sustainable urban development policies and relate these to the features of Oosterwaal (2011).

Sustainable development is a contested or wicked concept (Rittel and Webber, 1973; Connolly, 1983 in Van Bueren & De Jong, 2007), which means it has an indefinite and ambiguous character. There are competing or conflicting values, such as economic and ecological values and many interrelated attributes. It is hard to establish clear boundaries. While many actors seem to be in favour of sustainable goals, it is very difficult to implement its policies and objectives into practice because of the intangibility. Sustainability remains abstract in policies and is almost never operationalized into concrete goals. We recognize decision complexity here, where it is hard to know what decisions to make in order to achieve a desired outcome. As a result the implementer does not have enough specification to operationalize the decision.

The institutional systems in which policies are developed, lead to systemic barriers to sustainable development. Institutions are the 'rules of the game' and can be formal or informal. Formal institutions are regulations and contracts, informal institutions are traditions and social conventions (Van Bueren & Ten Heuvelhof, 2005). Especially financial and economic institutions do not succeed in taking the environmental and social costs into account. For example, it might be cheaper to demolish and replace buildings than renovate them, if the taxes on labour are higher than the use of materials. Political institutions are sometimes also held responsible for the failure of sustainability policies. Because of their short timespan (four years) their decision-making can be dominated by a fixation on votes which comes at the expense of environmental concerns. The institutions or 'rules of the game' can be recognized as ex ante controls, but as described above they are conflicting implementation compliance. Political institutions as part of the failure of sustainability policies, can be seen as political disagreement.

Another reason can be a principal-agent problem, not only about the asymmetry of information and knowledge, but mainly about the asymmetry of costs and benefits. A developer should invest in for example low-maintenance materials, but is not the one who reaps the benefits of lower maintenance costs, the owner is. This can result in low attraction for developers to develop sustainable buildings. And in large building projects where the potential end-user do not know each other, the developer tends to avoid risks and builds dwellings that meet the demands of an average home owner (Barlow & Ozaki, 2003 in Van Bueren De Jong, This is a feature of the implementer affecting the implementation, policy conflict. The assumption of the principal-agent theory has been the basis for most of the analytical models of the relation between political decision making and implementation (e.g. Epstein & O'Halloran, 1999; Ferejohn & Weingast, 1992; Waterman & Meier, 1998: in Oosterwaal, 2011). The decision maker (political party, the principal) 'avoids the transaction costs of monitoring and sanctioning the agent (the implementer) by delegating the implementation of a decision to the agent' (Waterman & Meier, 1998: in Oosterwaal, 2011). In this case the decision maker has decided that the developer (the agent and implementer) is the one to operate the decision of for example energy sufficient housing. However, the developer experiences an asymmetry of costs and benefits, which will result in low compliance with the decision.

Sustainability is often put on the agenda too late, when decision-making is well under way, which makes it harder or no longer possible to integrate sustainability measures in the project (Van Bueren & De Jong, 2007). But even when sustainability is integrated in the decision-making process, it is often difficult to translate abstract sustainability policy aims into project goals or objectives (Bossink, 1998 in Van Bueren & De Jong, 2007). In putting sustainability too late on the agenda, we recognize salience of a decision. In these situations it would seem that sustainability is not of importance for the implementer, but he or she has attention to different aspects of decisions.

The obstacles for market actors mentioned in section 2.2 also contribute to the failure of delivering SUDPs. Especially when the assumption is that implementers comply more with decisions if they are satisfied with the decision or it aligns with their own preference (Oosterwaal, 2011).

From general policy literature we have mentioned the following features that could lead to a gap between decision and implementation:

- Political disagreement
- decision complexity
- ex ante and ex post controls
- policy conflict
- salience of the decision

These were linked to several reasons specific for limited success sustainable urban policy implementation:

- sustainability as a wicked concept
- institutional systems
- asymmetry of costs and benefits
- put on agenda too late

In table 2 below an overview of the relations between the stages, main features of the gaps, and the several reasons for limited success of SUPs has been made.

Stage	Main feature	Reason SUP failure
Decision making	Political disagreement	Institutional systems
	Decision complexity	Sustainability as a wicked concept
Delegation	Ex ante controls	Institutional systems
	Ex post controls	
Implementation	Policy conflict	Asymmetry of costs and benefits
	Salience of a decision	Put on agenda too late

Table 2: the relations between the stages, main features of gaps and reasons for SUP failure

However, these are not the sole explanations for sustainable urban policies to fail to implement with compliance. Policies cannot be seen in isolation from the context it operates in (Bressers, 2004), which means that the context also influences whether policies are or can be implemented or not. The context is an external influence in the policy-implementation process, which can also lead to implementation-gaps.

The previous section described implementation failure in the form of obstacles for market actors in SUDPs. There are planning tools to influence market decision-making, influencing both the project and the policy implementation side, that can be deployed to reduce or close implementation gaps. These will be described in the next section.

2.4 The planning tools

In section 1.1.2 about the policy-implementation gap the stages of the policy-making process were described. The stage after an issue has been placed on the agenda is the alternative policy selection. In this stage the policy tools that will be used are chosen to address the issue. Adams et al. (2005) have made a typology which identifies four basic types of policy instruments or tools, in this research called 'planning tools'. The four tools, shaping, regulating, stimulus and capacity building, can be deployed to influence market decision-making.

There is a difference between the concept of 'market-led' planning and 'plan-shaped' markets. The concept of market-led planning portrays planning as subordinate to the market and is limited to a

position with little control on the outcome of developments. This is not really seen in practice and also open to discussion on the theoretical side (Heurkens et al., 2015).

Plan-shaped markets offer a better justified concept of planning in practice. In this concept markets are shaped by social as well as economic forces (Smith et al., 2006). Planners are not subordinate to the market but interact continuously with the market and essentially operate as 'market actors' (Heurkens et al., 2015). The planning tools described below can help planners to shape markets by influencing the 'decision environment' of actors (Tiesdell & Adams, 2011).

This decision environment can be seen as a space which gives the actor more room or less room to manoeuvre. With related planning actions the public planner can transform market operations. The decision environment is constrained by the context. The 'shaping' tool sets the context for market decisions and so shapes the decision environment. The 'regulating' tool controls the market actions and regulations and so defines the parameters of the decision environment. The 'stimulating' tool restructures the contours of the decision environment by lubricating market actions. Lastly, 'capacity building' enhances the ability of actors to operate more effectively within the decision environment (Tiesdell & Adams, 2011).

However, the tools are conceptual categories which will rarely be found explicitly in planning documents (Heurkens, 2012). Furthermore there are two notes which should be added to the tools approach. The first note is that planning tools do not operate in isolation, but are set in a context. Contextual influences may create (undesirable) secondary effects. This makes it hard to identify the cause-and-effect of a planning tool. Secondly, planning instruments are generally deployed in bundles or packages, instead of deploying just one tool at the time (Tiesdell & Adams, 2011).

2.4.1 Shaping tools

Shaping tools encourage market actors to see benefit for themselves in meeting policy objectives. The planning context set by the government influences decisions made by market actors and helps establish their room to manoeuvre.

The core of market shaping is the idea that 'the whole is (potentially) greater than the sum of the parts'. It is primarily the responsibility of governments to create an institutional framework that encourages and rewards integration in the development process. Market shaping can play a crucial role in breeding confidence, reducing risk and transforming developer attitudes. These effects can make developers more likely to help create a better place, rather than just delivering a profitable development.

In the land and property market context, the principal directive shaping tool can be considered plans. Plans provide information in three functions: they provide general (coordinating) information, they indicate government intentions and they provide information about regulatory policies. These result in development plans, indicative plans and regulatory plans (Adams et al., 2005).

Some plans are more effective than others in shaping decisions of market actors. Adams & Watkins (2014) suggest a few plan characteristics which usually successfully influence markets.

The market shaping tool in the form of a plan can help reducing the implementation gap if they contain the successful plan characteristics. In this way the public planner can provide the information it wants, so the developers can make informed decisions and thus shape their decision environment.

In table 3 nine key variables are identified that determine how persuasive spatial plans are in practice. The more a plan is persuasive on each of these variables, the greater its chances of influencing outcomes.

Table 3. Key variables persuasiveness of spatial plans (Adams & Tiesdell, 2013)

More persuasive	Key variable	Less persuasive
Plans that derive from substantive analysis of socio-economic trends, including those affecting real estate markets, are more likely to include realistic proposals.	Clear and apparent evidence base	Plans that emerge rapidly without substantive analysis may not be taken seriously.
Where a plan's rationale derives from substantive understanding of how markets operate and can be shaped by public policy, its content is more likely to generate confidence.	Plan's persuasive logic and rationale	Where a plan's rationale demonstrates misunderstanding of how markets operate and can be shaped by public policy, its content is more likely to provoke criticism.
If the plan maker is a government body with statutory powers, it is well placed to convince market actors of serious intent.	ldentity of plan maker	If the plan maker is an entrepreneur or voluntary body, doubts may exist about long-term commitment to delivery.
Plans that are championed by successful political leaders may be taken more seriously.	Charismatic, persuasive advocates	Plans that have no serious political advocate may be considered of less significance.
Where plans are endorsed by higher levels of government, there is likely to be greater confidence in their survival.	Endorsement by higher-level actors	Where plans fail to be endorsed by higher levels of government, there will be doubts about how long they may last.
Plan makers who can call upon significant resources to support implementation are likely to be held in high regard.	Plan maker's capacity to marshal wider resources	Plan makers who have access to few resources to support implementation may command little attention.
Plans that are communicated attractively are more likely to be noticed by key actors.	Attractive communication and presentation	Plans produced as official documents that are hard to read may tend to be left on the shelf.
The more plans engage relevant external stakeholders, the better their chances of implementation.	Stakeholder engagement	Plans prepared without serious stakeholder engagement may prove unrealistic, especially if significant capital investment is needed.
Plans that reflect community aspirations are more likely to be achieved without significant local conflict.	Community support	Plans that conflict with community aspirations may encounter significant local conflict.

2.4.2 Regulating tools

Regulating tools restrict the set of choices available by regulating and controlling market actions and transactions. It limits actors' scope for autonomous action. However, regulation is more effective when actors are persuaded to adapt their ideas according public policy, rather than cancel ideas that conflict with policy (Adams & Tiesdell, 2013).

Two forms of regulations can be distinguished. The first is when regulations are enforced by law, such as 'state' regulations which in principle apply universally and 'contractual' regulations which apply to the parties covered in the contract. These regulations are enforced through legal sanctions.

In real estate there is a long tradition of regulation by contract, which can be considered as a voluntary form of regulation. Such contracts are entered freely on terms that can be negotiated (Adams & Tiesdell, 2013).

The second form is regulation that can be termed 'cultures', these are usually subject to 'social' sanctions (i.e. group disapproval, conscience, harmed self-interest etc.) instead of legal sanctions (Adams et al., 2005).

There are several regulatory instruments such as standards, certifications, controls, permits and licenses that might lead to more sustainable outcomes in urban area development projects (Hendrickson et al., 2011 in Heurkens, 2016). 'For instance changing building codes and zoning standards to support sustainable outcomes, linking planning applications and development approval processes to sustainable objectives, and creating non-financial incentives for sustainable behaviour, might prove effective in enabling sustainable urban area development projects' (Heurkens, 2016).

Regulation often operates negatively, because it limits choices. Furthermore, it does not attract demand, but rather direct demand away. Therefore regulating tools are often combined with stimulating tools.

2.4.3 Stimulus tools

Stimulus tools make some strategies or desired events more (or less) advantageous to market actors by rewarding some actions more (and some less). Market actors are encouraged to produce more desirable – this is defined by the policy maker – outcomes. There are four types of stimulus actions. The first involves direct state actions, the other three are more indirect. These indirect actions are price-adjusting, risk-reducing and capital-raising (Adams & Tiesdell, 2013).

Syms and Clarke (2011: 137-138 in Adams & Tiesdell, 2013) have defined stimulus tools as instruments 'employed by a governmental body, either central or local, or a quasi-governmental agency, to encourage an actor or group of actors, for example both public- and private sector developers, to undertake development projects on sites, or in locations, that the actor would not otherwise consider and/or to undertake better quality development than would otherwise occur without the stimulus'.

Direct state action works through direct state intervention into land and property markets, for example the provision of public infrastructure, compulsory purchase of land or joint ventures (Adams et al., 2005). Traditionally in the Netherlands almost all development land passes through public ownership, and acquisitions normally take place voluntarily (Adams & Tiesdell, 2013).

Price-adjusting stimulus actions take three main forms: development grants, tax incentives and project bonuses. Development grants are direct public subsidies. Tax incentives are less closely targeted than development grants, because they provide exemptions from taxation systems and can affect either costs or revenues. Project bonuses can be provided in exchange for higher-quality developments or other benefits (Adams & Tiesdell, 2013).

Risk-reducing actions are for example accurate market information, and policy certainty and stability. It is a confidence-building measure for market actors if the public planner has accurate market information to match perceived risks to real returns. Policy certainty reassures market actors there is stability and thus less risks (Adams & Tiesdell, 2013).

Capital-raising actions provide or facilitate access to development finance if the private sector needs financial reinforcement. This can be in the form of loan guarantees, but another way is to enter in public-private development partnerships where risks and rewards are shared between the public and private parties (Adams & Tiesdell, 2013).

Stimulus tools stimulate developers to invest in sustainable urban area development projects (Hendrickson et al., 2011). If sustainable objectives are not met because of financial reasons and/or high risk exposure, the deployment of stimulating tools would make the investment in sustainable urban area development projects more beneficial and accountable. This might be needed to overcome the financial threshold for developers to deliver such projects (Heurkens, 2016).

2.4.4 Capacity building tools

The fourth tool is capacity building. Capacity refers to skills, knowledge, networks, rules of operation, working practices, etc. Capacity building tools could be seen as forms of market shaping or stimulation tools, but it can better be regarded as a means of facilitating the (better) operation of the other planning tools. This requires building relations, greater trust, mutual respect, social capital. It also requires a willingness of the public and private sector to work together in both a formal and informal way, to achieve mutually beneficial and desirable outcomes (Heurkens, Adams & Hobma, 2015).

Often in developments the concentration is too much on the means, which makes many planners and politicians mistakenly believe that the production or regulation of plans is enough to complete the planning task. Adams & Tiesdell (2013) state that 'planning tools are only as effective as the individuals and organisation charged with their delivery'. Capacity building supports market shaping, regulation and stimulus but is a separate planning tool. To be successful at capacity building it requires careful thought and attention and furthermore time and resources are needed.

There are four areas in capacity building: market-shaping cultures, mind-sets and ideas; market-rich information and knowledge; market-rooted networks; and market-relevant skills and capabilities.

For a planner to build capacity as a market actor he or she must often start by looking at their own cultural perspectives or ways of thinking. Cultural perspectives are about how 'things' are perceived, interpreted and appraised, which can be constraining. Therefore it is needed to think 'outside of the box' (Adams et al., 2005). An important cultural mind shift for public planners is to see themselves as active participants in the development process. They should communicate their vision, rather than be an external controller of the development (Adams & Tiesdell, 2013).

Market-rich information and knowledge are required to create better places by influencing the market and development processes. Background knowledge about 'the rules of the game' are needed to know how these processes function, as well as information about practical operations (Adams & Tiesdell, 2013).

Market-rooted networks are about relations across the development spectrum. It is beneficial to have informal debates and share knowledge across the sectors, so planners know how to best shape, regulate and stimulate real estate markets. Public planners can be reluctant of working together with private actors, partly because of suspected conflicting values. However, these relations need to be based on mutual respect rather than domination by one side or another (Adams & Tiesdell, 2013).

Lastly, market-relevant skills and capabilities are about the skills and capabilities of key individuals and organisations in the development process. These include activities to develop human capital, such as continuous professional development, expert seminars and field visit, but also the competences of the public planner are included here (Adams & Tiesdell, 2013).

Capacity building can help to reduce the implementation gap in sustainable developments, because it develops the capacity to facilitate market decisions which enables developers to operate more effectively. Public planners can influence this by building relations, trust and human capital. The public and private sector should actively work together to reach sustainable objectives of a project.

Table 4 gives an overview of the four planning tool, their impact on market decision environment and the sub-types.

Table 4. Planning tool types and intended market effect (source: Adams et al., 2005: 64; Adams and Tiesdell, 2013: 134-35; in Heurkens, Adams & Hobma, 2015)

Instruments	Impact on markets	Sub-types and examples	
		Development/investment plans	
	Shape decision environment of	Public (infrastructure) investment plan	
Chanina	development actors by setting broad	Regulatory plans	
Shaping	context for market actions and	Statutory plans, policies, strategie	
	transactions	Indicative plans	
		Non-statutory plans, policies, strategie	
	Constrain decision environment of	State/third party regulation	
Regulating	development actors by regulating or	Planning permission, property right	
Regulating	controlling market actions and	Contractual regulation	
	transactions	Development, section106 agreement	
		Direct state actions	
	Expand decision environment of development actors by facilitating market actions and transactions	Reclamation, infrastructure, land acquisition	
Stimulus		Price-adjusting instruments	
		Grants, tax incentives, bonuse	
Sumuus		Risk-reducing instruments	
	market actions and transactions	Policy certainty, place management	
		Capital-raising instruments	
		Loan guarantees, funds, partnership	
		Market-shaping cultures, mind-sets, ideas	
		New perspectives, ways of thinking	
	Enable development actors to operate	Market-rich information and knowledge	
Capacity building	more effectively within their decision environment and so facilitate the operation of other policy instruments	Market and development process logic	
		Market-rooted networks	
		Formal and informal interaction arena	
		Market-relevant skills	
		Human capital, individua	

2.4.5 Effectiveness

The public planner has the opportunity to realise public objectives by using market shaping, regulating, stimulating and capacity building tools. The parameters of the market decision space will be influenced by conscious use of the tools. The planner's role is effective when the deployed tools lead to a reduced or even closed implementation gap between sustainable urban policies and sustainable urban area development projects (Adams & Tiesdell, 2013). Figure 7 conceptualises the planner's role where he/she effectively connects planning instruments, planning actions and market effects.

Effectiveness or effective management can be seen in two ways. The first way considers effectiveness with realizing objectives. A measure is effective if one or more objectives are realized. The second way considers efficacy, which is the way that obstacles have been overcome effectively (Black & Porter, 2000; De Leeuw, 2002 in Heurkens, 2012).

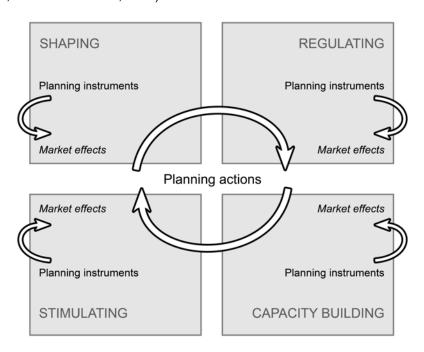


Figure 7. Roles of planners: connecting planning instruments, actions and market effects (Heurkens et al., 2015)

2.5 Conceptual model

The theory described in the previous sections is here summarized in a conceptual model (figure 8). It shows how in the research problem, the implementation gap, is explored. In the centre of the model are the implementation gap between sustainable urban policies and sustainable urban development projects and the planning tools. There are several influences on the size of the implementation gap. From the developers' side there are obstacles for market actors to commit to SUDPs (see section 2.2) resulting in an implementation gap. As seen in section 2.3 there is a gap between decisions and their implementations. From the policy side this influences the implementation gap. However, if the planning tools (section 2.4) are used successfully it can be the bridge between sustainable urban policies and sustainable urban development projects and thus no implementation gap should form. All the steering on bridging the implementation gap happens in the context of the urban development practice.

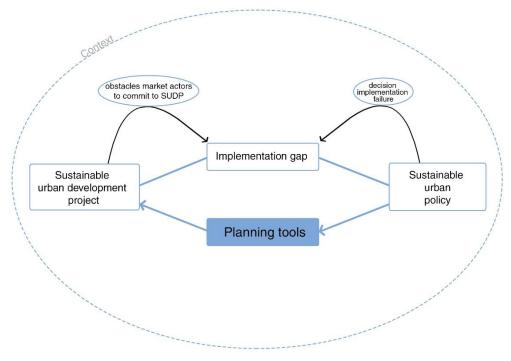


Figure 8. Conceptual model

3. Case study methodology

After the theoretical background which has been introduced in the previous chapter, this chapter elaborates on the case study methodology that will be used for the empirical research. The case studies will answer the following sub-question: How are planning tools used in practice to bridge sustainable urban policies and sustainable urban development projects?

Firstly, the analytical case study model is explained and the case selection criteria and selection process are described. The analytical model forms the basis to conduct the case studies. The next section is about the research techniques of the case studies. The last section explains the choice for case studies as methodology and reflects on the validity and generalizability of this methodology.

3.1 Analytical case study model

Ambitions concerning sustainability are often made on the abstraction level of the city and are often fragmented over different subjects of policies. They address issues which are on an urban level rather than on project level. For sustainable urban area development projects these general ambitions can be translated into specific project ambitions, which then should be implemented in the project. However, for a multitude of reasons it can happen that the ambitions are not always (completely) implemented, which means there is an implementation gap between the ambitions and the project. The lack of implementation can occur because of ineffective use of planning tools, but it could also be because of uncontrollable changing circumstances.

The analytical case study model consists of four layers, based on the analytical tool used in the book 'Understanding policy fiascoes' (Bovens & 't Hart, 1998). The four layers in this book are: 1. Assessing events, 2. Identifying agents, 3. Explaining agents' behaviour, and 4. Evaluating agents' behaviour. Although these layers are used for a different purpose than this research, they serve as an example and inspiration for the analytical case study model of this research.

The four layers in this analytical case study model are: 1. Assessing the case, 2. Identifying the gap, 3. Explaining the gap, and 4. Evaluating the case.

- The first layer is a case description with a short introduction about the municipality, the project characteristics and an extensive timeline.
- In the second layer the gap will be identified, by comparing the pre-formulated sustainability ambitions with the realised ambitions. The ambitions will be categorised in the list of sustainable objectives of figure 4 (p.18) to serve as an objective measurement method. Also the origin of the ambitions will be explored in this layer.
- In the third layer the reasons for the forming of the implementation gap are explained. A project is not only influenced by the use of planning tools, but is set in in a context which influences finances, politics and so on. Therefore the explanation is divided in the use of planning tools and influence of the context.
- Then the fourth layer is put in a separate chapter where a cross case analysis will be made in
 which the differences and similarities between the cases are evaluated. This will provide the
 input to give a recommendation about effective ways for public planners to steer on policy
 implementation.

Two questions are related to the second, third and fourth layer of the analytical case study model. Because the first layer is the case description a research question is not needed.

- 1. What does the implementation gap between the objectives and the project result consist of and why did the implementation gap develop? (Identification and explanation)
- 2. How are planning tools used in practice to bridge sustainable urban policies and sustainable urban development projects? (Evaluation)

The findings of the case studies make it possible to give a recommendation about the future application of planning tools by public planners in sustainable urban development projects.

In figure 9 the analytical case study model can be seen as a graphic model, with reference to the four layers and the subjects that will be described.

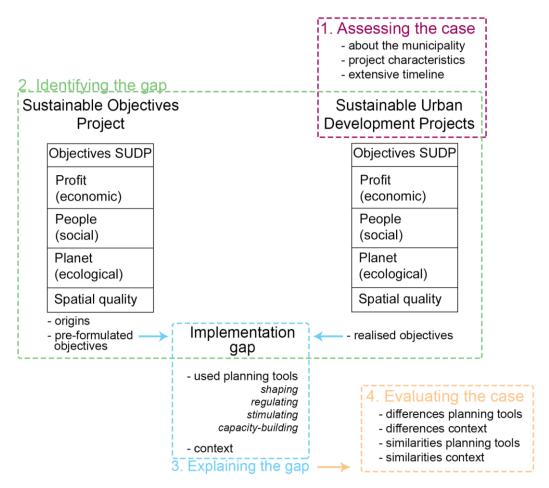


Figure 9. Analytical case study model

3.1.1 Case selection

For this research two in-depth case studies have been conducted. The choice for two cases is based on the goal to compare the cases. One case should have reached (most of) the pre-formulated sustainable objectives, while in the second case it looks like it has not reached (most of) the pre-formulated sustainable objectives. This will make it possible to compare the use of the application of the planning tools and the implementation gap. Timewise it has also been a well-considered choice to choose two projects to compare instead of more.

To choose the cases the following selection criteria have been set up:

- The case is executed in the Netherlands, because of practical reasons (country of residence, language, distance).
- The case is realised or partly realised, to be able to (possibly) identify an implementation gap.
- The case is an urban development.
- The cases are preferably executed during the similar period.
- The case has had sustainable objectives pre-formulated, to be able to compare the results with.
- One case has realized (most of) the sustainable objectives, the case with a small implementation gap. Preferably objectives with a high ambition level.
- One case did not realize (most of) the sustainable objectives, the case with a large implementation gap.
- The case is initiated by the public sector, to be able to study the effectiveness of planning tools.
- Preferably good accessibility to case study documentation and key persons.

RijswijkBuiten is selected as the case with (most of) the sustainable objectives implemented and has a high ambition level. The idea for RijswijkBuiten (former Rijswijk-Zuid) dates back to 1995, realisation

has started in 2013. This development has gained attention from academics and the media because of applied strategies and models (Van der Harst, 2014). RijswijkBuiten is known for successful implementation of people, planet and profit ambitions. The University of Delft (Praktijkleerstoel Gebiedsontwikkeling) is closely involved with the development and has written two extensive dossiers about RijswijkBuiten. Also, municipal documents can easily be found on the website of the municipality, so access to documentation is quite good. Furthermore, several interviews with key persons have been found in other theses (i.a. Van der Harst, 2014; De Jong, 2013b; Jansen, 2016), which shows they are willing to cooperate for interviews.

The search for a case with a large implementation gap was harder to find than expected. A few developments have been considered as projected in the table below (table 5).

Development	Vinex	Strijp R,	Stadsoevers,	Zuidpolder,	Bruisend
		Eindhoven	Roosendaal	Eemnes	Dorpshart,
					Kaatsheuvel
(Partly) realised	Yes	Yes	No	No	Yes
Urban	Yes	Yes	Yes	No	No
development					
Sustainable	Yes	Yes	Yes	Yes	Yes
objectives pre-					
formulated					
Sustainable	No	Yes	-	-	No
objectives					
implemented					
Initiated by	Yes	No	Yes	Yes	Yes
public sector					
Good	No	Fairly	-	-	Yes
accessibility to					
documentation					

Table 5: overview of considered developments and selection criteria

First of all the aim was to find a Vinex development, there are more than 110 Vinex developments in the Netherlands. Vinex is the abbreviation of 'Vierde Nota Ruimtelijke Ordening Extra' (English: Fourth Memorandum Spatial Planning Extra), a policy brief made by the Dutch Ministry of Housing, Spatial Planning and the Environment in 1988. It sets plans for massive new housing developments in outer city areas (Boeijenga & Mensink, 2008). The government had several sustainable objectives preformulated. The choice for a Vinex-location as a project with few sustainable objectives reached, would have been because many of these projects have received critiques on their realisations (Van Iersel & 1999: De Wildt **RIGO** Delft, Marsman, et al., 1999; & **OTB** 2005). However, the developments mainly took place between 1995 and 2005 and it was hard to find documentation. There were a few reports evaluating many Vinex developments and comparing them with each other, but these did not provide enough foundation to select a certain Vinex development as a case.

By asking colleagues and searching on the internet a few other developments were considered.

Strijp R in Eindhoven is a housing development on a former industrial area of Philips. There is newly built housing as well as transformation of former factory buildings. There is extra attention on a few aspects of sustainability, for example all the dwellings in Strijp R are connected to a WKO (Strijp R, n.d.). Because of this, it seems that their sustainability ambitions have been implemented. Furthermore, the area was tendered by the municipality and then in 2005 bought by a developer who was responsible for the plan making of the area (Kennisbank Herbestemming, n.d.). These latter two reasons make Strijp R unsuitable as a case study for this research.

The idea for Stadsoevers in Roosendaal has started in 2008, with the main ambition to make it an experimental area for innovative projects such as the Smart Climate Grid which connects several energy systems (Gebiedsontwikkeling.nu, 2011). Sustainability should have been an important part of the Stadsoevers development (BN DeStem, 2010). However, nothing has been realised yet. 30 dwellings

have been planned to start construction in March 2017 (Kijkoproosendaal.nl, 2016). Because the realisation has not started yet, this development is unsuitable as a case study for this research.

For the development of Zuidpolder in Eemnes ambitions concerning spatial quality, health, use of materials, energy and more have been made (Gemeente Eemnes, 2012), but only around 30 dwellings have been realised until now (Van Wijnen, 2016). This is not sufficient to make a good analysis of the implementation gap and the use of planning tools.

Bruisend Dorpshart in Kaatsheuvel is a redevelopment project of the town centre of Kaatsheuvel, part of the municipality of Loon op Zand. Kaatsheuvel is a village with ca. 16.000 inhabitants. The project started in 2007 and is recently delivered (end of 2016). Dwellings and a multifunctional accommodation have been realised, placed around a square which was also part of the development (www.bruisenddorpshart.nl). A specific document about sustainability was made for the project, according to the land-use plan. However the development is not promoting sustainability, which was an indicator of implementation failure of the sustainability document. Although it is not an urban development because it is located in a village, the size and program are similar to an urban development. Brink Management / Advies, the graduation company, has worked for this project so access to documentation was very good. Together with the indication of implementation failure this development seemed suitable to select as the second case study.

The two case study projects are RijswijkBuiten in Rijswijk and Bruisend Dorpshart in Kaatsheuvel. Although it is a comparison between a successful development and a less successful development concerning sustainability objectives, it should be noted that this does not mean the Bruisend Dorpshart development is a failed project. Many other ambitions have been implemented, when the construction phase really begun it took just 3 years to finish, it is an esthetical improvement of the area, the dwellings are all occupied, the multifunctional building is used intensively, many events have been hosted on the square, the inhabitants of Kaatsheuvel and the municipality are proud of the development and it has given a new and lively impulse to the town centre. Furthermore, both case studies are conducted to be able to draw lessons from them.

3.2 Research techniques case studies

Several research techniques have been used in the case studies such as document reviews and interviews. It is common to use these types of techniques in qualitative research, according to Miles & Huberman (1994). Project documents such as plans, development agreements and publications have been studied and semi-structured interviews have been conducted in both case studies. In Appendix I there is an overview of the sources that have been used and in Appendix II the interview schemes have been provided.

Documents

In the case of RijswijkBuiten the most used document has been the Masterplan Rijswijk-Zuid (Gemeente Rijswijk, 2009). Also the Dossiers made by the TU Delft Praktijkleerstoel Gebiedsontwikkeling (Mensink & Franzen, 2011; 2013) have been studied much. Other documents that have been studied are the landuse plan, the visual quality plan, municipal coalition agreements, master's theses and news articles. These documents have all been found through digital databases. Internal documents such as contracts or bid books have not been necessary, as the necessary data was collected via publicly available documents and the conducted interviews.

In the case of Bruisend Dorpshart Kaatsheuvel mainly internal documents have been used, as there was not much publicly available. Access to these internal documents was available by the graduation company Brink Management/Advies, because they have worked on the project. Many ambitions have been found in the bid book of the tender as well as in a separate ambition document added to the bid book: Duurzaam Verbindend (English: Sustainably Connected). Other internal documents that have been studied were development agreements and progress reports. Similar to the case of RijswijkBuiten the land-use plan, the visual quality plan, municipal coalition agreements and news articles have also been studied.

These documents have helped to write a case description and list the pre-formulated sustainability objectives of the projects.

Interviews

In each case semi-structured interviews have been held with actors from different perspectives to increase the validity of the interviews. Per case study an interview has been held with an Alderman involved with the project, a municipal project leader, the developer and an external consultant of the project.

- The choice to conduct an interview with an Alderman is to ask about sustainable policy objectives on a municipal level, to know where the sustainable objectives of the case study project originate from, and to ask about the policy making process of the project.
- The interview with a municipal project leader is to gain insight about the implementation of the set objectives; have the objectives been implemented, why (not) and how? Also the cooperation with other actors will be questioned.
- The choice to interview the developer is partly to cross check the cooperation between the municipality and developer, as well as to ask about how the plans, actions, and attitude of the municipality have been perceived.
- The external consultant can give an objective view on the case on several matters.

An overview of the interviewees can be found in the table below.

Table 6. Overview of interviewees case studies.

Interviewees RijswijkBuiten, Rijswijk		
Ronald van der Meij	Alderman, Municipality of Rijswijk	
Cees Rieke	Deputy director of Programmabureau RijswijkBuiten, Municipality of Rijswijk (municipal project leader)	
Joris Stouten	Senior developer at Dura Vermeer	
Robbert van Rijswijk	External consultant at Merosch	
Interviewees Bruisend Dorpshart Kaatsheuvel		
Gerard Bruijniks	Alderman, Municipality of Loon op Zand	
Wilfried Janssens	Municipal project leader, Municipality of Loon op Zand	
Christa Ippel	Urban area developer at Heijmans	
Ernst van der Leij	External consultant at Brink Management/Advies	

The names of the interviewees of the municipality of Rijswijk have been found in other documents, such as news articles and other theses. The interviewees at Dura Vermeer and Merosch were contacted after being redirected within the companies.

The names of the interviewees of Bruisend Dorpshart Kaatsheuvel were given by my supervisor at my graduation company, Brink Management/Advies, as they were involved as consultants in this project.

The duration of each interview was about an hour and the interviews have been digitally recorded. Permission to record was asked prior to the interview, all interviewees gave their permission. This allowed to focus on the interview and to ask more in depth questions when certain answers seemed interesting and relevant. The question topics were provided beforehand, simultaneously with the invitation for the interview.

Processing the interviews

The interviews have been processed by playback of the recordings and during this the parts relevant for the research were summarized. Then the parts were coded with labels (open coding):

Code	Reason for this code		
Ambition	To list ambitions that are mentioned during the interviews		
Implementation of objectives	To list if (and which) objectives have been implemented		
Reason for implementation (gap)	To list potential reasons that contributed to (non)compliance		
Context	To list contextual influences mentioned during the interviews		
Shaping			
Regulating	To categorise certain actions according to the planning tools		
Stimulating	To categorise certain actions according to the planning tools		
Capacity building			
Municipal view on sustainability	To list parts where something was mentioned about the municip		
	view on sustainability		
Origin of ambitions	To list where the project ambitions originate from		

These codes correspond with subjects of the analytical case study model. In the Kaatsheuvel case another code was added: non capacity building, because some parts could be recognized as opposites of capacity building.

Per case all the parts according to the labels were put together, to have a good overview of all the things that have been said per label by each interviewer. This step further enabled the process from interview analysis to case descriptions. See Appendix III for the coded transcripts.

Other methods

Because some objectives in the People section of the case RijswijkBuiten can mainly be experienced by the residents of RijswijkBuiten, it became necessary to conduct a survey among residents to be able to get an indication if these objectives had been realised or not. The survey was a short online survey that consisted of 7 multiple-choice questions. To reach the residents approximately 200 flyers which included the link to the online survey were distributed over several parts of RijswijkBuiten. There have been 25 responses on the survey, so valid conclusions cannot be drawn. The questions and results can be found in Appendix IV.

3.3 Method: case studies

The research strategy is qualitative. One of the most recognisable characteristics of qualitative research is that it usually is focused on words rather than quantification in data collection and analysis. Furthermore, it emphasizes an inductive approach to the relationship between theory and research, which leads to the *generation* of theories (Bryman, 2012).

However, according to Silverman (1993, in Bryman, 2012) qualitative research is used more and more for the *testing* of theories. So a case study can be used for both theory generation and theory testing (Bryman, 2012).

In this research qualitative research is used for the testing of the conceptual model by using case studies.

3.3.1 Case study methodology

In this research two in-depth case studies will be conducted to find out if theoretical aspects described in chapter 2 are found in practice. The case studies projects will be analysed to identify the implementation gap and why the implementation gap has developed and how planning tools have been used in the case studies.

The method of a case study was chosen because it 'facilitates the exploration of a phenomenon within its context using a variety of data sources' (Baxter & Jack, 2008). This allows the issue to be looked at through different lenses which reveals multiple angles of the phenomenon to be understood. The researcher can explore organizations or individuals 'through complex interventions, relationships, communities, or programs' (Yin, 2003).

In the field of case studies there are two main approaches for the guidance of case study methodology: the first is by Robert Stake (1995) and the second by Robert Yin (2003, 2006). Both approaches aim at a good exploration of the topic of interest and a revelation of the essence of the phenomenon.

A case study design should be considered according to Yin (2003) when:

- The focus of the study is to answer 'how' and 'why' questions;
- You cannot manipulate the behaviour of those involved in the study;
- You want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or
- The boundaries are not clear between the phenomenon and context

Stake (1995) notes that his case study method would be more beneficial for the study of programs and people than the study of events and processes. This intersects on some point with Yin who thinks that case study methods are best for program evaluation (Yazan, 2015).

In program evaluation information is collected, analysed and used to answer questions about projects, policies and programs (Office of Planning, Research & Evaluation, 2010).

This research meets both approaches that justify the choice for a case study design. The question to be answered is a 'how' question, the behaviour of those involved in the study cannot be manipulated, the contextual conditions are relevant for the study, and it is a study of program.

The type of case study for this research is the 'instrumental case study' which is described by Stake (1995). In an instrumental case study the case plays a supportive role, which is used to provide insight into an issue or to help to refine a theory. 'The case is often looked at in depth, its context scrutinized, its ordinary activities detailed, and it helps the research pursue the external interest'.

The cases are used to provide insight into an issue, as they will be evaluated in depth to be able to conclude how the planning tools are used in practice, and if this then leads to the desired result of a sustainable urban development. The cases help to give empirical insight into the classification of Adams (Adams & Tiesdell, 2010, 2013; Adams & Watkins, 2014; Adams et al., 2005).

By having an in-depth focus on the case studies, it gives the possibility to create a good understanding of the project and its context.

3.3.2 Validity and generalizability

There are some critical issues when conducting case studies that have to do with the research validity and generalizability. This section will explain them and explain how they are dealt with in this research.

There are critics that practical knowledge is less valuable than theoretical knowledge, especially in case studies where there are only a small number of cases. This critique can be dealt with by applying triangulation of data. Triangulation is the use of more than one method or source of data in the study of a social phenomenon so that findings may be cross-checked (Bryman, 2012). This increases the validity of research results. In the case studies two research techniques have been used: document analysis and semi-structured interviews. The interviews have been held with several actors in the development to validate each other's statements.

The case studies try to find relations between the implementation gap and the effectiveness of the planning tools. This means we should keep the issue of *internal validity* in mind. Internal validity relates to the issue of causality and is concerned with the question whether a certain relation between variables is valid. In Bryman (2012, p. 390) it is said that LeCompte and Goetz argue that internal validity is a strength of qualitative research, because the prolonged participation 'allows the researcher to ensure a high level of congruence between concepts and observations'. In this research there is no 'prolonged' participation per se, but an in-depth focus.

However, LeCompte and Goetz argue that *external validity* is a weakness of qualitative research. External validity refers to the degree to which derived findings can be generalized, which is also one of the standard criticisms of case study methodology. The findings of the two case studies conducted in this research cannot be generalized to all similar cases. The cases are used to obtain empirical findings on the use of planning tools to make recommendations on the deployment of the planning tools for similar cases.

4. Case 1: RijswijkBuiten, Rijswijk

In this chapter the case study project RijswijkBuiten, located in Rijswijk will be discussed. The interviewees in this case study were Ronald van der Meij (Alderman), Cees Rieke (deputy director Programmabureau RijswijkBuiten), Joris Stouten (Dura Vermeer) and Robbert van Rijswijk (Merosch consultancy).

4.1 About the municipality

RijswijkBuiten is part of the municipality of Rijswijk, a city located in the Southwest of the Netherlands between The Hague and Rotterdam. The area is located in the south of Rijswijk and the north of Delft.

There are ca. 50.000 habitants in Rijswijk and according to the Netherlands Environmental Assessment Agency (PBL) Rijswijk is the fastest growing municipality of the Netherlands (Groot Rijswijk, 2016).

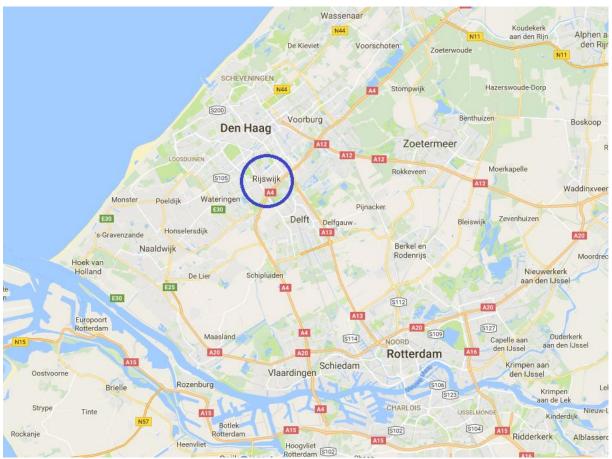


Figure 10. Location of Rijswijk (Source: Google Maps)

4.2 Project characteristics

Initiator	Municipality of Rijswijk
Surface area	230 hectares (incl. park zone)
Time span	2006 – 2023
Construction started	2013
Amount of dwellings	4000 – 4250
_	Ca. 1000 realised at the moment
Other functions (realised at the moment)	Primary school

RijswijkBuiten is divided into three sub-areas: Sion, 't Haantje and Pasgeld. The whole area covers ca. 230 hectares greenfield, including the parks. Until recently the area was used for the greenhouse industry, but the history of this southern part of Rijswijk goes back to the 15th century. A monastery named Sion was build there and stood there for 140 years. The contours of the monastery's garden are still visible in the water structure of the area (Gemeente Rijswijk, 2009).

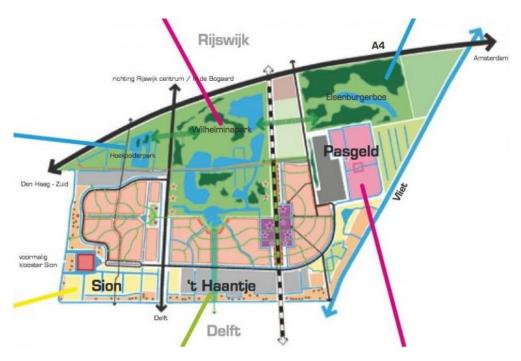


Figure 11. Plan of RijswijkBuiten (Nieuwbouw-Rijswijk.nl, n.d.)

Because there was no future anymore for the greenhouse industry the municipality set up a new vision for the area. In 2006 the choice was made to make an area with mainly housing, as part of a regional task. It would be mainly single-family dwellings in an area with an urban green character. Rijswijk has many multi-story dwellings, so adding single-family dwellings to the municipality would attract particular target groups to come and/or to stay in Rijswijk. In 2009 a Masterplan was written which would lead as the main policy document for the project. In this Masterplan the calculated number of houses for the area is 4250 dwellings. The area will be realized in a time span of 10 years, starting construction in 2013.



Figure 12. Scale model of RijswijkBuiten (Onafhankelijk Rijswijk, 2014)

A separate division within the municipality was set up in 2009 to oversee the development: 'Programmabureau RijswijkBuiten' (English: Program office RijswijkBuiten). In March 2011 the Programmabureau RijswijkBuiten issued a tender to look for a development partner. The municipality wanted more than a developer, they were looking for a partner who would help guide in the process from wasteland to a residential area (Dossier 2, 2013).

At the time of writing the first sub-area, Sion, is largely realized. The Programmabureau RijswijkBuiten has cooperated closely with its development partner for Sion, Dura Vermeer. All the dwellings have an EPC 0 and are mostly single-family dwellings in the affordable segment.

4.3 Extensive timeline of Rijswijk-Zuid to RijswijkBuiten

An extensive timeline with the main events from the start of the project until recent time, December 2016, is explained below. This timeline is based on Dossier Rijswijk-Zuid (Mensink & Franzen, 2011) and Dossier 2 RijswijkBuiten (Mensink & Franzen, 2013) made by the TU Delft Praktijkleerstoel Gebiedsontwikkeling (English: Chair Urban Area Development), the municipality of Rijswijk and Deloitte Real Estate Advisory and the conducted interviews.

The current area where RijswijkBuiten is being built, used to be an area for greenhouse industry during most of the 20th century. Before 2011 it was referenced as Rijswijk-Zuid. In 1995 the greenhouse owners in the area contacted the municipality to discuss the future of the area. The allotments were old and fragmented and it was not possible to exploit it profitably anymore. Also a lot of maintenance was necessary to the roads and sanitation. This led to the idea to create a large business area of approximately 60 hectares in 2000. From 2003-2004 exploratory studies were conducted to the possibilities of a business park. The result was that a business park of the proposed size was financially not feasible. It would be necessary to build 2000 dwellings to reach a feasible business case.

In this same period the potential of the area was frequently discussed by the Mayor and Executive Board. Then in March 2006 it turned out that in most of the municipal election programs the plan was to build a residential area in Rijswijk-Zuid instead of a business area. At the time developers often bought land speculatively, but to be able to keep municipal control the decision was made to apply the Municipal PreEmption Rights Act (Dutch: Wet Voorkeursrecht Gemeenten). This means that when the owner of the land sells the plot, it is the municipality's right to be the first to enter into negotiations. To substantiate the use of the PreEmption Rights Act a general land-use plan was made without a vision on the area.

This general land-use plan was agreed upon by the city council in September 2008. But the region (Stadsgewest Haaglanden) did not agree and insisted on creating a large business area in Rijswijk-Zuid of 30 hectares. After discussions it was settled to create 15 ha in Rijswijk-Zuid and 15 ha elsewhere in Rijswijk. Close to the area there is a large science-based company, DSM, which was hesitant about a residential area so close to their site. DSM asked the Province to comply to the environmental contours, which meant dwellings could not be built in Rijswijk-Zuid.

In October 2008 the first Sionsgaerde gathering was held. This was a gathering between the Mayor and Executive Board and the City Council concerning the development of Rijswijk-Zuid. A few professionals from practice were also invited. From this first gathering a few important ambitions were clear already, especially an urban green character, sustainability and much attention for the public space.

Within the municipality the Programmabureau Rijswijk-Zuid (English: Program office Rijswijk-Zuid) was set up in 2009, to focus on the development as a separate organization within the municipality.

It was quite clear that the land-use plan would not be approved because of the issues DSM pointed out. It was essential that the municipality created a good relationship with the Province in this stage. By organizing workshops the ideas of the municipality and the Province came closer together which was also the input for the Masterplan Rijswijk-Zuid 2009. A new land-use plan was made with support of the Province and agreement of DSM. The masterplan was accorded by the city council in 2009. The masterplan makes it very clear that there is a flexible plan which allows adaptation to the circumstances.

In the development of Rijswijk-Zuid the Programmabureau cooperates with a development partner. In March 2011 they issued a tender looking for a developer as a partner sharing the same values, rather than looking for the best plan and offer. In this way the Programmabureau can use the expertise of a private party and share the risks, without losing their control. At the end of 2011 the partner was selected, Dura Vermeer. It was around this time the brand name of the area was changed to RijswijkBuiten.

At the beginning of 2012 the first sub plan of Sion was developed, in September 2012 the sale started and at the beginning of 2013 the constructions started. Currently ca. 1000 dwellings have been realised. The plan is to realise ca. 4000 dwellings in RijswijkBuiten, divided in the sub areas Sion, 't Haantje and Pasqeld.

4.4 Identifying the implementation gap

We have described the development, so now the focus will be on the implementation gap. We identify the implementation gap by comparing the pre-formulated objectives in the Masterplan (Gemeente Rijswijk, 2009) with what has been realised in RijswijkBuiten until now. First, we will look at where the ambition for a sustainable urban development project comes from.

The sustainability ambitions for RijswijkBuiten originate from several reasons. The Province of South-Holland asked Rijswijk to use the DPL instrument because of environmental contours around the chemical company DSM. The DPL (Dutch: DuurzaamheidsProfiel van een Locatie, English:

Sustainability Profile of a Location) instrument is developed by IVAM UvA, an academic research agency about sustainability. It comprises 25 aspects of sustainability and gives a score on these aspects by comparing the development with a default area. This motivated the municipality to give extra thought to the strengths and weaknesses of sustainability in Rijswijk-Zuid: "Don't try to find reasons to eliminate the environmental contours, but mainly try to bring out your own strengths." (C. Rieke, personal communication, October 13, 2016).

Also, the development started during the financial crisis. It had to differentiate from other developments at the time to be attractive: "We have started Rijswijk-Zuid in a time of crisis, the crisis was about to happen. (...) We believed that we had to create something distinctive, distinctive from what was happening in our neighbouring municipalities." (C. Rieke, personal communication, October 13, 2016).

However, in the municipal coalition agreement of 2006-2010 there is little to be found about Rijswijk-Zuid and sustainability. It is mentioned to develop Sion and 't Haantje as a new housing area while preserving the cultural and historical structures and connecting the ecological zones Wilhelminapark, Elsenburgerbos and the Zwethzone.

4.4.1. The pre-formulated objectives on paper

To establish the nature of the implementation gap, we will look at the pre-formulated sustainability objectives and compare these with the results.

In the case of RijswijkBuiten the objectives for the project were set in the Masterplan of 2009 (Gemeente Rijswijk, 2009). The objectives found in the Masterplan are categorised according to the objectives of sustainable urban developments, found in figure 4.

Profit

To create a *favourable location for activity*, the municipality of Rijswijk wants to contribute to the economic profiles that are envisioned for the region, by providing a variety of possibilities to settle in Rijswijk. The choices of which facilities to realise, will be discussed with the neighbouring municipality of Delft.

In an effort to *stimulate local entrepreneurship*, 15 hectares of business area will be realised in RijswijkBuiten which will provide mainly space for small and medium enterprises. Also dwellings with the possibility to create a workspace at home will be realised.

According to the economic policy of Rijswijk it is fitting to link the development of RijswijkBuiten with the redevelopment of Plaspoelpolder, a big office park in Rijswijk, which will be attractive for *long-term investments*.

People

Concerning *social security and interaction*, the objective is that residents feel safe in the area and are involved with the neighbourhood.

Already during the plan development, the municipality wants to create conditions for *social cohesion* and *security*. They want to do this by involving future residents and institutions in the plans for designing the public space and the facilities in the area. In every neighbourhood there will be meeting spaces for children to play and for adults to chat.

There will be a percentage of 10% social housing in the rent sector. This percentage will be complemented to 30% with social housing/affordable housing in the owner-occupied sector (R. van der Meij, personal communication, October 26, 2016).

RijswijkBuiten will be realised in small parts of development, with a focus on *demand-oriented* development.

The construction of RijswijkBuiten will lead to an increase of car traffic, so the road capacity must be adjusted to ensure *good accessibility*.

Planet

During the construction of the area there will be *public transport* to serve the (future) residents and it will develop further as the area develops. Existing bus connections will need temporary connections through RijswijkBuiten. There will be space reserved to be able to realise a lightrail station in 't Haantje. The anticipation of a station also shows in the urban design and infrastructure, where there will be facilities in a high density.

Bike-usage has a high priority in RijswijkBuiten. The most important destinations should be reached within 10 minutes and the roads should be safe. At the time of writing the masterplan there were regional cycle paths along the Beatrixlaan and the Lange Kleiweg. Attached to these routes should be cycle paths to connect within the three subareas of RijswijkBuiten as well as paths between the subareas. The cycle paths within RijswijkBuiten should lead attractively to facilities, train stations and recreational destinations.

With regard to *self-sufficiency* and the *usage of renewable sources* there are high ambitions for RijswijkBuiten. Passive-housing will be realised. Solar boilers, thermal energy storage systems and PV panels will be implemented in the dwellings, to realise a maximum EPC of 0,4. The Trias Energetica line of thinking is mentioned in the Masterplan. The dwellings will be maximally isolated and the demand for heat and electricity will be generated from renewable sources.

To decrease and prevent environmental pollution waste- and rainwater will be as much as possible reused, preferable in the area itself. Adding greenery can lead to a decrease in the energy consumption of buildings and bring natural cooling.

The *living environment will be supported* by executing several ambitions. The quality of water will be improved by making environment friendly shores and preventing polluting sources.

It is Rijswijk's ambition to connect the ecological zones of the parks and continue its green tradition in RijswijkBuiten. Plantation reduces fine-particle emissions and buffers rainwater when there are heavy rains. A variation of plants and animals offers a rich experience for the direct living and business area.

The new neighbourhoods will get a green appearance. There is special attention for the connection of the neighbourhood to the existing parks and the connection of the ecological zones.

Spatial quality

There will be *varying densities* in the new neighbourhoods, ranging from 30 dwellings/ha in areas with expensive dwellings and 50 dwellings/ha in areas with apartments within the greenery. Furthermore, Rijswijk wants to have a wide variety in housing typologies to attract different target groups on the housing market.

It is intended that RijswijkBuiten becomes a complete neighbourhood, with facilities such as shops, schools, sports facilities, and medical- and care facilities, i. e. *mixed-use*. Preferably the facilities will be clustered on a central location. The expectation is that the first fifteen years there is more demand for child care than in later periods. By realising multifunctional buildings, these can later be transformed to other functions.

The history and present will be visibly connected with each other. The cultural-historical heritage of the old monastery is used as the inspiration for the lay-out of RijswijkBuiten. Water will get an attractive and visible place in the new neighbourhoods, for which the natural and historical water structure will be used. The identity for the area of the upgraded park zone can be identified as a 'park city'.

In terms of *robustness* a certain safeness should be provided against flooding, taking account of climate changes and it should fit in an urban area.

The plan is also financially robust. When the Masterplan was set up, the design and the finances were made simultaneously. There are several layers of ambitions in the Masterplan: a basic plan which is financially feasible and a basic plan + and basic plan ++. For the latter two plans the financial feasibility will be calculated separately and it is necessary to collaborate with external parties for financial support.

4.4.2. The pre-formulated objectives in the realised project

Based on documents, news articles, a survey and interviews the information about the realised preformulated objectives has been gathered.

Profit

The objectives in the profit section are not realised yet, but we try to describe to what extent the current development offers opportunities to reach economic goals. In the land-use plan it is stated that 15 ha business area should be realised in RijswijkBuiten.

There will be several possibilities for *local entrepreneurship* in RijswijkBuiten: a workspace attached to a dwelling or at home or a detached workspace on the same plot as the dwelling. On the edge of 't Haantje there will be separate business lots for businesses that fit in the spirit of RijswijkBuiten. There will be no large companies (www.rijswijkbuiten.nl).

People

The objectives in the people section can mainly be experienced by the residents of RijswijkBuiten. To have an indication whether these objectives have been realised, a small online survey was set up consisting of 7 multiple-choice questions. The results below merely show an indication of how the respondents perceive social security, social interaction and social cohesion. The survey questions and responses can be found in Appendix IV.

Social security and interaction

When asked if the residents feel safe in the neighbourhood it is clear that the majority of the respondents feel safe. 7 respondents feel very safe, 17 respondents feel safe and 1 respondent answered neither safe, nor unsafe.

The social relation between residents seems good in general. 14 respondents say there is a good relation, 7 respondents say there is a fairly good relation. However, 3 respondents answered there is a fairly bad relation and 1 respondent chose the 'I do not know' option.

The overall indication is that residents feel safe in the area and there is a good interaction between the residents.

Social cohesion and security

The plan of the municipality was to involve future residents with the plans of their neighbourhood, however only a third of the respondents (8 respondents) answered that they have been actually involved in the plan making. According to 4 of these 8 respondents, the municipality did not consult with them about the theme of the neighbourhood, design and the facilities. The remaining part of the 8 respondents answered the municipality did consult with them about those three facets. The majority, 16 respondents stated they were not involved in the plan making. Of these 16, 10 respondents answered they were not involved because they were not invited by the municipality and 3 respondents answered they were not involved because they did not feel the need to participate. The remaining respondents answered 'not applicable'.

It would seem that the objective of the municipality to involve future residents has only been realised partly according to the respondents of the survey among residents.

Another condition to create social cohesion and security is by providing meeting spaces where children can play and adults can chat. In the survey a statement was made where the respondent had to answer if he/she agreed with it. The statement was: The design of the public space in RijswijkBuiten stimulates (new) meetings between the residents. 4 respondents strongly agree, 10 respondents agree, 5 respondents were neutral and 6 respondents disagree. We also asked if the residents think there are enough meeting spaces, including playgrounds. 18 respondents answered they think there are enough meeting spaces, 1 respondent answered there are more than enough meeting spaces, and the remaining 6 said no, a few more meeting spaces can be added.

A slight majority of the respondents think the meeting spaces stimulate (new) meetings, which could indicate that the objective of providing meeting spaces for social cohesion is just reached according to the survey. However, the amount of meeting spaces seems to be mainly satisfactory.

Overall the indication about social interaction and cohesion seems good. 3 respondents feel very involved in the neighbourhood, 18 respondents feel involved, 3 respondents feel neither involved nor uninvolved and merely 1 respondent feels uninvolved with the neighbourhood.

Also, the construction of 24 sustainable rental dwellings in the social housing sector will start soon (R. van der Meij, personal communication, October 26, 2016).

Demand-oriented development

The development of RijswijkBuiten is realised in small parts and for each part the market demand is kept in mind (R. van der Meij, personal communication, October 26, 2016). There are no panels with future residents, but there is an information centre in RijswijkBuiten itself where there are advisors and potential buyers can get information about the development. The advisors get insight about the potential buyers' demand, so products that are in demand will be developed (J. Stouten, personal communication, October 19, 2016).

Good accessibility

Because of the anticipated increase of car traffic, the road capacity of the Prinses Beatrixlaan has been adjusted. This is an important connecting road between Rijswijk and Delft. The traffic flow was not optimal and would get under pressure after traffic increase.

Therefore the Prinses Beatrixlaan is doubled from two to four lanes. On both sides there are separate cycle paths. There was much attention for traffic flows, cyclists, water and greenery during the design phase. The construction took place from 2013 to 2015 (Nederland 2.0, 2015).

Planet

Public transport is not yet available in RijswijkBuiten, because this is organised by the public transport companies and is outside the influence of the municipality. More on this can be found in paragraph 4.5.2 (page 47).

Stimulating bike-usage and walking

There are many cycle paths in Sion and in the routing to Sion. The area has good infrastructural access for bikes to the centre of

"Public transport is not growing with the neighbourhood and that is due that public transport companies think in business cases."

R. van der Meij – Alderman

Rijswijk and the cities of Delft and The Hague (Google Maps). Within the area there are narrow lanes which are only partly accessible by cars, leaving much room for (young) cyclists and pedestrians to drive and walk safely (figure 13).







Figure 13. Cycle paths and narrow lanes in RijswijkBuiten (source: own photos)

Figure 14 below is from a supplement on the cycling policy of the municipality of Rijswijk, focused on the area of RijswijkBuiten and its surroundings. The blue routes show priority routes, the red routes show other main routes. One of the blue routes is the Prinses Beatrixlaan, which lies between Sion and 't Haantje. The Prinses Beatrixlaan connects Delft, Rijswijk and The Hague (Gemeente Rijswijk, 2013).



Figure 14. Cycling policy Rijswijk (source: Gemeente Rijswijk, 2013.)

Self-sufficiency / usage of renewable sources

The dwellings in RijswijkBuiten are all energy-neutral and have innovative ways of sustainability. There is technical optimization of insulation, triple glazing, heat pumps and ground heat exchangers are applied, and solar panels are placed. The dwellings have an EPC score of 0,0, which is the legal requirement from 2020 and onwards (Dura Vermeer, 2016). These measures also add to the *comfort and a healthy living environment*. "There are even 'zero meter' dwellings (NOM, these dwellings use no energy) realised, so living concepts that go a step further. We have done that at the time with subsidy of the Ministry of Interior." (R. van der Meij, personal communication, October 26, 2016).

Because the development is fairly new it is hard to assess if *environmental pollution has been decreased* and prevented. There is a decrease for example because there is no connection with the gas pipelines, but a statement about the re-use of waste- and rainwater cannot be done yet. This counts the same for supporting the living environment.

Spatial quality

It is still the plan to create *varying densities* and housing typologies in RijswijkBuiten (C. Rieke, J. Stouten, R. van der Meij, personal communication, October 2016), but at the moment there are mainly single-family dwellings being built in Sion RijswijkBuiten with a density of 35-40 dwellings/ha in a suburban living environment. There are also a few apartment buildings and detached dwellings. In the other two sub-areas the density will be higher with 40-45 dwellings/ha. "In 't Haantje there will be a quiet urban living environment with 1 and 2-person apartments around the potential station area, but also more expensive dwellings near the Wilhelminapark" (R. van der Meij, personal communication, October 26, 2016).

At the moment there is no *mixed-use* of the area. The start of the construction of a primary school in Sion has started and is planned to be ready in December 2017. Other facilities are planned, mainly clustered in 't Haantje (R. van der Meij, personal communication, October 26, 2016).

The lay-out of Sion is inspired by the former monastery and the accompanying water structure remains the same. This *connects the history and present visibly* and creates *identity* (KuiperCompagnons, n.d.).

The water that is already available is not only recreational, but it is also adds to the *robustness* of the area because it serves as water storage in times of heavy weather.

4.4.3 The implementation gap

We cannot state if the Profit objectives have been realised, but the intentions are present to realise them.

Based on a survey among the residents it was indicated that the People objectives have been met.

In the Planet section most objectives are reached. RijswijkBuiten has not yet been connected with public transport. Because of time it is not possible to say decrease of environmental pollution and supporting the living environment have been realised. The construction of other functions than housing has started with the construction of a primary school, but the construction of other intended functions has yet to start.

Although not all objectives are implemented (yet), overall it can be stated that the implementation gap is fairly small in RijswijkBuiten. An objective which is often the obstacle in implementation is the usage of renewable sources. Its implementation and also of the social objectives have contributed to the successfulness of RijswijkBuiten (www.hetgroteduurzaamheidscongres.nl).

Table 6. Overview of pre-formulated and realised sustainability objectives in RijswijkBuiten

Obje	ctives sustainable urban development		
	in RijswijkBuiten	Pre formulated	Realised
Profit	Create a favourable location for activity	Yes	n.a.y./intended
(economic)	Stimulate local entrepreneurship	Yes	n.a.y./intended
	Stimulate local employment	No	No
	Attracting long-term investments	Yes	n.a.y./intended
People (social)	Social security	Yes	(indication) Yes
	Social interaction	Yes	(indication) Yes
	Comfort and a healthy living environment	Yes	(indication) Yes
	Social cohesion	Yes	(indication) Yes
	Human scale	No	No
	Demand-oriented development	Yes	Yes
	Good accessibility	Yes	Yes
Planet	Good connection with public transport	Yes	n.a.y.
(ecological)	Stimulating bike-usage and walking	Yes	Yes
	Self-sufficiency (circular flows)	Yes	Yes
	Usage of renewable sources	Yes	Yes
	Decrease/prevent environmental pollution	Yes	n.a.y.
	Support the living environment and respect ecological structures	Yes	n.a.y.
Spatial	Varying density	Yes	n.a.y.
quality	Mixed-use	Yes	n.a.y.
	Preserving and highlighting distinctive (historical) quality	Yes	Yes
	Create identity (place-making)	Yes	Yes
	Flexibility: resistant against future changes and innovations	No	No
	Robustness: resistant against changing (weather) conditions	Yes	n.a.y.
	Stewardship	No	No

n.a.y.: not available yet

4.5 Explaining the implementation gap

In this section we will explain how the implementation gap has been kept rather small by analysing which planning tools have been used and what the contextual influence has been in the development of RijswijkBuiten.

4.5.1 Planning tools used

In RijswijkBuiten we can recognize many planning tools. A clear and persuasive plan has been made, regulating has been used in a positive way, stimulus that are risk-reducing and capital-raising have been deployed and in capacity building we see market-shaping cultures and mind-sets, market-rich information and knowledge, market-rooted networks and market-relevant skills. The used planning tools have been elaborated below.

Shaping

In the RijswijkBuiten case the development conditions of the project have mainly been shaped in the form of an extensive masterplan which outlines the ambitions, and functions as a guide for the

development (C. Rieke, personal communication, October 13, 2016). Many sustainability ambitions can be found in this indicative plan (see paragraph 4.4.1), but because they are realistic it did not put off market actors (R. van Rijswijk, personal communication, October 28, 2016).

Besides the masterplan a project plan has been made by the consultants of Merosch, in which the energy ambitions have been turned into concrete (technical) objectives. "In the masterplan ambitions have been mentioned, but it is still a bit vague. We have made them very concrete." (R. van Rijswijk, personal communication, October 28, 2016).

"If you want to realise something with many ambitions and you want to create support, you have to let everyone provide input and think with you"

C. Rieke – project leader

When we look for the nine key variables of a persuasive plan (table 2, p.24; Tiesdell & Adams, 2012) we can find that the masterplan for RijswijkBuiten meets the majority of these variables, see table 7. Referring to the literature this would mean the chance of influencing outcomes is greater. According to the development partner the masterplan as well as the visual quality plan set a clear framework for the development (J. Stouten, personal communication, October 19, 2016).

Table 7. Key variables of a persuasive plan in RijswijkBuiten

Masterplan Rijswijk-Zuid	Masterplan Rijswijk-Zuid 2009 (RijswijkBuiten)			
Clear and apparent	Energy ambitions (EPC 0) are checked and substantiated by a			
evidence base	consultancy firm specialized in sustainable energy and turned out to			
	be realistic			
Plan's persuasive logic	Aware of risks of area development and how markets operate by			
and rationale	steering on demand oriented development			
Identity of plan maker	Plan maker is a government body (municipality)			
Charismatic, persuasive	Not clear			
advocates				
Endorsement by higher-	Province was involved in making the Masterplan			
level actors				
Plan maker's capacity to	Slight expansions of the basis plan have been added, which would			
marshal wider resources	need financial cooperation			
Attractive	Attractively presented as a brochure with many images, in a clear and			
communication and	simple language			
presentation				
Stakeholder	During an interactive process with civil servants, the executive board			
engagement	and the city council the Masterplan was set up. Other stakeholders			
	such as the neighbouring municipality of Delft, the Province of South-			
	Holland, the Metropole region of Rotterdam and The Hague, ProRail			
	and social organisations have been involved in the process as well.			
	Besides these stakeholders, external consultants from the TU Delft,			
	the regional water authority and an urban design firm have given			
	specific advices about for example the urban design, sustainability and			
	the water aspect.			
Community support	Community aspirations not known			

Regulating

The land-use plan was first rejected because it was too general and the Haaglanden region did not approve of the change from business area to residential area. A new land-use plan was made with support of the Province and agreement of DSM. The Province asked to use the DPL instrument because of the environmental contours of DSM. This was taken into the masterplan at first and then into the land-use plan, which makes it mandatory to use the DPL instrument. It seems sufficient to have only this demand legally binding in the land-use plan (C. Rieke, personal communication, October 13, 2016).

Because an ambition as EPC 0 cannot be a legal demand, this cannot be found in the land-use plan. Initially the EPC asked for in the tender was 0,4, however the consultants of Merosch came up with the idea to set EPC 0,4 as the maximum and challenge the market to make a plan with a lower EPC (R. van Rijswijk, personal communication, October 28, 2016). Dura Vermeer offered an EPC 0 and this has been put in the contract on a voluntarily basis (C. Rieke, J. Stouten, personal communication, October 2016).

"We have 'caused' this EPC o by ourselves." J. Stouten – developer

Stimulus

Several stimulating measures have been used for the development of RijswijkBuiten. First of all a direct state action by the municipality by using the Municipal PreEmption Rights Act (Dutch: Wet Voorkeursrecht Gemeenten) in 2006 (Mensink & Franzen, 2011). The result of this measure is that the majority of the land is owned by the municipality, so the development will not be constrained because of fragmented land ownership and the municipality can keep control of the site and have an active land policy (R. van der Meij, personal communication, October 26, 2016). This is also a form of policy certainty because it provides reassurance for market actors, so a risk-reducing instrument.

Initiated by Dura Vermeer in their bid on the tender was the 'Rijswijk model' (J. Stouten, personal communication, October 19, 2016). This model has been adapted in the partnership between the Programmabureau and Dura Vermeer. In this model the land exploitation remains with the municipality and the developer is responsible for the real estate development and gives advice. The developer gets a purchase option on developed lands to realise 250 dwellings. As a financial incentive to not lose focus and to maintain a steady pace, the developer pays a 5% deposit on the land it has a purchase option on and also pays a developer's fee of 4,5% interest per year on the projected worth of this land (Mensink & Franzen, 2011), "[The developer has] no investment in land, so the risk remains completely with the municipality, so that took away pressure from developers to buy land upfront to develop." With this model the development partner does not have to pay a large amount of money upfront to buy land and thus take a lot of risks, but is still able to build. The risk and ownership of the land remains with the municipality (R. van der Meij, personal communication, October 26, 2016). The municipality also benefits from this model as it generates income at an early stage and distributed income streams, has a committed developer, and has more control on the spatial quality (Mensink & Franzen, 2011). This model is a capital-raising action as it facilitates the development finances for the private sector.

"The energy ambitions of the municipality of Rijswijk have been checked by [the consultants of] Merosch, to find out if they were feasible. They were feasible and have been translated into the project plan. The costs would be a little higher than traditional, but would be earned back" (R. van Rijswijk, personal communication, October 28, 2016). Checking the ambitions on accurate market information is a form of a risk-reducing action.

The next stimulating measure has had its focus on encouraging the market to set the bar higher and has been brought up by Merosch. The selection criteria in the tender were partly based on the EPC that the developing party offered to achieve in his plan.

"(...) we have subsidised the first dwellings from the land exploitation, call it the inevitable loss on construction costs for the energy performance. The developer could not put that in the selling price."

R. van der Meij – Alderman

To prevent that objectives would not get implemented for financial reasons, the first dwellings have been 'selfsubsidised' from the land exploitation. The land price was set lower, to finance the sustainable energy measures without raising the selling price. Because of the improving economic situation the 'self-subsidy' part has decreased and per January 1, 2018 this financial help will not be needed anymore. This is also because the cost price of energy measures is decreasing and some banks provide buyers extra loan capacity for sustainable energy measures (R. van der Meij, personal communication, October 26, 2016). This is a capital-raising action which facilitates the development's financial feasibility.

There is stability in the staff that works in the process, which is a risk-reducing action. Continuity of the people in the process results in a shared knowledge base and history (C. Rieke, J. Stouten, personal communication, October 2016).

Besides these measures a price-adjusting instrument was deployed, a governmental subsidy was received for the development of 5 NOM dwellings as a pilot project (R. van Rijswijk, R, van der Meij, personal communication, October 2016).

Capacity building

In the RijswijkBuiten development the public planners of the Programmabureau build capacity in several ways. They have not followed the common way of thinking of selecting a developer, but chose a development partner that besides the usual activities of a developer also gives advice and brings in their knowledge as an equal partner. The public planners of RijswijkBuiten have had a cultural mindshift to see themselves as active participants in the development and in communicating their vision, as opposed to a facilitating role (Mensink & Franzen, 2011; C. Rieke, personal communication, October 13, 2016).

"It is good the municipality had the thought of 'we need a development partner' and its expertise."

J. Stouten – developer

The planners have good information and knowledge about the market, partly also as a result of the cooperation with a development partner. "Within the municipality someone monitors the market very precisely and from both the planners' side and the developer's side there is a mutual understanding of each other's motives and risks." (J. Stouten, personal communication, October 19, 2016). Knowledge of the market has resulted in demand oriented developments, where dwellings are developed in small amounts and deliver an affordable product for which there is demand (J. Stouten, personal communication, October 19, 2016).

"Every Friday we sit together and discuss the progress, new subplans, ambitions, and if objectives are indeed realised." J. Stouten - developer There is a close engagement between the planners of RijswijkBuiten and the city council and with other market actors. A form of coalition has been generated with shared interests, which drives the development forward while implementing many ambitions. There is a good cooperation between the planners and the development partner, they meet every Friday and there is trust and transparency (open books)

between the actors (C. Rieke, J. Stouten, personal communication, October 2016). Many actors were involved in the making of the masterplan, such as the Province, the city council, DSM, and external consultants, to organise support (Gemeente Rijswijk, 2009). There is a meeting twice per year between the Programmabureau and the city council to involve them with the developments in RijswijkBuiten.

Within the Programmabureau there is an advisory group which meets a few times per year and includes other professional parties. As the development grows there are meetings with residents whenever it's necessary. There is no doubt that the cooperation with a new development partner would not be good, as the selection process of new development partners is very extensive so the Programmabureau gets to know them well (C. Rieke, personal communication, October 13, 2016). So the market-rooted networks are much used.

"We do everything with open books. We always want to see from everyone what the costs are to build a dwelling."

C. Rieke - project leader

"The team of people on it is essential. Not per se their knowledge, that is evident. The 'we' feeling and the joint drive, a sports team needs that too. The better the interaction, the larger the playfield is. Then there will be no empty spaces. Very important."

C. Rieke – project leader

Last but not least, the human capital is an important part of building capacity and plays a big role in RijswijkBuiten. The main characteristic is the strong personality of the public planners and their determination of implementing the ambitions. "It is of importance that there are people at the Programmabureau that are willing and are also persistent." (R. van Rijswijk, personal communication, October 28, 2016). Also there is a continuity in the teams working on the development. "What's also important is the continuity of the team, so the people in the process, that they are involved with great enthusiasm. (...) That team leads the development and keeps everyone focussed." (C. Rieke, personal communication, October 13, 2016). Furthermore, the right parties were involved at the right times in the project (R. van Rijswijk, personal communication, October 28, 2016).

Overall, many planning tools have been used in RijswijkBuiten (see table 8 below) but this is not the main criteria for a successful development, as it is not about the quantity of tools but rather the quality of tools that is important.

Table 8. Used planning tools in RijswijkBuiten

Tools	RijswijkBuiten
Shaping	Development/investment plans
	Regulatory plans
	Land-use plan (with DPL instrument),
	Indicative plans
	Masterplan
	Project plan by Merosch
Regulating	State/third party regulation
	Development permit (Omgevingsvergunning)
	Contractual regulation
	EPC 0 in contract development partner
Stimulus	Direct state actions
	Municipal PreEmption Rights Act
	Price-adjusting actions
	Governmental subsidy for 5 NOM dwellings
	Risk-reducing actions
	Rijswijk model ('bouwclaim nieuwe stijl')
	Municipal PreEmption Rights Act
	Continuity in team
	Ambition check
	Capital-raising actions
	Rijswijk model ('bouwclaim nieuwe stijl')
	'Self-subsidy' from land exploitation
Capacity	Market-shaping cultures, mind-sets, ideas
building	Using a development partner, active participation
	Market-rich information and knowledge
	Knowledge of the real estate market, trends and developments,
	understanding each other's motives and risks.
	Market-rooted networks
	Good cooperation, trust, transparency
	Market-relevant skills
	Tenacity, strong personality

4.5.2 Influence of the context

Besides the use of planning tools there are also other factors which influence the degree of success of the RijswijkBuiten development. In this section the main contextual influences have been explained.

RijswijkBuiten issued the tender for the development in 2011 during the financial crisis when the construction industry was on a low and selling houses was also a challenge. All land exploitations were finished before the crisis happened, so that was no issue (C. Rieke, R. van der Meij, personal communication, October 2016). However, the land was owned by the municipality and because of interest over the lands, there was time pressure to start the development (J. Stouten, personal communication, October 19, 2016). Market actors were looking for work, so a big development such as RijswijkBuiten was a good opportunity (R. van Rijswijk, personal communication, October 28, 2016).

"We were kind of lucky that the tender was during the start of the crisis, so they [the developers] wanted very much just to work." R. van Rijswijk – consultant

Although the municipality wanted to start the development and market actors were looking for work, selling the dwellings could become an issue during the crisis. To attract buyers RijswijkBuiten should be distinctive from other developments. This was one of multiple reasons to develop a sustainable urban area (C. Rieke, personal communication, October 13, 2016).

Another contextual influence to strengthen the sustainability identity of RijswijkBuiten, were the environmental contours of the DSM company next to the area. Because of this the Province asked the municipality to use the DPL instrument which stimulated the planners to fully integrate sustainability as a theme for the development (C. Rieke, personal communication, October 13, 2016).

Despite the sustainability theme of RijswijkBuiten, many buyers choose the development for other reasons which have an influence on the successfulness of RijswijkBuiten (J. Stouten, personal communication, October 19, 2016). First of all, the location is very attractive. It lies between Rijswijk and Delft and is close to The Hague and Rotterdam and is the last large-scale construction site in the area. It is also well accessible by car as it lies close to a highway. Besides this, RijswijkBuiten offers a product

"We have started with very small portions and a product that was attractive. And there is an enormous demand from within Rijswijk" C. Rieke – project leader for which there is much demand within Rijswijk and within the Randstad (J. Stouten, C. Rieke, R. van Rijswijk, personal communication, October 2016). There are many single-family dwellings in the affordable owner-occupied segment in an urban green character. Within Rijswijk there are not many single-family dwellings, so to upgrade from an apartment to a single-family dwelling is hard. Also the moving flow from social housing to the affordable owner-occupied segment is obstructed in many parts of the Randstad.

A good connection with public transport is one of the objectives of sustainable urban development (see figure 4, p. 18). Together with the objective of stimulating bike-usage and walking, this means the usage of cars is discouraged. However, there is a parking norm of 2,3 places per dwelling. This encourages to own a second car, rather than discouraging it. This parking norm stems from the municipal parking policy from which cannot be deviated. Currently the Programmabureau is trying to change the parking policy (C. Rieke, personal communication, October 13, 2016).

There is no public transport in RijswijkBuiten at the moment, although this was one of the ambitions set in the masterplan. "Public transport companies are organised on a regional level and not directly influenced by municipalities. There should be a viable business case before a line is opened or rerouted, which is hard when a neighbourhood is newly built" (C. Rieke, personal communication, October 13, 2016). Since the start of the development the municipality is lobbying to bring public transport to the area. "To bridge the financial gap of the public transport company, the Mayor and Executive Board of Rijswijk decided to reserve a budget for the coming 5 years to reroute a bus line through RijswijkBuiten" (R. van der Meij, personal communication, October 26, 2016).

"Political changes in the city council have not influenced the development of RijswijkBuiten. All parties are proud to be able to execute such a big development for a relatively small municipality" (C. Rieke, personal communication, October 13, 2016).

The financial crisis and the location near DSM have strengthened the sustainability theme, and this has been used as a distinctive quality to attract buyers. Such a large development during the financial crisis was also a good opportunity for developers, which increased the willingness to comply to the sustainability ambitions. The implementation of having a good connection with public transport lies outside the sphere of influence of the public planners. Contextual influences have worked out positively as well as negatively.

5. Case 2: Bruisend Dorpshart, Kaatsheuvel

In this case study the project Bruisend Dorpshart in Kaatsheuvel will be discussed. The interviewees for this case study were Gerard Bruijniks (Alderman), Wilfried Janssens (municipal project manager), Christa Ippel (Heijmans) and Ernst van der Leij (Brink Management/Advies).

5.1 About the municipality

Bruisend Dorpshart (English: Lively Village's Heart) is part of the town centre of Kaatsheuvel, a village in the South East of the Netherlands. Kaatsheuvel has around 16300 habitants. It is part of the municipality of Loon op Zand, which consists of three villages: Kaatsheuvel (municipal capital), Loon op Zand and De Moer. Cities close to Kaatsheuvel are Breda, Tilburg and Den Bosch.

In the 19th and 20th century Kaatsheuvel had a blooming leather and shoe industry. In the early 1950's the mayor wanted more diversification in Kaatsheuvel's economy, which lead to the foundation of the amusement park De Efteling. De Efteling attracts more than 4 million visitors each year.



Figure 15. Location of Kaatsheuvel (Google Maps)

5.2 Project characteristics

Initiator	Municipality of Loon op Zand
Surface area	2,6 hectares
Time span	2007-2016
Construction started	2011
Amount of dwellings	Ca. 120
Other functions	Retail
	Commercial space
	Community building (cultural space and municipal offices)

The municipality had the wish to redevelop the area in the centre of Kaatsheuvel, so it would get a quality boost. The objective is to strengthen the identity of the town centre by creating a 'Lively Village's Heart' around the market square, in addition to the shopping area. In the Bidbook for the redevelopment of the square it is stated that Kaatsheuvel is a village with a strong social cohesion, but is

missing a heart or a soul. A place where all residents feel at home and like to visit (Gemeente Loon op Zand, 2009)³.

The market square used to be a square with no identity and the town hall was outdated, see figure 16. Events and the weekly market were organised on the square.



Figure 16. Old town hall and market square Kaatsheuvel (source: J. de Brouwer, n.d.)

The redevelopment consisted of the construction of a new town hall, a multifunctional accommodation as a social and cultural centre, housing with commercial space in the plinth and the public space. A non-public procurement procedure was started which led to an award of a group of developers consisting of Heijmans, Proper Stok and the housing corporation WSG.

Soon after the agreement was signed, WSG had to be replaced because of internal issues. Housing corporation Casade came on board. Prompted by this change and financially hard times at the municipality and the market in general, the plans were revised. The town hall would be placed within the multifunctional accommodation and more housing would be added by Casade.

The construction finished in 2016. There is housing, commercial space for local entrepreneurs and a multifunctional community building which houses a theatre, a restaurant, a library, a social service organisation and municipal offices. The public space within Bruisend Dorpshart is also redeveloped.







Figure 17. Square and multifunctional accommodation after development (source: own photo)

70

³ Internal document accessed via Brink Management/Advies

5.3 Extensive timeline Bruisend Dorpshart Kaatsheuvel

The timeline with the main events during the development of Bruisend Dorpshart Kaatsheuvel is explained here. This timeline is based on an internal document of the graduation company and four interviews conducted for this case study. The internal document is a report on the situation of Bruisend Dorpshart in May 2012⁴.

The idea for Bruisend Dorpshart started in 2007, in April 2007 the local council agreed upon the bid book for the area. The plan consisted of dwellings, a cultural centre, a new town hall and demolishment of the municipal front office building and build a new building in its place. This commission was awarded to Proper Stok, at the time a subsidiary of Heijmans, in the fourth quarter of 2007 (C. Ippel, personal communication, October 21, 2016). "Because of financial perils that plan was cancelled" (W. Janssens, personal communication, October 24, 2016).

Because of some alterations and extra examinations the final version of the bid book was determined by the Mayor and Executive Board in January 2009. A non-public procurement procedure (Dutch: niet-openbare aanbestedingsprocedure) was already started in June 2008 with help of the consultants of Brink Management/Advies. This resulted in an award for a group of developers consisting of Heijmans, Proper Stok and the housing corporation WSG in the summer of 2009. In February 2010 the preagreement was signed and the demolition work, including the town hall, started soon after that. The definitive agreement was signed in October 2010. This agreement included the construction of a town hall, a multifunctional centre, ground-floor houses, apartment buildings, reconstruction of the former fire station, and construction of the public space.

In May of 2011 it became apparent that the municipal finances were under a lot of pressure as well as the finances of WSG. The housing corporation was facing fraudulent issues within its organization and was under supervision by the authority of housing corporations. For the municipality the town hall and multifunctional accommodation and their exploitations became financially unfeasible.

After a long period of discussing the result was a new agreement between Heijmans and the housing corporation Casade in the third quarter of 2012. Proper Stok had merged into Heijmans in the meantime. WSG exited the project because of internal issues and instead housing corporation Casade entered the project. The plans were changed as well. A separate town hall was cancelled, instead this would be part of the multifunctional accommodation. Where the town hall was planned, more dwellings were planned, to be built by Casade. The former fire station was not part of the plan anymore.

In the meantime around 70% of the site was ready for construction which meant there was a large sand area in the middle of the village centre. As a temporary measure this area was covered with a large turf by the municipality. This was done to give the area a more positive look during the negotiations (G. Bruijniks, personal communication, October 24, 2016).

After the new agreement with Heijmans and Casade, the construction of the buildings and square began and the complete area was finalized in May 2016.

5.4 Identifying the implementation gap

After the description of the development in the previous sections, we will now identify the implementation gap by comparing the pre-formulated objectives in the Bidbook (2009) and Duurzaam Verbindend (English: Sustainably Connected) (2009)⁵ with what has been realised in Bruisend Dorpshart. First, we will look at where the ambitions for a sustainable urban development project comes from.

The municipality of Loon op Zand endorses the importance of sustainable construction and wanted to make this concrete in the form of a pilot development project within the municipality. This pilot project was Bruisend Dorpshart in Kaatsheuvel. With this project the municipality wants to involve all actors, developers, designers, but also the own municipal employees, to shape sustainability in the plans. The municipality also regards the project as an important pilot for municipal policy about quality as well as sustainability. These ambitions have also been inspired by several trends and tightening of regulation

⁴ Totaalrapportage 24-05-2012, Internal document accessed via Brink Management/Advies

⁵ Internal documents accessed via Brink Management/Advies

by the national government. This tightening intends to reduce CO₂ emissions by 25%, however Loon op Zand aims at a 40% reduction against the requirements at the start of Bruisend Dorpshart (around 2009)⁶.

Besides ambitions for the social aspects a separate document was made for the sustainability objectives, 'Duurzaam Verbindend' and was added to the tender.

"If you look at our coalition agreement you will not find much about sustainability. Two lines. (...) Neither if you look at our structural vision, that says swellings should be delivered according to the building decree and that's it. We do that because we notice that sustainability is seen as a cost-increasing factor in construction, and projects do not start because of this." (G. Bruijniks, personal communication, October 24, 2016). In the previous coalition agreements of the municipality councils of 2006-2010 and 2010-2014 also little can be found on the municipality's stand on sustainability. There is no municipal policy about sustainability, because according to Alderman Bruijniks sustainability should come from the people and should not be pushed, but rather stimulated (G. Bruijniks, personal communication, October 24, 2016).

However, according to Wilfried Janssens (W. Janssens, personal communication, October 24, 2016) who works at the municipality, the entirety of sustainability is hard to find but is improving. Still, sustainability ambitions within the municipality are very scattered and out of tune. There will be an ambition document added to separate developments, especially for public buildings. A framework for these ambitions is missing however, which would be better to have.

5.4.1 The pre-formulated objectives on paper

In the case of Bruisend Dorpshart Kaatsheuvel the objectives listed below were found in the Bidbook of the tender and the document Duurzaam Verbindend (2009)⁷. The first version of Duurzaam Verbindend was made in 2009, a revised version was made in 2012 when the overall plans were changed and WSG was replaced by Casade. In this paragraph the ambitions of the original document are listed. The objectives are categorised according to the objectives of sustainable urban developments in figure 4.

In general, sustainability in Bruisend Dorpshart concerns constructional quality and maintenance as well as the quality of the surroundings and the energy consumption of the buildings.

The municipality of Loon op Zand wants to take an extra step in sustainability, in addition to the formal framework of standards and regulations. This will be done by testing the sustainability performances and quality of the several subprojects with 'GPR Gebouw', a measurement and certification tool. The municipality intends an ambition level which is higher than the national average score.

The five main elements that influence sustainability on real estate level according to GPR Gebouw are energy, the environment, health, user quality and future value. The municipality of Loon op Zand has set the following ambition scores:

	Energy	Environment	Health	User quality	Future value
Town hall	7,0	7,5	7,5	7,5	7,5
Office function	6,5	7,0	7,0	7,0	7,0
Dwellings	7,0	7,0	7,0	7,0	7,0
Multifunctional building	7,0	7,0	7,0	7,0	7,0

A score of 6,0 represents the legal minimum.

Profit

The redevelopment of the village centre will create a place for the residents to meet, enjoy and experience things, a place of interaction. Societal and cultural functions and restaurants will be clustered around the square to create a lively town centre. Events such as the annual fair and the weekly market will be on the square, as well as other events. It will be a *favourable location for activity*.

⁶ Bid book Bruisend Dorpshart Kaatsheuvel, internally accessed via Brink Management/Advies

⁷ Internal documents accessed via Brink Management/Advies

The municipality has planned a multifunctional accommodation in which there is room for several functions, such as food services. Besides this, *local entrepreneurship* is further stimulated with commercial space in the plinths at the square.

All buildings in Bruisend Dorpshart are developed for long durability, which might be *attractive for long-term investments*.

People

The *social security* in the area will be improved and a police certification will be issued to create an extra sense of safety for the residents. A point of attention is to prevent spaces with no function, especially when there is little or no social control.

A certain amenity value should be added to promote *social interaction*. On the square events will be held. Quality of space will be created for the square by using special design, street furniture and materials.

There are certain technical requirements set concerning a *healthy living environment*. Fungi susceptible materials should be minimalized, the use of kits and glues with many solvents should be limited and the installation systems should be easy reachable and easy to clean. The application of low temperature heating contributes to a healthy living and working environment. Concerning the multifunctional accommodation noise is an important factor for the experience and well-being of people using the workplaces. Office users also like to be able to open a window.

The plan for Bruisend Dorpshart Kaatsheuvel gives the village centre a quality boost and liveliness. The design of the public space and addition of functions gives Kaatsheuvel a societal and cultural centre, which adds to the *social cohesion* in the village, this is the main ambition of the plan.

The square should have a village character and a human scale.

The buildings, the public space and the events organised there should be *well accessible* to all people, also the disabled.

Planet

The most ambitions for Bruisend Dorpshart are set regarding the 'planet' section. In general, the municipality of Loon op Zand wants to develop Bruisend Dorpshart as a pilot project for sustainable construction.

Regarding a *good connection with public transport* new bus stops should be situated as closely as possible to the Bruisend Dorpshart.

Bike-usage and walking will be stimulated by creating public bicycle parking spaces and making the square free of cars. The square is for pedestrians and the walking paths towards it will be emphasized.

The main ambition concerns the *use of renewable energy sources* which is to connect the buildings in Bruisend Dorpshart to a thermal energy storage system. Applying such a system contributes to the intention of the municipality to reduce 40% CO2 against a traditional system. The municipality anticipates on the tightening of regulations from 2011. These new regulations determine the energy objectives of the municipality.

To decrease and prevent environmental pollution there should be a careful use of resources and materials. This includes as much as possible re-use of materials that are already available, such as paving bricks. The municipality wants to steer on CO₂ reduction rather than a low EPC, and other harmful emissions should be limited. Water-saving sanitary will be installed to decrease the wastage of clean water.

Space, nature and ecological structures should be handled with care in *support of the living environment* and to respect ecological structures. Part of this is a sustainable water management, also during the construction phase. Rainwater infiltration will be applied to prevent the flow of rainwater through the sewers to the sewage plant. Whenever wood is used in any part of the project, this must be wood with

a FSC certification. In the area there are several trees with a value to the area, these trees will be conserved.

Spatial quality

There will be an increased amount of *mixed-use* functions on the same surface, which means the current area will be intensified.

On the square many (annual) events will take place and there are restaurants, and it is also the social and cultural heart of the village. It is the *identity* of the place to be a lively village centre.

The buildings should be *flexible* so they can easily be transformed to another function if needed, and which also creates future value.

The development will be *resistant against changing (weather) conditions* because of sustainable water management. In the area there are issues with releasing water, therefore green roofs will be used as rainwater buffer and rainwater will be infiltrated directly in the ground.

5.4.2 The pre-formulated objectives realised in the project

The information about the realised objectives has been gathered from interviews, news articles and documents.

Profit

During the construction the main events of the village were replaced to another location. To bring back the events to the Bruisend Dorpshart square, the municipality has made a budget available to attract the events and the organisers have been guided (G. Bruijniks, personal communication, October 24, 2016). It is a *favourable location for activity* and the functions and restaurants attract residents (W. Janssens, personal communication, October 24, 2016).

"We have made money available to bring events back to the square"

G. Bruijniks - Alderman

The restaurant operator for the multifunctional accommodation was found around the completion of the construction. For the northern building on the square a restaurant operator bought the complete plinth during the construction, when the development started to get form (*long-term investment*). There is a restaurant in this plinth, but the rest of the commercial space is not completely let (W. Janssens, personal communication, October 24, 2016). So, *local entrepreneurship* is partly available and there is still space for other entrepreneurs.

People

There are empty spaces in the plinth of the northern building, however there is often activity around the multifunctional building which adds to the feeling of *social security* (W. Janssens, personal communication, October 24, 2016). A police certification has not been requested by the municipality (W. Janssens, personal communication, December 2, 2016).

Social interaction is available in Bruisend Dorpshart, because of the events organised there, the restaurants and the multifunctional accommodation which houses several cultural and societal organisations. This also creates a *social cohesion*. "If you would have asked me half a year ago, I would have been in doubt. But since this spring it has come to live and one after the other manifestations were organised, both on the square as well as indoor, often combined." (W. Janssens, personal communication, October 24, 2016).

In the multifunctional accommodation the technical requirements of a *healthy living environment* have been implemented (W. Janssens, personal communication, October 24, 2016).

The square is all on one level, there are no vertical obstacles so the place is *well accessible* for wheelchair users. The multifunctional accommodation has a certificate which states the building is accessible for disabled people (W. Janssens, personal communication, December 2, 2016).

Planet

There is a *connection with public transport* since there is a bus stop next to the multifunctional accommodation where one bus line stops (Google Maps). This bus drives through local villages and connects them with a train station in Oisterwijk. This bus drives once per hour between 8.00 and 18.00 hours. It takes 40 minutes from Bruisend Dorpshart to the train station in Oisterwijk (arriva.nl) where there is connection by stopping train to Eindhoven and Tilburg (ns.nl).

The square is free of cars and there is an outside public bicycle parking behind the multifunctional accommodation (see figure 18), *stimulating bike-usage and walking*.



Figure 18. Public bicycle parking (source: own photo)

The original plan was to connect the whole development to a thermal energy storage system (Dutch: WKO) as a *renewable energy source*. However, there is only such a system in the multifunctional accommodation. The buildings meet the requirements of the Building Decree and the then valid EPC demand of 0,6 (C. Ippel, personal communication, October 21, 2016).

The objective to *decrease and prevent environmental pollution* is mainly reached with the multifunctional accommodation. The thermal energy storage system reduces CO₂ emission, LED lighting has been used and some water-saving sanitary has been installed (G. Bruijniks, personal communication, October 24, 2016).

The wood that has been used in any part of the project has a FSC certification and rainwater infiltration have been applied in the square, *supporting the living environment*. The green roof also adds to this as a water buffer. "We have difficulties with water control here in the area, the green roof helps as a water buffer." (W. Janssens, personal communication, October 24, 2016).

Spatial quality

There is a *mixed-use* of functions in the development: housing, town hall, library, cultural centre, theatre, restaurants and commercial space.

"It is definitely a lively village's heart, especially now there is a restaurant in the northern building. It is really a new meeting place."

C. Ippel – developer

The new square has brought liveliness to the area and with each event organised there, the *identity* of the place has been strengthened.

Sustainable water management to be *resistant against changing* (weather) conditions has been implemented with a green roof on the multifunctional accommodation and water infiltrations in the square (W. Janssens, personal communication, October 24, 2016).

5.4.3 The implementation gap

The square is a favourable location for activity and local entrepreneurship is stimulated with spaces for small businesses and restaurants. It has attracted long-term investment, for example the restaurant operator who has bought the whole plinth of the northern building.

Since the old square had no identity and there was no activity around it, any intervention would have increased the (social) quality (C. Ippel, personal communication, October 21, 2016). The inhabitants of Kaatsheuvel are enthusiastic and proud of the end result (W. Janssens, G. Bruijniks, C. Ippel, personal communication, October 2016).

The Planet objectives are not all implemented or are just partly implemented. There is a connection with public transport, however this is just one bus connection with a low frequency. It was intended to implement a thermal storage system for the whole development, but in the end the system has only been installed for the multifunctional accommodation.

There is mixed-use in the development as was intended. An identity for the place is also been realised with events organised and bringing the social and cultural centre of the town there, as well as the weekly market.

Overall it would seem the implementation gap of this development is rather small, but the main sustainable objective of installing a thermal storage system has not been reached. Some objectives had to be dropped in the overall development, but were implemented in the multifunctional accommodation where the municipality was the client: "Ambitions were handed in, but on the other hand when we started Het Klavier [the multifunctional accommodation], more ambitions were brought in there" (W. Janssens, personal communication, October 24, 2016). Furthermore, the Profit objectives can be assessed here, while this is not yet possible in RijswijkBuiten.

Table 9. Overview of pre-formulated and realised sustainability objectives in Bruisend Dorpshart

Obje	ctives sustainable urban development		
ir	Bruisend Dorpshart Kaatsheuvel	Pre formulated	Realised
Profit	Create a favourable location for activity	Yes	Yes
(economic)	Stimulate local entrepreneurship	Yes	Yes
	Stimulate local employment	No	No
	Attracting long-term investments	Yes	Yes
People	Social security	Yes	partly
(social)	Social interaction	Yes	Yes
	Comfort and a healthy living environment	Yes	Yes
	Social cohesion	Yes	Yes
	Human scale	Yes	Yes
	Demand-oriented development	No	No
	Good accessibility	Yes	Yes
Planet	Good connection with public transport	Yes	Yes
(ecological)	Stimulating bike-usage and walking	Yes	Yes
	Self-sufficiency (circular flows)	No	No
	Usage of renewable sources	Yes	partly
	Decrease/prevent environmental pollution	Yes	partly
	Support the living environment and respect ecological structures	Yes	Yes
Spatial	Varying density	No	No
quality	Mixed-use	Yes	Yes
	Preserving and highlighting distinctive (historical) quality	No	No
	Create identity (place-making)	Yes	Yes
	Flexibility: resistant against future changes and innovations	Yes	No
	Robustness: resistant against changing (weather) conditions	Yes	Yes
	Stewardship	No	No

5.5 Explaining the implementation gap

In this section the explanation of why objectives have or have not been reached can be found, by analysing which planning tools have been used and what the contextual influence has been in the development of Bruisend Dorpshart Kaatsheuvel.

5.5.1 Planning tools used

The planning tools that can be recognised in the development of Bruisend Dorpshart Kaatsheuvel are described below, these are mainly shaping and regulating.

Shaping

The main ambition of the municipality of Loon op Zand was to create a lively town centre in Kaatsheuvel (Bidbook, G. Bruijniks, W. Janssens, C. Ippel, E. van der Leij, personal communication, October 2016). This has been the basis for the *shaping* tools of Bruisend Dorpshart. The ambitions have been set out in the bid book of the tender and in the land-use plan, with help of the external consultant Brink M/A (E. van der Leij, personal communication, October 17, 2016).

"The main ambition was to make a pleasant ['gezellige'] square, a lively square, because it is named the Lively Village's Heart. It is in fact a piece of liveability, a place to go out whether it is day or night, which was missing in Kaatsheuvel."

W. Janssens – project leader

The overall plan is clear and the several projects within the plan have been explained (C. Ippel, personal communication, October 21, 2016). Because of the change from a separate town hall and theatre to a multifunctional accommodation and an apartment block, part of the land-use plan had to be revised.

"In 2008/2009 the question was how should the square look like?"

G. Bruijniks - Alderman

Based on creative sessions with a group of city council members, residents and professionals a visual quality plan was made, which has served as an indicative plan (G. Bruijniks, personal communication, October 24, 2016).

Mentioned in the land-use plan and part of the agreement is the document Duurzaam Verbindend in which the sustainability ambitions are listed. "With the tender a large appendix was included with the sustainability ambitions. In this plan the focus is mainly on technical ambitions, while issues about for example well-being were discussed before drawing the plan" (W. Janssens, personal communication, October 24, 2016). "The municipality wanted a thermal energy storage system (WKO), but there was no apparent evidence base for this". It was not well-substantiated concerning feasibility either (E. van der Leij, personal communication, October 17, 2016).

The table with the nine key variables of a persuasive plan (see table 2, p.24 Tiesdell & Adams, 2012) has been filled in for the Bid book and Duurzaam Verbindend, see table 10.

Bid book Bruisend Dorpshart Duurzaam Verbindend Bruisend Kaatsheuvel (2009) **Dorpshart Kaatsheuvel (2009)** Clear and apparent Is based on studies of urban WKO seems to be put in the ambition evidence base design and architecture firms for the plan, without sufficient (financial) analysis It does not have signs of Plan's persuasive It does not have signs of logic and rationale misunderstanding markets misunderstanding markets Identity of plan Two aldermen and interim Plan maker is an installation maker managers consultancy, client is municipality Charismatic. Not clear Not clear persuasive advocates Endorsement by No signs of endorsement by No signs of endorsement by higherhigher-level actors higher-level actors level actors Plan maker's Not clear Not clear capacity to marshal wider resources A clear presentation as a An appendix to the bid book, with Attractive communication and brochure. However, it is not mainly text and technical explanations. presentation publicly available, only used in No special lay-out, not publicly tender procedure. available Stakeholder Involvement of residents in visual No signs of engagement of other

Table 10. Key variables of a persuasive plan in Bruisend Dorpshart

Regulating

engagement

Community support

Duurzaam Verbindend has been used as a regulating tool, because it is one of the appendices of the development agreement between the municipality and Heijmans and Casade. Therefore the 'GPR Gebouw' instrument that is mentioned in Duurzaam Verbindend is also mandatory to use for the developers. However, the implementation of the WKO installation has been taken out of Duurzaam Verbindend because the developers have had negative experiences with it and it was financially not feasible (W. Janssens, personal communication, October 24, 2016).

Community aspirations not known

quality plan

"A WKO is, definitely at that time, difficult for dwellings. Ultimately we chose not to do it, because it was too expensive."
C. Ippel - developer

stakeholders

Community aspirations not known

Stimulus

The stimulating tools in this case seem to have had little impact on facilitating market actions. In the land-use plan it is mentioned that some parts of the land had to be purchased compulsory for the benefit of the development. Also a governmental subsidy for urban renewal had been requested, however the amount received was lower than expected⁸.

Capacity building

A few capacity building tools have been used, but are not very strongly dominating. Mostly the market relevant skills can be found, since the collaboration between actors has been mentioned as an essential

"Perseverance has been very important, (...) and a joint commitment of the developer, housing corporation and the municipality"

G. Bruijniks - Alderman

success factor several times (C. Ippel, E. van der Leij, G. Bruijniks, W. Janssens, personal communication, October 2016). Despite the circumstances of the project and sometimes opposite interests, the actors tried to look for a solution together: "Of course there are always some frictions and disagreements, but in the end we always worked it out. We all had a common goal, realising the Lively Village's Heart" (C. Ippel, E. van der Leij, personal communication, October 2016).

As a small municipality it was good to hire a consultancy firm and use market expertise for the tender, especially after the very first tender was cancelled. So for the second round the market expertise was part of the project at the right time (E. van der Leij, personal communication, October 17, 2016).

There are not many planning tools recognised in Kaatsheuvel, especially the stimulus and capacity building tools have not been deployed much, see table 11 below.

Tools	Bruisend Dorpshart Kaatsheuvel		
Shaping	Development/investment plans		
	Regulatory plans		
	Land-use plan		
	Indicative plans		
	Bid book, Visual quality plan, Duurzaam Verbindend		
Regulating	State/third party regulation		
	Development permit (Omgevingsvergunning)		
	Contractual regulation		
	Duurzaam Verbindend part of contract		
Stimulus	Direct state actions		
	Compulsory purchase		
	Price-adjusting actions		
	ISV subsidy (Investeringsbudget Stedelijke Vernieuwing		
	Risk-reducing actions		
	Capital-raising actions		
Capacity building	Market-shaping cultures, mind-sets, ideas		
	Market-rich information and knowledge		
	Consultancy firm		
	Market-rooted networks		
	Fairly good cooperation		
	Market-relevant skills		
	Perseverance		

Table 11. Planning tools used in Bruisend Dorpshart Kaatsheuvel

5.5.2 Influence of the context

Also in Bruisend Dorpshart the use of planning tools was not the only way to measure successfulness. The circumstances around the project have had a clear influence on the development and are explained below.

⁸ Totaalrapportage 24-05-2012 Internal document accessed via Brink Management/Advies

The project became delayed in the first half of 2011, because the circumstances changed. The most important changes were: 1. The financial situation of WSG, 2. Recalibration of the vision on municipal accommodation policy, 3. The vision on collaboration with the municipality of Waalwijk was drawn, 4. The municipal finances were under pressure⁹. Also the municipality's lack of a consistent view on sustainability objectives has been an influence on the development.

Because of the financial crisis it became apparent that the housing corporation WSG was financially weak and had probably been part of fraudulent issues (Vastgoedmarkt, 2014; E. van der Leij, personal communication, October 17, 2016). This resulted in withdrawal of its participation in the Bruisend Dorpshart development, which left the municipality with no developer for social housing in the project. The housing corporation within the municipality of Loon op Zand, Casade, then became the new social housing developer.

With the new development combination comprising Heijmans and Casade negotiations started about possible plan changes within the boundaries of the tender. Because the vision on the municipal accommodation policy had changed and a vision on collaboration with the municipality of Waalwijk was drawn, it became unnecessary to build a separate town hall. Instead, the front office of the municipality would be accommodated in the multifunctional accommodation and the back office in the former fire department after renovation. On the site where the town hall would have been build, Casade would now build housing apartments (W. Janssens, personal communication, October 24, 2016).

WSG would have exploited the multifunctional accommodation, but after renegotiations with Casade and the change of plans the municipality took the exploitation of the multifunctional accommodation upon itself. However, the municipal finances were under pressure (it was during the financial crisis), so they had to be careful not to spend too much: "WSG who was originally in the plan would have been the operator of the multifunctional accommodation and all public buildings. And the municipality had to do that their selves ultimately. If someone else does that you're quick to ask 'can we make it a bit nicer?'. And if suddenly you have to pay the bill, that attitude changes of course." (E. van der Leij, personal communication, October 17, 2016).

"The total framework, the starting point is developed inadequately at the moment. That should be better." "Because there is not much defined from a general sustainability philosophy, it is bound to become a technician's party if you're not careful."

W. Janssens – project leader

Sustainability ambitions are limited and fragmentary present within the municipality, there is no clear policy about it. The sustainability ambitions for Bruisend Dorpshart were unique and specifically set up for the project. Because there is no general policy about sustainability in the municipality, there was no 'people, planet, profit' mentality but rather a technical vision on planet ambitions. From the city council there were mainly financial questions and concerns about the sustainability measurements (W. Janssens, personal communication, October 24, 2016).

The implementation of a WKO for the whole plan seemed financially unfeasible in 2009, although it was already taken up in the tender. The market actors did not want to implement the WKO because of the unfeasibility and own negative experiences: "The market actors were very clear they did not want that, that was clear from day 1." (E. van der Leij, personal communication, October 17, 2016). However, two years later when the multifunctional building was developed, the technology of WKO's was improved so then it was feasible to implement a WKO only for the multifunctional accommodation (W. Janssens, personal communication, October 24, 2016).

⁹ Totaalrapportage 24-05-2012 Internal document accessed via Brink Management/Advies

Overall, the financial feasibility of the project became under pressure after the withdrawal of WSG and the financial crisis. Roughly said this left the municipality with the choice to quit the project or to accept savings and changes in the plans (E. van der Leij, personal communication, October 17, 2016). Quitting was not an option because the a large part of the site was ready for construction, so there was a large sand area in the middle of the village centre and the municipality wanted to realise the development (C. Ippel, G. Bruijniks, personal communication, October 2016).

"The municipality had no other choice than accept every cut in spending." E. van der Leij – consultant

6. Cross case analysis

In this chapter a cross case analysis is carried out of the two case studies that have been described in the previous two chapters. An overview of the shaping, regulating, stimulating and capacity building tools that have been used by the public planners in both cases is provided and the process of when which tools and actions have been used. Then the differences and similarities in the used tools and context between the two cases are described more in detail. This step enables us to draw conclusions (rather assumptions) in the next chapter and makes it possible to give a recommendation about the effective use of the planning tools for public planners to steer on policy implementation.

Table 12. Planning tools used in RijswijkBuiten and Bruisend Dorpshart Kaatsheuvel

Tools	RijswijkBuiten	Bruisend Dorpshart Kaatsheuvel
Shaping	Development/investment plans	Development/investment plans
	Regulatory plans	
	Land-use plan (with DPL instrument),	Regulatory plans
	Indicative plans	Land-use plan
	Masterplan	Indicative plans
	Project plan by Merosch	Bid book, Visual quality plan, Duurzaam Verbindend
Regulating	State/third party regulation	State/third party regulation
	Development permit (Omgevingsvergunning)	Development permit (Omgevingsvergunning)
	Contractual regulation	Contractual regulation
	EPC 0 in contract development partner	Duurzaam Verbindend part of contract
Stimulus	Direct state actions	Direct state actions
	Municipal PreEmption Rights Act	Compulsory purchase
	Price-adjusting actions	Price-adjusting actions
	Governmental subsidy for 5 NOM dwellings	Governmental subsidy (Investeringsbudget
	Risk-reducing actions	Stedelijke Vernieuwing)
	Rijswijk model ('bouwclaim nieuwe stijl')	Risk-reducing actions
	Municipal PreEmption Rights Act	
	Continuity in team	Capital-raising actions
	Ambition check	
	Capital-raising actions	
	Rijswijk model ('bouwclaim nieuwe stijl')	
	'Self-subsidy' from land exploitation	
Capacity	Market-shaping cultures, mind-sets, ideas	Market-shaping cultures, mind-sets, ideas
building	Using a development partner, active	
	participation	
	Market-rich information and knowledge	Market-rich information and knowledge
	Knowledge of the real estate market, trends	Consultancy firm
	and developments, understanding each	
	other's motives and risks.	
	Market-rooted networks	Market-rooted networks
	Good cooperation, trust, transparency	Fairly good cooperation
	Market-relevant skills	Market-relevant skills
	Tenacity, strong personality	Perseverance

From the first impression of the overview given in table 12 it is clear that there have been more planning tools used to influence market decisions in RijswijkBuiten than in Kaatsheuvel. Next we will look at the process of the several actions and the planning tools and their influence on each other, see figure 19.

In figure 19 the process of when which planning tools and actions have been used is reconstructed. This gives us insight in the relation between the planning tools and actions and their influences on each other. The relation between the tools might enable us to make an assumption about when and which tool(s) should be used that seem to bridge implementation gaps in SUDPs.

In RijswijkBuiten we can see that the tools and actions are all related to each other. There is a kind of iterative process where capacity-building is a stopover between almost every other action. We have

seen in the case study analysis that active participation, knowledge of the market, cooperation and trust, and personal skills have been present during the whole process. As explained below, the actions in capacity building (italic) have supported the other three tools.

- a. The development process of RijswijkBuiten has started with the direct state action of using the Municipal PreEmption Rights Act with a *mind-set to actively participate* in the development process.
- b. Cooperation with the Province and other stakeholders resulted in a broadly supported c. Masterplan and d. Land-use plan with the DPL instrument.
- e. Then back to capacity building we see the *mind-set of wanting a development partner*.
- f. In the tender that has been issued the developer was asked to offer an EPC as low as possible.
- g. Based on market knowledge risk-reducing and capital-raising actions have been used to stimulate market actors.
- h. Dura Vermeer offered an EPC 0 score and this has been put in the development contract voluntarily.
- i. Development finance has been stimulated with a form of 'self-subsidy' from land exploitation, to ensure implementation of objectives (*mind-set*).

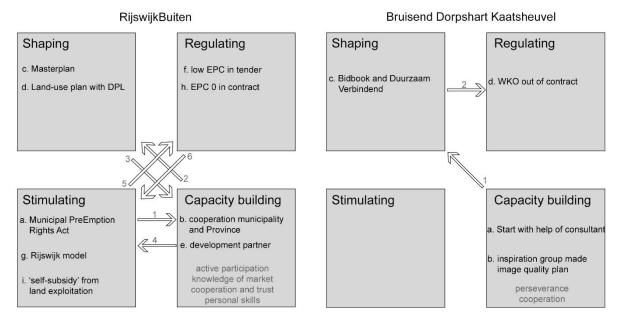


Figure 19. Process and relation of planning tools and actions in case studies (based on Heurkens et al., 2015)

Next we will look at the main actions related to the planning tools of Bruisend Dorpshart Kaatsheuvel that have been found in this research. According to analysis based on this research, there are hardly any relations between the tools and the process is quite traditional. The stimulating tools have not been integrated, because they did not seem to have influenced the decision environment. During the whole process, the municipality was perseverant to realise the project and according to the interviewees there was a good cooperation between the actors.

- a. In Bruisend Dorpshart Kaatsheuvel they have started with capacity building by *involving an external consultant* in the beginning of the process.
- b. An inspiration group with, amongst others, residents made an image quality plan. Here we see an arena of *interaction*.
- c. Both these steps have led to the Bid book and Duurzaam Verbindend as results.
- d. Then after the tender a development contract was negotiated, where the WKO was taken out of the contract.

RijswijkBuiten has been selected as the case with the small implementation gap and since we see there that the planning tools and actions are much related to each other and especially capacity building actions have been apparent throughout the whole process, we assume that capacity building contributes to the better operation of the three other tools (Adams & Tiesdell, 2013) and can bridge the implementation gap.

6.1 Differences in planning tools

Shaping

First of all, the communication about the sustainable objectives and the content of the objectives is different between the cases. The Masterplan for RijswijkBuiten is a publicly accessible and is an attractive document in which objectives are named in the broad perspective of people, planet and profit. There are other objectives stated in the masterplan besides the sustainability objectives, it also serves as a guide for the whole development.

The bid book and sustainable objectives document of Kaatsheuvel were only part of the tender and agreement, not publicly available and mainly consists of sustainable objectives translated into technical objectives.

Also the process of writing the documents is different. It is not clear which parties were involved in writing Duurzaam Verbindend (Kaatsheuvel) besides the municipality and a few consultancies (VIAC, n.d.). However the consultants do not seem to have been involved later in the project. The making of the visual quality plan has been made in an interactive process consisting of creative sessions with a group of city council members, residents and professionals. The bid book has been made with studies of urban design and architecture firms.

For the Masterplan of RijswijkBuiten a lot of external actors were involved, for example the Province, ProRail, design firm KuiperCompagnons and societal organisations, which has resulted in a broadly supported plan.

In Bruisend Dorpshart the municipality wanted a WKO while this was not substantiated: "The municipality had defined the WKO very much as a starting point, while there was not really an analysis for it" (E. van der Leij, personal communication, October 17, 2016). In RijswijkBuiten however the consultants of Merosch checked the ambitions and have translated the energy ambitions into concrete objectives in a project plan: "With the project plan we have looked if the ambitions of the municipality were realistic." (R. van Rijswijk, personal communication, October 28, 2016).

Regulating

In both case studies the sustainability objectives have been taken into the contract, however in the case of Kaatsheuvel the developers negotiated about taking the WKO out, resulting in a smaller objective. "When we started the plan there was a WKO planned for the whole development. [Housing corporation] Casade said during the negotiations 'we don't want that, because we have negative experiences with a WKO so we will not connect our buildings to the WKO'." (G. Bruijniks, personal communication, October 24, 2016).

In the tender that was issued in RijswijkBuiten, the market has been stimulated to set the bar higher by asking for a low as possible EPC score. In the unhealthy financial situation and low construction market during the tender, this has prompted the developers to think about sustainability and its implementation. Consequently, the development partner came up with a higher EPC objective than initially asked by the municipality. This higher objective is part of the contract. "We have said in the tender that we will have an EPC 0, so we had to put our money where our mouth is." (J. Stouten, personal communication, October 19, 2016).

Stimulating

The public planner has taken a more active role in RijswijkBuiten than Kaatsheuvel. This is driven by the fact that the municipality of Rijswijk deployed the Municipalities Preferential Rights Act in 2006 to become – and stay – the director of the area. At the same time this is also a form of risk-reducing.

Another stimulating tool in RijswijkBuiten was a capital-raising instrument with a different approach of risk division which made it possible for the development partner to enter the large urban development

without paying a large amount of money upfront. "We will keep the ownership of the land, developer you only get the right to build." (R. van der Meij, personal communication, October 26, 2016). Since this was during the financial crisis, it was an important stimulating measure.

Checking the sustainability ambitions on feasibility and accurate market information is a form of a risk-reducing action that has been done in RijswijkBuiten.

A 'self-subsidy' from the land exploitation has been used by the municipality of Rijswijk to prevent that sustainable objectives would not get implemented for financial reasons. The municipality facilitated development finance.

Continuity of the people that are involved in the process is risk-reducing and creates a shared knowledge base and history.

In Kaatsheuvel there has barely made use of stimulating measures, except for a governmental subsidy and a compulsory purchase order of small parts of land. Both these actions have not seemed to influence the market's decision environment.

Capacity-building

In RijswijkBuiten the planners have a good knowledge of the real estate market which allows them to build capacity with the market actors. Until now it has worked out well to collaborate with a development partner and share knowledge: "(...) and the collaboration is really great. They [Dura Vermeer, the development partner] are an integral part of our urban development." (C. Rieke, personal communication, October 13, 2016).

Both the development partner and the Programmabureau know each other's risks and motives, which has been the basis for the trust and transparency between them: "Building trust begins with knowing each other's interests and knowing what could hurt the other party". (J. Stouten, personal communication, October 19, 2016).

The planners are actively involved in all aspects of the development process. There is a good cooperation with the city council and the market and from the beginning support was created with surrounding actors and other public bodies: "Looking back it has been very important (...), to have a broad number of involved parties, to think about it, to communicate a lot with the city council and to create support there." (C. Rieke, personal communication, October 13, 2016).

Also, the planners have a strong tenacity to stick to their drafted objectives: "It is very hard to implement objectives, sometimes it is moaning and groaning to find out how we are going to do it, but there has not been said let's stop, let's not do that. Because it is the added value of the neighbourhood (...)." (C. Rieke, personal communication, October 13, 2016).

In Kaatsheuvel it would seem the knowledge of the market was not that well. This appears from the demand of a WKO although it was not financially feasible and it did not attract market parties, as there was a low interest in the tender (E. van der Leij, personal communication, October 17, 2016).

After the agreements were signed with the developers, the public planners were not part of the development team and process of the non-public buildings anymore: "When Casade started developing its buildings, the municipality wasn't really involved anymore. They had their own building team without the municipality." (W. Janssens, personal communication, October 24, 2016).

In the city council there was mainly interest for the financial parts of the ambitions: "At the time there have been questions about the feasibility of certain things and a lot was linked to business models." (W. Janssens, personal communication, October 24, 2016).

Despite disagreements and opposing interests the cooperation between the planners and developers was fairly good, mainly because everybody was determined to wrap up the project with a positive outcome: "All parties had the ambition to realise the project, and they had to because they were attached to each other" (C. Ippel, personal communication, October 21, 2016).

6.2 Differences in context

Besides the use of planning tools, there are also differences in the context of the two case studies.

First of all the attractiveness of the location is different. Bruisend Dorpshart Kaatsheuvel is located in a small town in the province of Noord-Brabant. By contrast, RijswijkBuiten is located in the Randstad, between the big cities of Rotterdam and The Hague.

In Kaatsheuvel one of the developers, housing corporation WSG, was called into question and was put under supervision after it became clear their financial status was not well and was facing fraudulent issues within their organisation. Therefore the housing corporation had to withdraw itself from the Bruisend Dorpshart development and another housing corporation had to be found to replace WSG. This was an unforeseen event which caused a delay in the process. However, according to Alderman Bruijniks (G. Bruijniks, personal communication, October 24, 2016) in retrospect it was a change with positive outcomes: "WSG delivered its cases to Casade, and then we had the very nice opportunity to reconsider our plan: should we build a new town hall? Should we build a large theatre? Or should we combine them in a multifunctional accommodation?". Because of renegotiations with the new housing corporation and the developer it was decided to integrate the town hall into the multifunctional building. This made it possible to build more dwellings in Bruisend Dorpshart and prevented future vacancy in the non-public buildings (G. Bruijniks, personal communication, October 24, 2016). A separate town hall would have been too large for the municipality of Loon op Zand, because of a revised accommodation policy and plans to cooperate with other municipalities.

The size and financial position of both the municipalities has also been different. Rijswijk is a municipality with around 50.000 inhabitants in the city of Rijswijk, the municipality of Loon op Zand has ca. 23.000 inhabitants in three villages. The financial position of Loon op Zand has played an important role in the Bruisend Dorpshart development. Because of the withdrawal of WSG more costs were allocated to the municipality than initially planned, for example the exploitation costs of the multifunctional building (E. van der Leij, personal communication, October 17, 2016).

The desires of the municipal administrations concerning sustainability in their municipality differs.

- The municipality of Loon op Zand has some sustainability ambitions, however these are scattered in several policies and are not in tune with each other. Improving this has started on a regional level, but it is mainly on an abstract level (W. Janssens, personal communication, October 24, 2016).
- Within the municipality there is no policy or framework, because taking sustainability measures should come bottom-up from the inhabitants rather than enforcing it according to Alderman Bruijniks: "We as government should not force that [sustainability] upon citizens, but enthuse to make it a great good." (G. Bruijniks, personal communication, October 24, 2016).
- The municipality facilitates inhabitants and organisations with available subsidies and tries to inspire them by setting an example: "We like to enthuse our citizens about sustainability by giving the example that you can get returns without much additional costs'. (G. Bruijniks, personal communication, October 24, 2016).
- However there is barely communication towards inhabitants about the sustainability measures
 the municipality is taking: "For example, in Het Klavier [multifunctional accommodation] a
 monitor could be placed to explain the energy concept of the building to citizens, to increase
 awareness." (W. Janssens, personal communication, October 24, 2016).

The municipality of Loon op Zand plays a passive role in promoting sustainability and taking sustainability measures.

Even though RijswijkBuiten has a strong focus on sustainability, the municipality of Rijswijk had a very low score concerning sustainability in comparison with other Dutch municipalities. This was a stimulus for the municipal administration to actively improve on this matter.

 The executive board has checked their selves on the People, Planet and Profit points and as a result a program was written with 75 actions to perform in the years 2016-2018 as well as an agenda until 2020 (Meerjarenactieplan 2016-2018 - bestuurlijke opgave duurzaamheid, Duurzaamheidsagenda 2020). In these plans the priority for now is on the Planet aspect. "We have reflected ourselves against the PPP ladder and concluded that we have good scores on some parts, but on some parts we score very low. (…). We can't do everything at the same time, for now we focus mainly on the Planet ambitions." (R. van der Meij, personal communication, October 26, 2016).

- Besides this there are performance agreements with local housing corporations and there is a municipal energy counter to facilitate homeowners (R. van der Meij, personal communication, October 26, 2016).
- "The portfolio division between the Aldermen stimulates integral working and this is also done
 in the administrative organisation. One of the Aldermen has a sustainability portfolio and
 oversees the share of sustainability in the other portfolios as well." (R. van der Meij, personal
 communication, October 26, 2016).

The municipality of Rijswijk is actively busy with sustainability.

These contextual differences have had influences on the size of the implementation gap and the outcome of the projects.

6.3 Similarities in planning tools

There are not many similarities in the use of planning tools, but some in capacity building. In both projects a good cooperation between developer and planner has been mentioned as a positive influence even though there are differences between the collaboration approaches. In Kaatsheuvel the collaboration is quite traditional, while in Rijswijk the engagement with a development partner is rather innovative.

- [about Het Klavier] "The building team has been essential in steering on results. Every decision about the building has been made together." (W. Janssens, personal communication, October 24, 2016)
- "Of course there are always some frictions and disagreements, but in the end we always worked
 it out. We all had a common goal, realising the Lively Village's Heart. Everyone has another
 interest in it, but everyone aimed at the same direction." (C. Ippel, personal communication,
 October 21, 2016)
- "On average the cooperation has been constructive" (E. van der Leij, personal communication, October 17, 2016)
- "Yes, you can say it is a real cooperation. The basis of that is very well. We work with open books, it is very transparent." (J. Stouten, personal communication, October 19, 2016)
- "(...) and the collaboration is really great. They [Dura Vermeer, the development partner] are an integral part of our urban development." (C. Rieke, personal communication, October 13, 2016)
- "The cooperation is good, the right parties have been around the table at the right time." (R. van Rijswijk, personal communication, October 28, 2016)

Determination and perseverance from the planners and the municipal administration to make the project successful can be seen in both cases.

- "Perseverance is very important (...). Commitment of the constructor, but also commitment of Casade. (...) a joint commitment of the developer, housing corporation and the municipality" (G. Bruijniks, personal communication, October 24, 2016)
- "The most important lesson is to hold on to your ambition, also to not want to score quickly in times of success, but keep holding on to your concept. In my opinion you should keep the direction until the end. Believe in it and dare to express that." (R. van der Meij, personal communication, October 26, 2016).

Although in Kaatsheuvel some ambitions could not be implemented, the project overall has been brought to a successful end by realising its main ambition to create a lively town centre. This perseverance has a strong connection with personal commitment of key persons in both cases (G. Bruijniks, C. Ippel, W. Janssens, E. van der Leij, personal communication, October 2016).

6.4 Similarities in context

There are several contextual similarities between the case studies, listed below.

First of all, the timing of the projects is similar. Concrete plans have started in 2006 for Rijswijk and in 2007 for Kaatsheuvel. Furthermore, both projects started constructing during the financial crisis. In Rijswijk they started in 2013 and Kaatsheuvel has started in 2012.

In both projects the municipality and its political arena have been determined to make the development a success, rather than opposing the ambitions or disagreements.

- "The municipality really wanted it [Bruisend Dorpshart] to be realised, that has always been like that, with all administrations. (...) Everyone has its interests and in negotiations these become clear, but there has not been counteracted." (C. Ippel, personal communication, October 21, 2016).
- "Political changes have had no influence on the development. They have all been involved with the original decision. Everyone is happy and proud that such a relative 'small' municipality is realising such a large development." (C. Rieke, personal communication, October 13, 2016).

Despite the financial crisis the sales of the dwellings in both projects have gone well. In Kaatsheuvel the majority of commercial spaces is occupied (W. Janssens, C. Ippel, personal communication, October 2016).

And finally, in both cases there was no general sustainability policy from the municipality to serve as a guideline for the projects. The objectives were project-specific (G. Bruijniks, R. van der Meij, personal communication, October 2016).

6.5 Cross case conclusion

In this cross case analysis we have compared the collected case material of this research and have seen that there are differences and similarities in the used planning tools and the context. A few conclusion have been made:

- There have been more planning tools and actions used in RijswijkBuiten than in Bruisend Dorpshart Kaatsheuvel (see table 12).
- Capacity building actions have been more present in RijswijkBuiten than in Bruisend Dorpshart Kaatsheuvel. Also in RijswijkBuiten there has been more interaction between the planning tools and actions (see figure 19).
- There is a difference in the attitude of the municipalities towards sustainability in general. The municipality of Loon op Zand (Bruisend Dorpshart Kaatsheuvel) has a passive attitude, while the municipality of Rijswijk has adopted an active attitude.
- Contextual influences that could not have been bridged with planning tools have had an impact on the implementation gap
- In both cases it is mentioned that cooperation, determination and the people involved in the process have been essential for the realisation of the project.

These points are a prelude the conclusions in the next chapter.

7. Conclusion

In this research we have looked at how public planners can use planning tools to bridge the implementation gap between sustainable urban policies (SUPs) and sustainable urban development projects (SUPs). Before we answer the main question, we will look back at the sub-questions.

7.1 Sub-questions

5 sub-questions have been formulated in this research. The first four questions have been answered with academic literature, the fifth question has been answered by conducting two in-depth case studies.

7.1.1 What are the characteristics of sustainable urban development projects?

Sustainability is a broad subject although it has been approached from mainly a technical perspective for a long time. In urban development several disciplines, functions, actors and cash flows are linked to lead to a (re)development of an area with several functions combined, such as infrastructure, housing, parking, working and recreation. Sustainable urban development has no precise definition but rather consists of several aspects or objectives. In this research we have used a list of objectives of sustainable urban development from Buskens (2015) to understand what sustainable urban development comprises (see figure 4, p. 18). This sub-question has given an explanation of sustainable urban development and has enabled us to categorise the sustainability objectives of both case studies.

7.1.2 What are current obstacles for market actors to commit to sustainable urban development projects?

There are a number of obstacles for market actors to commit to sustainable urban development which also contribute to the implementation gap between SUPs and SUDPs. Market actors are not always consulted or are involved too late. Absence of power to enforce achieving sustainability objectives results in variations in the achievement of sustainability, as well as an actor's attitude towards the risks and responsibilities of it and their knowledge of the sustainability issue. This might also be because the focus on sustainability is relatively new. Sustainability objectives are often applied because of regulation, not mainly from an own belief. Sustainability is often not approached as People, Planet, Profit, but rather as energy efficiency. Therefore the sustainability discussion is primarily focused on the level of real estate instead of the urban area level. Lastly, there is often no integral approach or direction in the development process. Public planners should be aware of obstacles that market actors experience and try to influence them with planning tools.

7.1.3 What are reasons for decision implementation failure in sustainable urban development projects?

Implementation is about the conversion of a decision into concrete actions. This happens in three stages: decision-making, delegation and implementation. In each of these stages there are main features which could affect the implementer's compliance to the decision. These are political disagreement and decision complexity in the first stage, ex ante and ex post controls in the delegation stage and lastly policy conflict and salience of a decision. These features are recognised in sustainability as a wicked concept, institutional systems, asymmetry of costs and benefits, and too late put on the agenda. The context also has influence on the compliance to decisions or policies.

7.1.4 Which planning tools can a public planner use to influence the decisions by developers on sustainable urban development projects and reduce implementation gaps?

Adams et al. (2005) have categorised four planning tools for public planners to use: shaping, regulating, stimulating and capacity building. These planning tools can be deployed to influence the decision environment of market actors, and with related planning actions transform market operations. Shaping encourages market actors to see benefit for themselves in aligning with plans. Regulating consists of the law and contractual regulations. These limit the scope and control market actions. Stimulus tools encourage market actors to produce more desirable outcomes. This can be done with direct state action or indirect actions price-adjusting, risk-reducing and capital-raising. Capacity building is a means to facilitate the previous three tools, by among others building relations, trust, acquiring knowledge and social capital.

7.1.5 How are planning tools used in practice to bridge sustainable urban policies and sustainable urban development projects?

The fifth sub-question has been answered by conducting two in-depth case studies. The use of planning tools in these both case studies have been different from each other. In RijswijkBuiten more planning tools have been used than in Kaatsheuvel. It is not the quantity which is the important difference, but rather which tools have been used and their quality. Here we will recapture which tools can be recognised as influential on the success of the development.

In both cases there is a land-use plan, because this is obligatory for municipalities to have. It is rather unique that in RijswijkBuiten the DPL instrument has been integrated in the land-use plan. In RijswijkBuiten an extensive Masterplan has been written which consists of the ambitions for the development and serves as a guide during the development. In Kaatsheuvel a bid book was made for the tender and a visual quality plan was made together with interested residents of the village. A document with the sustainability ambitions was added to the tender. The Masterplan of RijswijkBuiten provides more flexibility than the bid book of Kaatsheuvel. Furthermore, we have identified more key variables of a persuasive plan in RijswijkBuiten.

Without a development permit nothing of significance can be built in the Netherlands, so of course this is present in both cases. In Kaatsheuvel an ambition document with sustainability objectives was part of the contract with the developers. This document was set up by the municipality, but was negotiated to lower ambitions with the developers. In RijswijkBuiten the main (technical) sustainability ambition in the contract was higher than mentioned in the Masterplan. The development partner offered this ambition itself, because the municipality stimulated developers to make this certain ambition as high as possible in the tender procedure. This may be a result of that in RijswijkBuiten the development partner was chosen because of its view on sustainability, so both parties had the same view. In Kaatsheuvel this was not one of the main criteria, which resulted in awarding developers who did not align with the municipality's ambitions on sustainability.

Concerning stimulus tools, the ones used in Kaatsheuvel were not deployed as tools for encouragement, but rather as necessary tools in the process. The compulsory purchase was needed for the progress of the development and the subsidy covered a small part of the project. It was estimated to receive more subsidy. The main stimulus used in RijswijkBuiten were the Municipal PreEmption Rights Act, 'self-subsidy', and the 'Rijswijk model', the financial model which is being used. These stimulus tools have been risk-reducing and capital-raising which is encouraging for market actors.

In Kaatsheuvel the most apparent forms of capacity building are market-rooted networks and market relevant skills: cooperation and determination. Good cooperation was mentioned in the interviews, but the cooperation would rather seem standard and trust and transparency have not been mentioned. Determination was present but mainly for the overall process to continue and to finish realisation of the development, not to implement sustainability ambitions. This applies less for the development of the multifunctional accommodation. In RijswijkBuiten there has been a specific focus on building relations and trust with stakeholders, knowledge sharing with the development partner, and looking for ways to hold on to the ambitions of the Masterplan.

7.2 Conclusion main research question

First we have looked at the sub-questions and now we will take a closer look at the main research question:

How can public planners use planning tools to bridge the implementation gap between sustainable urban policies and sustainable urban development projects?

In this research we have performed a literature review and have conducted two case studies. With the theoretical framework, based on the literature review, we have indicated:

- the objectives of sustainable urban development (Buskens, 2015)
- obstacles for market actors (Dair & Williams, 2006; Buskens, 2015)
- the implementation gap (Oosterwaal, 2011) and several reasons for the limited success of sustainable urban policies (SUPs) (Van Bueren & De Jong, 2007)

- the planning tools: shaping, regulating, stimulating and capacity building (Adams et al., 2005; Adams & Tiesdell, 2010, 2013; Adams & Watkins, 2014; Heurkens, Adams & Hobma, 2015).

The theoretical framework has supported the case study analyses and the structure of the analytical case study model. In the analyses of the case studies we have identified the implementation gap by comparing the pre-formulated sustainability objectives with the realised objectives, based on the list of objectives made by Buskens (2015). We have explained the implementation gap by looking at which planning tools have been used and what the influence of the context has been.

The project of Bruisend Dorpshart Kaatsheuvel has been selected as a case with a low ambition level where not all pre-formulated objectives have been realised. The RijswijkBuiten development has been selected as a case with a high ambition level and where many pre-formulated objectives have been realised.

Both research methods, the literature review and the case studies, have resulted in the construction of table 13 which answers the main research question. The table connects the reasons for limited success of SUPs (Van Bueren & De Jong, 2007) and the main features of implementation gaps (Oosterwaal, 2011) with the four planning tools (Adams et al., 2005). In the table actions have been given per tool, on how to bridge a feature of SUP implementation gaps. These actions are accompanied by examples of planning actions from the empirical findings of this research.

Table 13. overview of how planning tools can bridge the gap between SUPs and SUDPs

Asymmetry of costs and benefits Policy co	ain feature of nplementation ap	Shaping	Regulating	Stimulating	Capacity-building
Asymmetry of costs and benefits Put on agenda Salience		Make substantive analyses of socio-economic trends to have a clear and apparent evidence base. Engage other stakeholders in the process to gather information. This enables to operationalize sustainability into concrete goals. e.g. Masterplan Rijswijk-Zuid			Information and knowledge about sustainability, the market and development process is needed to be able to operationalize sustainable goals. Networks/relations can be beneficial to share knowledge and precedents e.g. help from consultants, cooperation with a market actor
Asymmetry of costs and benefits Put on agenda Salience	x ante controls	Give clear explanations of what the intentions of the plan are to have less room for interpretation by the developer e.g. Bid book Bruisend Dorpshart Kaatsheuvel	Regulation should be beneficial for sustainability objectives instead of conflicting. Rules for methods and procedures should be clear e.g. 'Change building codes and zoning standards to support sustainable outcomes, link planning applications and development approval processes to sustainable objectives, and create non-financial incentives for sustainable behaviour.' (Heurkens, 2016)	Price-adjusting and capital-raising actions can help overcome conflicting formal (financial or economic) institutions. e.g. Rijswijk Model and 'self-subsidy' from land exploitation	A change of mind-set could help to bypass formal and informal institutions. Knowledge of the institutional system is necessary for this. e.g. cooperation with a development partner as in Rijswijk
costs and benefits Policy or Policy	olitical sagreement	Shape an institutional framework which encourages sustainability that can serve as a basis for decisions to make e.g. municipal policy on sustainability objectives	'Social sanctions' can help to turn political disagreement into compromise, which has a positive effect on implementation e.g. harmed self-interest, (public) image		Information and knowledge about the issue can help decrease the disagreement. Personal skills as being convincing can also result in more agreement between decision-makers e.g. cooperation with higher governmental levels (Province and RijswijkBuiten)
	olicy conflict	Shaping tools encourage developers to see benefit for themselves in meeting policy objectives. e.g. a logical and realistic masterplan with an evidence base	Use regulation to persuade developers to adapt their ideas according to the policy, instead of sanctioning e.g. stimulate developers to set the bar higher during the tender procedure	To reduce non-compliance because of financial reasons can be done with price-adjusting and capital-raising instruments. This for example can also be public-private partnerships where risks and rewards are shared. e.g. Rijswijk Model and 'self-subsidy' from land exploitation	The implementation of a decision should not be completely delegated to the developer (the implementer), but there should be a form of collaboration. Trust, knowledge and personal skills are needed here. e.g. RijswijkBuiten with the mind-set to collaborate with a development partner and use of Rijswijk Model in financial hard times
	alience of a ecision	Create an institutional framework that encourages and rewards integration of sustainability in the development process. Translate abstract sustainability policy aims into project goals or objectives. e.g. Project plan of Merosch in RijswijkBuiten and Duurzaam Verbindend in Kaatsheuvel		Financial incentives could make it stimulating to integrate sustainability in the process. A risk-reducing action such as having accurate market information to match perceived risks to real returns, could also create interest in the subject as it builds confidence for developers. e.g. check the feasibility of ambitions by experts/consultants. Also continuity in the team to build a collective memory and knowledge base	By being an active participant in the development process as a public planner, influence can be exerted on integrating sustainability measures in the process. e.g. planners of RijswijkBuiten were early involved in the whole process

This table shows that several planning tools can help to bridge a feature of an implementation gap. We assume that this table will be used effectively if a combination of the tools is applied. Effectiveness regards the bridging of implementation gaps and realising ambitious sustainability objectives.

It should be noted that this table is not restrictive: the planning actions in the table are based on the empirical findings of this research and other actions related to the planning tools are also able to bridge implementation gaps between SUPs and SUDPs. Furthermore the reasons for limited success of the implementation of sustainable urban policies and the main features of implementation gaps are not limited to what is stated in this table.

Several concluding statements are made below, but we have to keep the external validity of it in mind. Because the statements are based on this research with only two case studies, we cannot generalize them to all similar cases.

There are several planning tools for public planners to use

Adams et al. (2005) have categorised four planning tools for public planners to use: shaping, regulating, stimulating and capacity building. These planning tools can be deployed to influence the decision environment of market actors and can transform market operations with related planning actions.

In the cross case analysis we have seen that more planning tools and actions have been used in RijswijkBuiten than in Bruisend Dorpshart Kaatsheuvel.

 A combination of actions of the planning tools is needed to be able to effectively bridge an implementation gap

In literature it is stated that the planning tools are not used one by one, but are generally deployed in combinations (Tiesdell & Adams, 2011).

In the cross case analysis we have seen that there has been much interaction between the planning tools and the related actions in RijswijkBuiten.

 Capacity building plays a facilitating role for the other tools and bridging the implementation gap and should be present during the whole process

It has been stated in literature that capacity building is a means to facilitate the (better) operation of the other planning tools (Heurkens et al., 2015).

In the case of RijswijkBuiten capacity building actions have been apparent throughout the whole process and seem to have had a positive influence on the other planning tools. In Bruisend Dorpshart Kaatsheuvel not all forms of capacity building have been clearly present and the other planning tools have been used to a lesser extent than RijswijkBuiten.

In figure 20 we see in RijswijkBuiten the mind-set of being active participants has led to the deployment of the Municipal PreEmption Rights Act, a stimulating tool (1). After that step the masterplan and land-use plan have been drawn, where the network and relation with other stakeholders has led to a broadly supported plan (2). In the tender the developers were asked to make a plan with an as low as possible EPC (3). Dura Vermeer offered EPC 0 which later was also put in the contract (5). The Rijswijk Model was suggested by the development partner. As the public planners knew the financial situation at the time was hard for developers, they have agreed to use the Rijswijk Model (4). Knowledge of the financial situation and a willingness to 'sacrifice' income (mind-set) led to the stimulating tool of 'self-subsidy'. The municipality would receive less income via the land exploitation, but made sure that objectives got implemented (6).

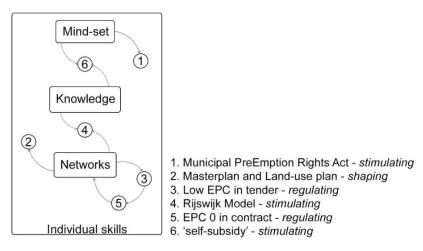


Figure 20. Influence of the capacity building forms on actions related to the other planning tools

Since the RijswijkBuiten development has a smaller implementation gap, it would seem that capacity building supports the other three tools.

From both literature as well as the empirical findings we can see that capacity building seems to be a tool to facilitate the better operation of the other three tools and it can help to bridge implementation gaps between sustainable urban policies and sustainable urban development projects.

 Contextual influences can have an impact on implementation gaps that cannot always be bridged with the planning tools

Planning tools do not operate in isolation, but are set in a context (Tiesdell & Adams, 2011). The size of an implementation gap is also influenced by other factors, such as economic situation, level of ambition, location and size and financial position of the municipality.

7.3 The relation between human capital and capacity building

In literature it is said that capacity building facilitates the (better) operation of the other planning tools (Heurkens et al., 2015). Capacity building is sub-divided into four forms: market-shaping mind-sets, market-rich information and knowledge, market-rooted networks and market-relevant (individual) skills. This last one, market-relevant skills is related to human capital.

Also, in literature it has been stated that that 'planning tools are only as effective as the individuals and organisation charged with their delivery' (Adams & Tiesdell, 2013), which would refer to market-relevant skills (human capital). The individual skills or human capital of the people involved in the process would influence the effectiveness of the used planning tools.

Looking at the empirical findings, in both case studies the interviewees have mentioned that cooperation, determination and the people involved in the process (i.e. human capital) have been essential for the successful realisation of the project.

In Bruisend Dorpshart the cooperation between actors, perseverance to realise the project and several key individuals were mentioned to have contributed to the overall successful realisation of the project. However, we have not identified many planning tools that have been used, neither were there many capacity building actions present beside the market-relevant skills. Additionally, in this project the level of ambition of the sustainability objectives was not very high and not all objectives have been implemented. Figure 21 shows the assumed relation that capacity building has less facilitating influence on the other planning tools if only market-relevant skills are present.

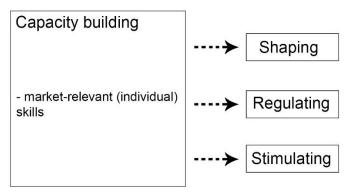


Figure 21. Less influence of capacity building on other tools if only the market-relevant skills are present

This is in contrast with RijswijkBuiten where we have seen that all forms of capacity building have been present during the whole process. We have also seen many planning actions of the other tools. In this case many sustainability objectives of a high ambition level have been implemented. Figure 22 shows the assumed relation that all forms of capacity building should be present to be able to facilitate the other planning tools.

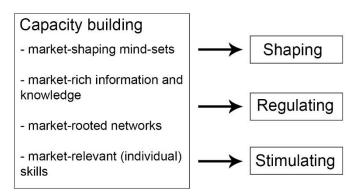


Figure 22. Capacity building facilitates other planning tools if all forms are present

As we compare both cases, it would seem that the presence of *only individual skills* does not lead to an effective use of capacity building. We might say that the individual skills should *support the other forms* of capacity building, and are important to have *as a basis* to be able to change mind-sets, be open to gain and share knowledge and to cooperate with others. Then capacity building can facilitate the better operation of the other planning tools.

8. Recommendations

In the conclusion we have seen a table of how the four planning tools (Adams et al., 2005) can be used to bridge the implementation gap between sustainable urban policies and sustainable urban development projects. Several planning actions have been provided for specific reasons of limited implementation success of sustainable urban policies. In the conclusion we have seen that:

- a combination of tools is needed
- capacity building facilitates the other tools
- human capital supports the other forms of capacity building

Besides the answer in the conclusion, in this chapter several recommendations for public planners are given related to the use of the planning tools: shaping, regulating, stimulating and capacity building.

The first and most necessary recommendation according to this research is about capacity building and the support of human capital, which both should always be present. This recommendation is derived from the conclusion of this research.

The other recommendations are derived from both literature and the case study findings. In the case studies we have found several factors that have either helped or could have helped the implementation of project objectives. These recommendations are linked to the planning tools to demonstrate how the planning tools can be used by public planners to better implement sustainable urban policies and so steer on delivering sustainable urban development projects.

Throughout the whole process

Certain characteristics should be present during the whole development process from decision making to implementation, because they can support several steps in bridging implementation gaps. In the conclusion we have seen that capacity building can help to bridge the implementation gap.

There are four forms of capacity building:

- market-shaping cultures, mind-sets and ideas
- market-rich information and knowledge
- market-rooted networks
- market-relevant skills and capabilities

Translated into more practical language they are about:

- having an open mind-set, be open for new ways of thinking, don't get stuck on traditional ways
 of working
- having knowledge of the (real estate) market, development processes, trends and innovations
- building relations and networks, cooperating formally and informally, with different types of actors (private- and public sector)
- skills and competencies of individuals and organisations in the process

In section 7.3 'the relation between human capital and capacity building' (pages 95-96) we have assumed that the individual skills should *support the other forms* of capacity building, and are important to have *as a basis* to be able to change mind-sets, be open to gain and share knowledge and to cooperate with others. These traits are necessary to be able to perform better on other tools, such as plan making, signing the contract and financial support. There seems to be a relation between the use of capacity building and the size of the implementation gap. However, based on this research we cannot draw valid conclusions about this, since we have conducted only two case studies.

In table 13 (page 93) of the conclusion several examples of capacity building actions have been given. This table can be used as a guide by public planners to bridge implementation gaps between SUPs and SUDPs.

The recommendation is that the public planner should have certain competences such as negotiating skills, the ability to convince others, be able to cooperate with others, trust others and be trusted, be determined and stand their ground, but also to be open for new ways of thinking, knowledge and compromise. The individual skills of the public planner are essential for the effective use of capacity building and should be present during the whole process. The concluding table of this research (see page 93) can be used as a guide to bridge implementation gaps between SUPs and SUDPs.

A coherent (municipal) sustainability framework

In the cross case analysis we have seen that there is a difference in the attitude of the municipalities towards sustainability in general. The municipality of Loon op Zand (Bruisend Dorpshart Kaatsheuvel) had a passive attitude, while the municipality of Rijswijk adopted an active attitude. To effectively use the shaping tools for making plans, it would seem beneficial to have a coherent (municipal) framework concerning sustainability ambitions. This framework offers a basis or guideline for drawing the objectives for sustainable urban development projects (SUDPs).

In the municipality of Loon op Zand there is no coherent municipal framework concerning sustainability ambitions. Sustainability ambitions are scattered and are out of tune with each other. It is their aim to add an ambition document to each new SUDP, however this seems inefficient and makes it harder to work towards certain goals.

When a municipal framework or policy document is made such a framework should contain goals that the municipality would like to reach, preferably within a certain timeframe. This would make it easier to draw objectives and to substantiate the choices that have been made for the project.

In RijswijkBuiten there was no municipal framework either, but they did use the DPL instrument as a guideline to draw their objectives. The DPL instrument is an elaborate instrument that can be used in the phase when a vision is made up and also helps in writing the masterplan. This instrument helps to create an overview of strong and weak points in the sustainability objectives, by comparing the aspects of the new project with a reference development. The goals that the municipality wanted to reach were set up before using the instrument, but were also project-specific.

The recommendation is to have a certain framework in place that can serve as a guideline when the objectives for a SUDP are drawn. This can be in the form of a municipal policy document or by using an elaborate instrument where one can check the influence of the objectives on the sustainability level of the whole development. Preferably there should be a municipal framework with set goals to draw objectives that contribute to these goals.

Drawing project objectives in a plan

Plans are used in the land and property market as shaping tools and it is where project objectives are presented. Some plans are more persuasive than others and there are several variables that can influence the persuasiveness of a plan.

When drawing objectives for a sustainable urban development project, these should be presented in a broadly supported plan. In RijswijkBuiten's masterplan we have, among others, seen these variables:

- a clear and apparent evidence base
- awareness of risks
- stakeholder engagement
- endorsement by higher-level actors

These variables or characteristics seem to have had a positive influence on the implementation of objectives as the objectives have been realistic and have been supported by many stakeholders.

To have well substantiated objectives it might be necessary to involve external consultants to help with analysing trends and developments, knowledge of the real estate market, calculating financial feasibility, and product knowledge.

Showing that there is awareness of risks and real returns is a confidence-building measure for developers. This might lead to higher implementation of the objectives, as implementers comply more with decisions when they are more satisfied with the decision.

Engaging stakeholders in the process of plan making might increase the chance of implementation. This can start with for example an interactive process with civil servants, the executive board and the city council. It might be necessary to involve neighbouring municipalities and/or interested organisations as well. Depending on the size of the development engagement with higher governments such as the Province or regional alliance could be beneficial for gathering support for the plan.

When during the plan making process conflicting issues with stakeholders in the area arise or are foreseen, it could be beneficial to involve a higher governmental level in the process. In RijswijkBuiten they have involved the Province by organizing workshops after DSM pointed out some conflicting issues. This helped to create a masterplan with shared ideas and it is also supported on a higher governmental level.

The recommendation is to incorporate the following points in the plan making process:

- a clear and apparent evidence base
- awareness of risks
- stakeholder engagement
- endorsement by higher level actors

Think about the implementer

According to theory an important predictor of implementation of a decision is that the implementer should agree with the decision. When the implementer is more satisfied with a decision, there is a higher chance he or she will implement that decision (Oosterwaal, 2011). The implementer is in this case the urban area developer or market actor and by decision we mean the sustainability objectives for the project.

This means that implementer preferences and capacities should be considered as well when drawing sustainability objectives. There are several obstacles for market actors to commit to SUDPs as we have seen in section 2.2 of this research (Dair & Williams, 2006; Buskens, 2015). This does not mean one should *only* draw objectives that avoid obstacles or align exactly with implementer preferences or capacities, because otherwise there will be no progress made in overcoming obstacles and self-development.

The recommendation is to not formulate sustainability objectives that are too ambitious, which could not be implemented by the market actor. Sustainability objectives should be ambitious, but realistic and feasible as well.

Tender not too tight

In Kaatsheuvel a WKO was asked in the tender specifically, while in RijswijkBuiten the developers were free in how to reach an as low as possible EPC score. It might lead to a higher level of commitment and implementation by developers if they come up with the way to implement an objective by themselves. This can then also be incorporated in the development contract, which is a regulating tool.

The recommendation is to not provide too many restrictions in the tender procedure. This offers market actors freedom of how objectives should be realised. *However*, it should be very clear what the goal of the objective is, because too much room for interpretation may result in that an objective is not reached at all.

In conclusion

Overall, the pillar of these recommendations is the human capital of the people involved. This supports capacity building, which in turn facilitates the other three tools and actions.

In figure 23 below we have displayed the importance of the individual skills within capacity building and shown that capacity building is needed to execute the other recommendations as well.

- Market-relevant skills and capabilities
 Negotiating and convincing –skills, ability to cooperate, perseverance
- Market-shaping cultures, mind-sets and ideas
 Thinking outside the box, open to change, active participation
- Market-rich information and knowledge
 Think and discuss on the same level as the market
- Market-rooted networks
 Cooperate in (in)formal ways, gain and share knowledge

A coherent (municipal) sustainability framework	Plan characteristics for a persuasive plan	Implementer preferences and capacities	Tender not too tight
Having a framework makes it easier to draw objectives for SUDPs and to explain the choice of the objectives and the importance of its implementation.	The objectives should be realistic and show awareness of risks. Cooperation with stakeholders should lead to a broadly supported plan	The implementer and its capacities should be kept in mind to stay realistic and avoid policy conflict	It might increase commitment of the developer if the tender offers a certain level of freedom of how objectives should be realised.

Figure 23. Overview of the given recommendations showing the importance of human capital and capacity building

8.1 Recommendations for further research

Since in this research only two case studies have been conducted, the validity is not high and only assumptions have been made. Conducting more similar case studies and testing the table in the conclusion, can increase the validity of the assumptions.

In this research we have described the gap between decision and implementation by looking at main features of implementation gaps and reasons for limited success of SUP implementation. It might be interesting to look for these features and reasons in similar case study analyses as well as identifying used planning tools. The table in the conclusion might then be expanded.

9. Reflection

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Appendix I: Case references

Case RijswijkBuiten

Interviews

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Rieke, Cees (13 October 2016). Municipality of Rijswijk, deputy director Programmabureau RijswijkBuiten

Van Rijswijk, Robbert (28 October 2016). Merosch, consultant

Stouten, Joris (19 October 2016). Dura Vermeer, senior developer

Survey

For survey questions and results, see Appendix IV

Documents

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Case Bruisend Dorpshart Kaatsheuvel

Interviews

Bruijniks, Gerard (24 October 2016). Municipality of Loon op Zand, Alderman

Ippel, Christa (21 October 2016). Heijmans, area developer

Janssens, Wilfried (24 October 2016). Municipality of Loon op Zand, municipal project leader

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Appendix II: Interview schemes

Interview met gemeente Rijswijk / Wethouder stadsontwikkeling, stadsbeheer en grondzaken en wijkwethouder RijswijkBuiten

Wethouder Ronald van der Meij, 26 oktober 2016, 10.00 uur Stadhuis Rijswijk

Doel: achterhalen hoe er op strategisch/politiek niveau over RijswijkBuiten wordt gedacht.

Vragen:

Intro

Kunt u een korte omschrijving geven van het project en uw rol daarin?

Duurzaamheid in de gemeente

- Wat betekent duurzaamheid voor de gemeente Rijswijk?
- Er staat maar weinig over duurzaamheid in het collegeprogramma 2006-2010/coalitieakkoord 2010-2014. Er is wel een uitgebreid duurzaamheidsbeleid opgezet (Duurzaamheidsagenda 2020).
 - o Hoe is dit zo ontstaan?
 - Waar komt de duurzaamheidsambitie vandaan, als deze in eerste instantie niet in het programma/akkoord is opgenomen?
 - Was het een gemeenschappelijk doel/gemeenschappelijke inzet om een hoge duurzaamheidsambitie in te zetten, of werd het door een/enkele mensen doorgedrukt?
 - Geldt dat ook voor RijswijkBuiten? / Waar komt de hoge duurzaamheidsambitie voor RijswijkBuiten vandaan?

Planvorming RijswijkBuiten

- Hoe is het plan voor RijswijkBuiten tot stand gekomen?
 - o Wat zijn de grootste ambities?
- Vaak worden duurzaamheidsambities niet uitgevoerd vanwege te weinig financiële middelen.
 Hoe werd hier over gedacht tijdens het opstellen van de duurzaamheidsambitie voor Rijswijk en RijswijkBuiten?
 - o En hoe werd er sowieso nagedacht over de implementatie van de ambities?

Politieke context

- Hoe wordt er vanuit de politiek op RijswijkBuiten gekeken?
 - o Hebben gemeenteraadsverkiezingen invloed gehad op het project?
 - Meer aandacht voor duurzaamheid door het project?

Verdiepende vragen

- Zijn er volgens u genoeg verschillende woonmilieus in Rijswijk?
 - o Of is de komst van eengezinswoningen in RijswijkBuiten een woonmilieu dat nodig is?
 - o In het coalitieakkoord 2010-2014 staat dat het college de diversiteit aan onderscheidende woonmilieus koestert. Echter, ik heb in andere bronnen gelezen dat er veel eengezinswoningen worden gebouwd in RijswijkBuiten, juist vanwege de weinige diversiteit aan woonmilieus. Klopt dat?

- Het percentage sociale woningbouw ligt in Rijswijk op 35%. In RijswijkBuiten zijn inmiddels 24 sociale huurwoningen gebouwd. Is het de bedoeling dat er in RijswijkBuiten ook rond de 30% sociale woningbouw komt?
 - o Waarom wel/niet?
 - o Waarom gaat het zo langzaam?
 - o Wat betekent een lager percentage voor de sociale cohesie in de wijk?
- De gemeente Rijswijk koestert de goede ligging en vooral de goede bereikbaarheid van Rijswijk met zijn omgeving. Helaas is er nog geen ov in RijswijkBuiten, terwijl dit wel een van de doelstellingen was. Hoe komt dat?
 - o Waarom is dit niet 'harder doorgedrukt'? Nu pas budget voor vrij gemaakt
- Trekt het gebied al lange termijn investeringen aan?

Afsluiting

- Wat is voor u de belangrijkste les die u heeft geleerd van het project RijswijkBuiten?
- Wat zijn succesfactoren in het algemeen in het project?

Interview met gemeente Rijswijk / gemeentelijke projectleider

Cees Rieke, (Adjunct directeur Programmabureau RijswijkBuiten), 13 oktober 2016, 14.15 uur Kantoor Programmabureau RijswijkBuiten, Rijswijk

Doel: Achterhalen waarom gekozen is voor de duurzaamheidsambitie, hoe de (interactieve) beleidsvorming is gegaan, of en hoe er is nagedacht over de implementatie van het gemaakte beleid, welke tools zijn ingezet.

Vragen:

Intro

- Kunt u kort uw rol binnen het project beschrijven?
- Waarom is het huidige duurzaamheidsniveau als ambitie gesteld?

RijswijkBuiten

In het masterplan van 2009 staat dat het plan in een 'interactief beleidsproces' is ontstaan.

- Wie waren er betrokken bij het opstellen van het masterplan?
- Hoe is dit interactieve beleidsproces opgesteld? Door wie?
- Was dit een nieuw proces voor de gemeente Rijswijk?
- Is er tijdens dit proces nagedacht over de implementatie van het beleid/doelstellingen?
 - o Zo ja, hoe? Is dit gebeurd? Hoe gaat de implementatie in praktijk?
 - o Zo nee, waarom niet?
- Wie heeft de duurzaamheidsambities bewaakt, gezorgd dat ze niet uit het plan werden geschrapt?
- Is er een moment geweest dat men duurzaamheidsdoelstellingen wilde laten vallen?
 - o Zijn er doelstellingen die niet zijn behaald tot nu toe?

Tools

- Welke wetgeving is gebruikt om bepaalde doelstellingen verplicht te stellen?
- Zijn er subsidies gebruikt in het project? Of andere stimulerende maatregelen?

Context

- Hebben politieke verschuivingen invloed gehad op het gevormde beleid?
- Heeft de financiële crisis invloed gehad op het gevormde beleid (en implementatie/doelstellingen)?

Samenwerkingen

- Hoe wordt de samenwerking met marktpartijen ervaren?
- Hoe is de samenwerking aangegaan met de huidige ontwikkelpartner, Dura Vermeer?
- Hoe is de relatie en het vertrouwen tussen het Programmabureau en Dura Vermeer en andere partijen?
 - o Hoe is de relatie en het vertrouwen *opgebouwd* tussen de partijen?
- Hoe wordt de samenwerking met andere ontwikkelaars opgezet?
 - o Wat als die minder soepel verlopen?

Afsluiting

- Wat is de belangrijkste les die u heeft geleerd in het project RijswijkBuiten?

Interview met Dura Vermeer / ontwikkelpartner RijswijkBuiten

Joris Stouten, 19 oktober 2016, 10.30 uur Kantoor Dura Vermeer, Rotterdam Airport

Doel: achterhalen wat de ervaring over de samenwerking met het Programmabureau is, (indirect) de invloed van ingezette tools checken.

Vragen:

Intro

- Kunt u een korte samenvatting geven van het project en de rol die u/uw organisatie daarin heeft gespeeld?
- Hoe wordt de samenwerking met het Programmabureau ervaren?

Duurzaamheidsdoelstellingen

- Was Dura Vermeer betrokken bij de marktverkenning n.a.v. het opstellen van het masterplan?
- Is het masterplan 2009 een duidelijk document voor een marktpartij?
 - Waren de duurzaamheidsdoelstellingen duidelijk?
- Is er een moment geweest dat het niet lukte om een duurzaamheidsdoelstelling te halen?
- Zijn er gevolgen als Dura Vermeer een doelstelling niet haalt?
- Hoe draagt Dura Vermeer, behalve op bouwen van huizen met een EPC van 0,0, nog meer bij aan de duurzaamheidsdoelstellingen van RijswijkBuiten?
 - o Duurzaamheid op gebiedsniveau? Ruimtelijke kwaliteit?
- Worden toekomstige bewoners bij de ontwikkelingen betrokken?
 - o Hoe en wanneer?

Samenwerkingsovereenkomst

- Wat was de eerste indruk van het 'bouwclaim nieuwe stijl' model?
 - Geen zekerheid over het te realiseren bouwprogramma, niet aantrekkelijke gronden toegewezen krijgen
- Het samenwerken op basis van dit ontwikkelmodel vraagt om vertrouwen van de ontwikkelpartner in de gemeente: Waar was het eerste vertrouwen op gebaseerd?
 - o Hoe is dit vertrouwen verder opgebouwd?

Afsluiting

- Wat is de belangrijkste les die u heeft geleerd in het project RijswijkBuiten?

Interview met Merosch / duurzaamheidsadviseur RijswijkBuiten

Robbert van Rijswijk, 28 oktober 2016, 9.00 uur Kantoor Merosch, Bodegraven

Doel: objectieve kijk op het project. Achterhalen wat de invloed van de duurzaamheidsadviseur is op de doelstellingen, wat de houding van de gemeente is t.o.v. duurzaamheidsambitie.

Vragen:

Intro

- Kunt u een korte beschrijving geven van het project en uw rol daarin?
- Hoe is Merosch betrokken geraakt bij het project?
 - o En sinds wanneer?
 - o Betrokken bij opstellen masterplan en opstellen duurzaamheidsdoelstellingen?

Gemeente en samenwerking

- Hoe ervaren jullie de houding van de gemeente Rijswijk/Programmabureau wat duurzaamheid betreft, i.v.m. andere gemeenten?
- Is de gemeente Rijswijk/Programmabureau ambitieus uit zichzelf, op het vlak van duurzaamheid?
- Hoe wordt de samenwerking met het Programmabureau en Dura Vermeer ervaren?

Duurzaamheidsdoelstellingen

- Is er tijdens het bedenken van de duurzaamheidsdoelstellingen bedacht hoe ze geïmplementeerd konden worden?
 - o En gecontroleerd? Vooral people en profit
- Wie bewaakt de implementatie van de opgestelde duurzaamheidsdoelstellingen?
 - o En hoe?
 - o Programmabureau hier veel bij betrokken of gepusht vanuit Merosch?
- Niet bang geweest dat de vele doelstellingen marktpartijen zou afschrikken?
- Ergens in het masterplan staat *people* wordt vertaald naar: een optimale leefomgeving voor de bewoners. Wat houdt dat precies in?
 - o Hoe willen jullie de people aspecten controleren?
- Kunt u een korte uitleg geven van DPL en hoe het in RijswijkBuiten gebruikt wordt?

Afsluiting

- Vaak worden duurzaamheidsdoelstellingen niet behaald in projecten. Wat is het geheim van RijswijkBuiten?
- Zijn er dingen die beter kunnen?
- Wat is de belangrijkste les die jullie hebben geleerd van RijswijkBuiten?

Interviewschema met gemeente Loon op Zand / Wethouder ruimtelijke ontwikkeling, openbare ruimte, verkeer & vervoer

Wethouder Gerard Bruijniks, 24 oktober 2016, 13.30 uur Het Klavier, gemeenschapshuis, Kaatsheuvel

Doel: achterhalen hoe er op strategisch/politiek niveau over het Bruisend Dorpshart wordt gedacht, waar komen de ambities vandaan

Intro

Kunt u een korte beschrijving van het project geven en uw rol daarin?

Beleids- en planvorming

- Hoe is het plan voor Bruisend Dorpshart tot stand gekomen?
 - o Wat waren de grootste ambities voor het project?
 - o Waar waren de ambities op gebaseerd?

Duurzaamheid

- Wat betekent duurzaamheid voor de gemeente LoZ?
 - o Is dit vertaald in beleid? Waarom is er nog geen duurzaamheidsbeleid?
 - o Hoe is dit vertaald naar het project BD? Hoezo is BD wel duurzaam?
 - o Is DZ in de breedste zin van het woord besproken? People, planet, profit
 - o Invloed van Duurzaam Verbindend? Veel geïmplementeerd?
- Wil LoZ hernieuwbare energie gebruiken?
 - o Waarom niet vastgehouden aan WKO of gezocht naar vervanging?
- Heeft BD voor sociale cohesie gezorgd?

Samenwerken

- Hoe werd de samenwerking met de marktpartijen ervaren?
 - Vertrouwen? Relatie gebaseerd op?
 - Marktverkenning gedaan?
 - o Open boeken principe?

Politieke context

- Hebben politieke verschuivingen invloed gehad op het project?

Afsluiting

- Hoe wordt er aan place-making gedaan voor Bruisend Dorpshart?
- Wat is essentieel geweest in het proces om te sturen op resultaten?
- Was er een succesfactor in het project?

Interviewschema met gemeente Loon op Zand / gemeentelijke projectleider

Wilfried Janssens, 24 oktober 2016, 11.00 uur Het Klavier, gemeenschapshuis, Kaatsheuvel

Doel: Achterhalen waarom gekozen is voor de duurzaamheidsambitie en hoe deze is geïmplementeerd, hoe de samenwerking met marktpartijen is ervaren, welke tools zijn gebruikt

Vragen:

Intro

- Kunt u een korte beschrijving van het project geven en uw rol daarin?

Beleids- en planvorming

- Hoe is het plan voor Bruisend Dorpshart tot stand gekomen?
 - o Wat waren de grootste ambities voor het project?
 - Zijn de projectambities bewaakt?

Politieke context

- Hebben wisselingen van gemeenteraden invloed gehad op projectambities?
- Is er gemeentelijk beleid of ambities vertaald naar het project?
 - o Hoe is dat gegaan?

Duurzaamheid

- Wat betekent duurzaamheid voor de gemeente LoZ?
 - o Is dit vertaald in beleid?
 - o Hoe is dit vertaald naar het project BD?
 - o Is DZ in de breedste zin van het woord besproken? People, planet, profit
 - o Invloed van Duurzaam Verbindend? Veel geïmplementeerd?
 - Zou u het project een duurzame gebiedsontwikkeling noemen?

Afsluiting

- Wat is essentieel geweest in het proces om te sturen op resultaten?
- Andere succesfactoren?

Interview met Heijmans - Christa Ippel

Ontwikkelaar Bruisend Dorpshart, Kaatsheuvel

Intro

- Kunt u een korte samenvatting geven van het project en uw rol daarin?

Het plan

- Was het plan wat de gemeente had gemaakt voor het project duidelijk voor marktpartijen?
- Was u op de hoogte van het document Duurzaam Verbindend?
 - o En op de hoogte van de WKO? Waarom niet gerealiseerd/willen realiseren?
 - o Is er GPR Gebouw gebruikt?
- Is er gesproken over duurzaamheid in de breedste zin van het woord?
 - o People, planet, profit. Bijv sociale cohesie

Samenwerking

- Hoe is de samenwerking met de gemeente ervaren?
 - o Vertrouwen? Relatie gebaseerd op?
 - Oplossingsgerichte houding?
 - o Relatie veranderd door de tijd?
- Was de gemeente traditioneel of vernieuwend in hun handelen?
 - Bewust of door invloed van context?
- Hebben de economische/financiële en politieke context (grote) invloed gehad op het project?

Afsluiting

- Was er een succesfactor in het project?

Interviewschema met Brink Management Advies / adviseur Bruisend Dorpshart Kaatsheuvel

Ernst van der Leij, 17 oktober 2016, 09.00 uur Kantoor Brink M/A, Rotterdam

Doel: objectieve kijk op het project. Achterhalen hoe de houding van de gemeente was en samenwerking met andere partijen.

Introductie

- Zou je een korte beschrijving van het project willen geven en jouw rol daarin?

Gemeente Loon op Zand

- Was de gemeente traditioneel in zijn handelen of vernieuwend?
 - o Bewust of vanwege omstandigheden?

Duurzaam Verbindend

- De doelstellingen die de gemeente stelde, zouden die leiden tot een duurzame gebiedsontwikkeling (zie overzicht aspecten)?
- Waren de eerste doelstellingen haalbaar?
- Hoe graag wilde de gemeente vasthouden aan de duurzaamheidsaspecten tijdens de onderhandelingen?
 - o Hoe dachten de marktpartijen erover?
- Is er gezocht naar andere duurzaamheidsaspecten om te implementeren?
- Had de gemeente harder aan zijn duurzaamheidsdoelstellingen moeten vasthouden?

Relatie

- Hoe was de relatie tussen de gemeente en de marktpartijen?
 - Agressief of oplossingsgericht?
 - Veranderd in de loop van tijd?
- Zijn jullie als adviseur op tijd ingeroepen in het proces, of was het eigenlijk te laat?

Afsluiting

- Was er een soort succesfactor in het project?

Appendix III: Interview analyses with open coding

Confidential.

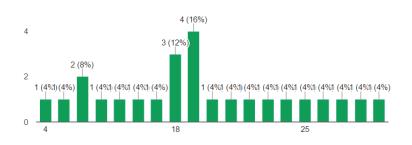
Bewonersenquête RijswijkBuiten
Beste bewoner van RijswijkBuiten,
Bedankt dat u de enquête hebt geopend! Voor mijn masterscriptie wil ik graag weten hoe bewoners van RijswijkBuiten de sociale interactie en veiligheid in hun wijk ervaren.
Hiervoor heb ik een korte enquête opgesteld die bestaat uit 7 meerkeuzevragen. Het invullen duurt slechts 2 à 3 minuten.
U zou mij er erg mee vooruit helpen in mijn onderzoek en ik dank u alvast zeer voor het invullen van de enquête.
Met vriendelijke groeten,
Zuba Adham
*Vereist
Hoe lang woont u in RijswijkBuiten? (in maanden) *
Jouw antwoord
1. In hoeverre voelt u zich betrokken bij uw buurt? *
O Zeer betrokken
O Betrokken
Noch betrokken, noch onbetrokken
Onbetrokken
○ Zeer onbetrokken
2. In hoeverre heeft u een veilig gevoel in de buurt? *
O Zeer veilig
○ Veilig
Noch veilig, noch onveilig
Onveilig
O Zeer onveilig

3. Hoe ervaart u de sociale relatie van bewoners onderling? *
C Er is een goede relatie
C Er is een redelijk goede relatie
C Er is een redelijk slechte relatie
C Er is een slechte relatie
O Weet ik niet
4. In hoeverre bent u het eens met de volgende stelling: De inrichting van de openbare ruimte in RijswijkBuiten bevordert (nieuwe) ontmoetingen tussen bewoners. *
O Zeer mee eens
○ Mee eens
O Neutraal
Oneens
O Zeer oneens
5. Zijn er volgens u genoeg ontmoetingsplekken (incl. speeltuintjes) aanwezig in uw buurt? *
O Ja, er zijn meer dan genoeg ontmoetingsplekken
O Ja, er zijn genoeg ontmoetingsplekken
Nee, er mogen een paar ontmoetingsplekken bij
Nee, er mogen veel meer ontmoetingsplekken bij

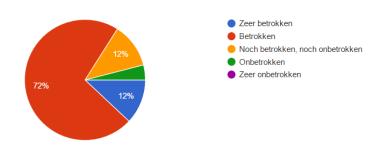
6. Bent u als bewoner vroegtijdig bij de plannenmakerij van uw buurt betrokken door de gemeente? *
O Ja, ik ben erbij betrokken geweest
Nee, ik ben er niet bij betrokken geweest
Niet van toepassing
7. Vervolgvraag over de betrokkenheid bij de plannenmakerij
O Ik was betrokken bij de plannenmakerij en de gemeente is in overleg gegaan met bewoners over het thema van de buurt, de inrichting en benodigde voorzieningen.
O Ik was betrokken bij de plannenmakerij, maar de gemeente is niet in overleg gegaan met bewoners over het thema van de buurt, de inrichting en benodigde voorzieningen.
O Ik ben niet betrokken geweest, omdat ik hier niet voor was uitgenodigd.
O Ik ben niet betrokken geweest, omdat ik hier geen behoefte aan had.
Niet van toepassing
VERZENDEN

Results

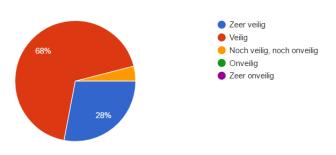
Hoe lang woont u in RijswijkBuiten? (in maanden) (25 reacties)



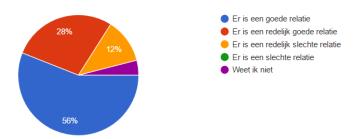
1. In hoeverre voelt u zich betrokken bij uw buurt? (25 reacties)



2. In hoeverre heeft u een veilig gevoel in de buurt? (25 reacties)

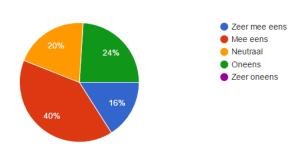


3. Hoe ervaart u de sociale relatie van bewoners onderling? (25 reacties)



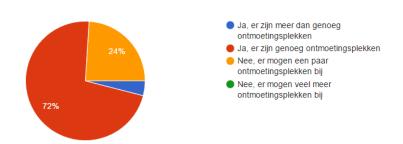
4. In hoeverre bent u het eens met de volgende stelling: De inrichting van de openbare ruimte in RijswijkBuiten bevordert (nieuwe) ontmoetingen tussen bewoners.

(25 reacties)



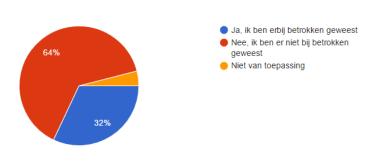
5. Zijn er volgens u genoeg ontmoetingsplekken (incl. speeltuintjes) aanwezig in uw buurt?

(25 reacties)



6. Bent u als bewoner vroegtijdig bij de plannenmakerij van uw buurt betrokken door de gemeente?

(25 reacties)



7. Vervolgvraag over de betrokkenheid bij de plannenmakerij (25 reacties)



Beste bewoner van RijswijkBuiten,

Ik ben Zuba, masterstudente op de TU Delft en ik ben op het moment bezig met mijn masterscriptie over RijswijkBuiten. Ik zou hiervoor graag willen weten hoe bewoners van RijswijkBuiten de sociale interactie en veiligheid in hun wijk ervaren.

Daarom heb ik een korte enquête opgesteld en ik zou u graag willen vragen om de enquête in te vullen.

De enquête bestaat uit 7 meerkeuzevragen en het invullen duurt slechts 2 à 3 minuten.

U zou mij er erg mee vooruit helpen in mijn onderzoek en ik dank u alvast zeer voor het nemen van de moeite.



Website screenshot

