

Change of a developer organisation for a better future

An approach for Implementing change strategies in the organisational structures of private developers management and projects for sustainable impact – a single case study

Master thesis P5

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Abstract

There is significant potential for circular and sustainable development, however, many organisations are struggling to keep pace with this transition. Despite the Paris Agreements and ESGs benchmarks setting clear sustainability standards, private developers are still lacking in adopting new transitions towards a future-proof strategy for their organisations due to growing risks, increasing costs, and the competitive nature of the market.

This research aims to examine how organisational change within developers' management structures and processes can benefit early adopters and frontrunners. Changing the industry goes step by step and starts with an individual approach to adapt the available knowledge. Implementing these changes within companies presents barriers and opportunities at various levels in the organisation. By investigating the implementation of strategic changes, it is crucial to consider the perspectives of different teams and individuals in the organisation to understand how the short-term projects will be affected by the long-term goals and new strategies to come. These factors are shaped both internally and externally, depending on the context. Within this single case study of a developers' organisation interviews are conducted with individuals within the developer's operations. The aim is to provide insights into how their beliefs and work align with the framework of the private developers' proactive and reactive approaches in the company's culture and values. Additionally, case study is conducted to see the change strategies in the past years concerning management and their implications on further developments by using the guide plan, recommendations are given. Combining Strategies for change and aligning strategic and project level shows the importance of the guide plan. Providing a guide plan to address and connect theory to practice shows implementation recommendations for private developer organisations towards change strategies. The research concludes with recommendations.

Keywords: private real estate developer, single case study, change management, change strategies, implementation, guide plan, sustainability, impact

"I cannot say whether things will get better if we change; what I can say is they must change if they are to get better" – George C. Lichtenberg

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I hope the results and the design of a guide plan result in a mutual understanding as well as a pathway for change strategies to be implemented in an organised manner.

Sincerely,

Philip Chin-A-Pauw

Delft, November 2024

Executive summary

Introduction

There is significant potential for circular and sustainable development; however, many organisations are struggling to keep pace with this transition. Despite the Paris Agreement and ESG benchmarks setting clear sustainability standards, private developers often lag in adopting forward-looking strategies due to growing risks, increasing costs, and intense market competition.

Implementing strategic change within organisations is a complex process that requires awareness and a willingness to learn (Cummings, 1993). As regulatory mandates, like the Paris Agreement's emissions-free requirements, draw closer, organisations are increasingly motivated to proactively address these issues. Taking a leadership position ahead of competitors demonstrates motivation, vision, and a drive to succeed.

Given the knowledge gaps in implementing new strategies and the barriers and drivers affecting change, developing effective change strategies is crucial for all developer organisations. This research focuses on identifying how change strategies that meet or exceed sustainability and ESG regulations are implemented within organisations and how these strategies benefit both employees and the organisation. It aims to examine how organisational change within developers' management structures and processes can benefit early adopters and frontrunners.

Methodology

To find out how a developer organisation can benefit from change implementation, the following research question is formulated:

How does a private real estate developer manage the implementation of organisational change strategies for sustainability impact?

- Sub question 1. What factors contribute to effective organisational change management?
- Sub question 2. What barriers and drivers contribute to change management in a developer organisation at the starting phase
- Sub question 3. What change strategies are integrated in the developer organisation and development projects in the implementation phase?
- Sub question 4. How does a private developer manage the integration of sustainable business and project development strategies in the assessment and evaluation phase?
- Sub question 5. How could a guide plan for organisational change be designed in real estate developer organisations.

The research is divided into four parts. The first part establishes a theoretical foundation on organisations, change management, strategies, and impact, forming the conceptual framework. The second part is an empirical study, utilising a single case in which document reviews and interviews are conducted to explore sustainability definitions, strategies, and the organisation's readiness to implement change strategies in its projects and management. Part three includes a validation session to test the findings from the single case study, followed by the design of a guide plan. After comparing empirical findings, theoretical insights, and the guide plan, conclusions and recommendations are made.

The goal of this research is defined by the search for a more sustainable future, with a focus on the climate transition that private developers in urban development must navigate and how implementation of change management can enable sustainable impact. This research aims to gather tangible information on how private real estate developers implement and utilise change strategies in daily practices, and how an organisation's culture and structure enable change and adaptation towards new objectives. Deliverables are a guide plan to help developers' organisations plan their own

changes and give conditions and recommendations for innovation and transition towards the future use of new sustainable strategies to gain more knowledge and awareness for impact on the context of the organisation processes.

Theoretical and empirical research

By linking organisational theory with social theories of change, a framework emerges that clarifies how these concepts interact. Waddel et al. (2018) describe multiple levels of participation and influence within organisations, ranging from individual to management roles, using both top-down and bottom-up approaches. Cummings (1993) and Lewin's model highlight three core stages: preparation, chaotic implementation, and institutionalisation. Waddel demonstrates how environmental factors drive organisational learning and adaptation, while Floyd & Lane (2000) identify middle management as essential in connecting strategic and operational levels. Muller (2023) underlines the importance of alignment between project and strategic levels, bridging "soft" vision-oriented factors with "hard" feasibility requirements. This approach results in a five-step model that guides organisations from their current through the change process towards a new state.

Identifying and adapting shows to value trends and how to change, Finding the right people to generate a basis of committed employees as well as alignment of criteria for barriers and drivers if a certain change is needed. Seeking support and offer guidance as well as a strong leadership in the experiments that are likely to start ensures transparency and urgency for awareness. Prioritising ambitions and selecting partners in this sense is therefore needed. To ensure the basis, there needs to be active coaching on all departments of the organisation as this offers experiments a better chance of generating enough feedback to use it into the strategy plan that is chosen accordingly by that team as well as the approach that is most fitted for the change depending on the scope. This concludes the first two steps. Choosing the right strategy gives room for flexibility in dialogue and more. In addition, strategies from Boonstra can be chosen in combination to maximize effectiveness and balance in the strategy implementation whereas more dialogue strategies (Boonstra, 2021) are considered to be less used but have support as well as interactive and active approaches confirming the need for balance.

With data of small experiments, the team needs to implement the strategy plan with a future perspective that is both realistic and ambitious. Proactive, flexible leadership supports a variety of solutions when changes are clear and justified. Short- and long-term goals need to be implemented to show short-term gains for support. Furthermore, these middle to long-term effects, can be evaluated by shorter and effective meetings on the functionality and effect of the changes used in these experiments or strategies.

Monitoring the process by set KPI's and criteria set in the first phases will make the evaluation more transparent and valuable as well as for the impact. Monitoring faster is possible if digital tools are used in multiple moments in the process. Searching for moments of evaluations, and assessments should offer clear feedback on the set KPI's. If unsuccessful, participation and action planning to initiate after the evaluations will be reiterated for further implementations short-term gains are expected as long as it serves long-term goals.

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offer clear feedback on the set KPI's. If unsuccessful, participation and action planning to initiate after the evaluations will be reiterated for further implementations short-term gains are expected as long as it serves long-term goals.

In summary, the validation shows that employees wish to prioritize sustainability in strategies and seek clearer guidance on implementation, though they acknowledge the complexity of balancing numerous KPI's. While incentives are needed to drive innovation, these should largely stem from management support rather than strict mandates, allowing personal initiatives to go beyond baseline sustainability requirements.

Knowledge sharing through workshops and project insights is valued, but a balance between learning and working is essential. Evaluation challenges also exist, as limited time can hinder innovation, and project ambitions may shift. While tracking sustainability KPI's is important, it's one part of a broader assessment. Ultimately, understanding sustainability's role within projects and using workshops and evaluations can help integrate it more effectively across the organisation.

Guideplan

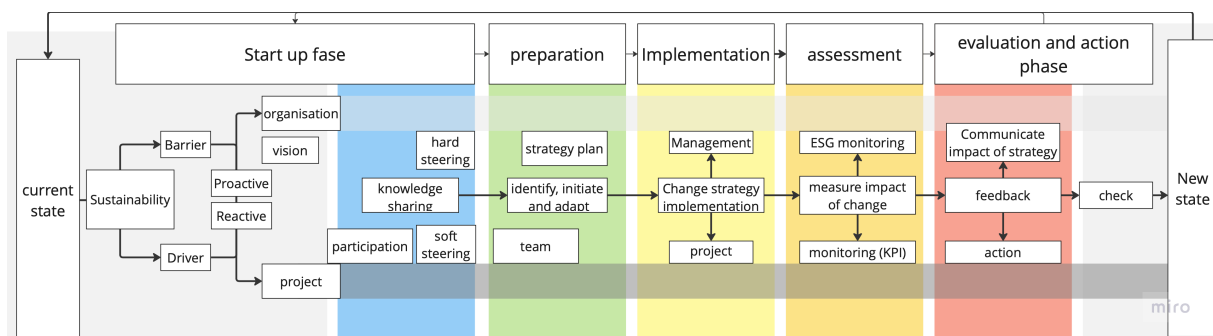


Figure 1: Model for the guide plan (own work)

The change process relies on both planned and unplanned actions, occurring internally and externally. Within the model, structured, planned changes generally provide more clarity, though both types of changes are necessary. In the organisation's current state, barriers and drivers emerge, identified through empirical research, with proactive or reactive measures taken as needed. This new vision becomes apparent within the organisation, and it is up to management or individual employees to grasp the essence of this change vision.

The five phases are simplified into: understanding, identifying and adapting, implementing, assessing, and acting. These are the five steps required to implement a change strategy within the organisation's processes, from project level to management. Each phase must be initiated to roll out a change strategy, derived from the visions and structures of the planned objectives. Each phase has its own conditions for starting, its actions, and its outputs, which include both general and organisation specific points.

All phases will start with criteria, and conditions that need to be completed in order to start the phase, these are no hard criteria but guides. These conditions will form the basis information from where in the phase actions and steps are taken to complete the phase and gather outputs to be communicated towards the next phase.

Certain criteria need to be in place in order to start the phases, here a shift is needed that triggers actions for this phase, the shift and actions will be communicated through the organisation for the next phase in time.

In summary, every phase starts with a set of guiding conditions, followed by specific actions designed to fulfil the phase objectives. Once all phases are successfully completed, this results in a comprehensive change implementation.

Conclusion

A conceptual framework for change management in private developers integrates top-down objectives with bottom-up project team insights, fostering flexibility and adaptability. Boonstra's and Waddell's theories emphasize collaboration between strategic directives and operational learning, allowing knowledge sharing and continuous improvement across projects. Middle managers play a key role by bridging strategic goals and practical execution, using feedback loops to adapt changes based on real-time data. For developers, this combined approach supports senior management in setting clear, long-term goals, while enabling project teams to innovate and respond to immediate market, sustainability, and regulatory demands. With the use of combined change strategies balancing strategic and project implications, this approach institutionalizes change for long-term impact.

Validation of empirical findings forms the basis of a structured guide plan, enabling planned and adaptive steps across five phases. Each phase includes minimum requirements, ensuring continuity and building on previous outputs. This guide aligns strategic objectives with actionable steps for implementing change. By combining Boonstra's interactive strategies with proactive approaches, the guide supports sustainable cultural shifts. It emphasizes clear communication, flexibility, and a collaborative, incentivized environment for employees. Continuous evaluation and development of new strategies enable aligning both market demands and sustainability objectives, promoting a forward-thinking organisational culture.

Recommendations

1. Incentivize Sustainable Change: Integrate sustainability with affordability through clear examples. Introduce a real-time bonus structure tied to sustainability KPIs to drive commitment.
2. Promote Knowledge Sharing and Proactive Leadership: Conduct workshops and mentorship programs with experienced developers and external partners to build proactive leadership and practical expertise among employees, while motivating talent.
3. Continuous Evaluation and Feedback: Implement brief, context-sensitive evaluations for ongoing projects, focusing on cost, emissions, and collaborative success. Schedule follow-ups after projects have matured for deeper insights.
4. Transparent, Cross-Departmental Communication: Develop clear, standardized language across departments to foster mutual understanding and collaborative action on sustainability goals.
5. Flexible but Structured Monitoring: Establish adaptable monitoring frameworks with early, flexible agreements on goals. Integrate risk management to streamline processes and prevent overextension of ambitions.
6. Financial Tools for Sustainable Development: Utilize a blend of "hard" and "soft" leadership styles to encourage innovative, sustainable financial solutions for area and building developments, supporting both immediate and long-term investment.
7. Social Investment and Community Resilience: Enhance projects by focusing on community well-being and employee engagement. Combine experienced and new colleagues for knowledge sharing, fostering a resilient, collaborative workforce.
8. Impact Measurement with ESG Integration: Develop an impact matrix that aligns short- and long-term ESG goals and KPIs, facilitating cross-departmental collaboration and tracking progress on economic, environmental, and social outcomes.

9. Digital and Departmental Integration: Build a digital support framework embedded in strategic plans to support sustainability initiatives. Increase inter-departmental collaboration and digitalisation for intuitive, data-driven decision-making.

10. Centralised Data and Knowledge Sharing: Enhance data-sharing capabilities within and across departments. Centralize operations to improve tracking, planning, and sustainability modelling across all development projects.

Table of Contents

COLOPHON	2
ABSTRACT	3
ACKNOWLEDGEMENTS	4
EXECUTIVE SUMMARY	5
TERMINOLOGY	13
1. INTRODUCTION	14
1.1. PROBLEM STATEMENT.....	15
1.2. SOCIETAL AND SCIENTIFIC RELEVANCE	16
2.- LITERATURE REVIEW	17
2. LITERATURE - CHANGING FIELD OF DEVELOPMENT	17
2.1. DEVELOPERS	17
2.1.1. <i>(Beyond) Compliance</i>	18
2.1.2 <i>Barriers</i>	19
2.2. FUTURE PROOF	19
2.3. CHANGE MANAGEMENT.....	20
2.3.1. <i>Models of change</i>	21
2.3.2. <i>Strategies for Change</i>	22
2.3.3. <i>Structure</i>	23
2.3.4 <i>Culture</i>	24
2.3.5. <i>(Individual) behaviour</i>	24
2.3.6. <i>Team-Project</i>	24
2.4. IMPACT	25
2.4.3. <i>The impact of changing core values</i>	26
2.5.5. <i>Assessments of strategies for change</i>	26
2.6. CONCEPTUAL FRAMEWORK	26
CHAPTER III METHODOLOGY	29
3.1 RESEARCH QUESTIONS	29
MAIN RESEARCH QUESTION:.....	29
3.2 RESEARCH METHODS	30
3.2.1 TYPE OF STUDY	30
3.3 CASE STUDY	32
3.3.1 <i>Case criteria</i>	32
3.4. CASE – BPD	33
3.4.1 <i>Documents review</i>	33
3.4.3. <i>Interviews</i>	34
3.4.4. <i>Validation session</i>	34
3.4.5. <i>Research output - Goals and objectives</i>	34
3.4.6. <i>Deliverables</i>	35
3.4.7. <i>Data analysis</i>	35
CHAPTER IV EMPIRICAL RESEARCH	37
4. EMPIRICAL RESEARCH	37
4.1. DESK RESEARCH CASE	37
4.1.1. <i>Organisation structure</i>	38

4.1.2. Organisation culture.....	39
4.1.4. Timeline:.....	39
4.1.5. (Proactive) positioning.....	40
4.1.6 Strategy notes and documents.....	41
4.1.7. Expert team of Sustainability.....	42
4.1.8. Regional office of Zuidwest.....	42
4.1.9. Expert team sustainability:.....	43
4.1.10. Tools, strategy and data.....	44
4.2. CONCLUDING DESK RESEARCH CASE.....	44
4.3. PROJECTS.....	45
4.3.1. Findings of the projects.....	47
4.4. INTERVIEWS FINDINGS.....	47
4.4.1. Barriers and drivers.....	50
4.4.4 Cross-interview analysis.....	53
4.4.2. Patterns.....	55
4.4.3. Contradictions.....	57
4.4.4. General findings interviews.....	58
4.4.5. Findings and the conceptual framework.....	58
4.4.6. Strategies.....	60
4.5. CONCLUDING FINDINGS.....	62
PART V: SYNTHESIS.....	63
VALIDATION SESSION.....	63
<i>Executing the validation session.....</i>	<i>65</i>
1. Strategic level:.....	65
2. Strategic level:.....	66
3. Tactical level:.....	67
4. Project level:.....	67
<i>Preliminary conclusion small expert meeting.....</i>	<i>68</i>
CHAPTER VI: GUIDELINE FOR CHANGE PLAN.....	69
6. GUIDELINE CHANGE PLANS.....	69
<i>Blue: Understand change and identify.....</i>	<i>71</i>
<i>Green: Identify and adapt.....</i>	<i>72</i>
<i>Yellow: Implement and carry out action plan.....</i>	<i>73</i>
<i>Orange: Assessment, monitoring and measuring.....</i>	<i>73</i>
<i>Red: Feedback, communication and action.....</i>	<i>74</i>
PART V: DISCUSSION, CONCLUSION, RECOMMENDATIONS AND REFLECTION.....	75
DISCUSSION.....	75
<i>Value of the research.....</i>	<i>75</i>
<i>Limitations.....</i>	<i>76</i>
<i>Dissemination and audiences.....</i>	<i>76</i>
<i>Future research.....</i>	<i>77</i>
CONCLUSION.....	78
<i>Q1 How can we, based on theory construct a conceptual framework for change management in private organisations like developers?.....</i>	<i>78</i>
<i>Q2 What barriers and drivers contribute to change management in a developer organisation at the starting phase?.....</i>	<i>78</i>

<i>Q3 What change strategies are integrated in the developer organisation and development projects in the implementation phase?</i>	<i>79</i>
<i>Q4 How does a private developer manage the integration of sustainable business and project development strategies in the assessment and evaluation phase?</i>	<i>79</i>
<i>Q5 How does validating the empirical findings assist in designing the guide plan to make a guide plan for organisational change.</i>	<i>80</i>
<i>Main research question</i>	<i>81</i>
RECOMMENDATION.....	82
<i>Recommendations case</i>	<i>82</i>
<i>Recommendations practice.</i>	<i>82</i>
<i>Recommendations for guide plan.....</i>	<i>82</i>
REFLECTION	84
LITERATURE.....	86
APPENDIX 1	92
APPENDIX 2	100
APPENDIX 3	104

Terminology

BPD = Bouwfonds Property Development

KPI = Key Performance Indicator

GREX = Grond Exploitatie

IRAV= Initiatief Risico Acceptatie Voorstel

RAV = Risico Acceptatie Voorstel

DUV = Definitief Uitvoerend Voorstel

1. Introduction

Since the early 1980s, companies have gained more insights on the subject of sustainability. As more awareness of environmental issues gained momentum, sustainability was mostly not the pressing concept. The first steps towards addressing environmental issues were taken with the introduction of new climate frameworks from the United Nations.

Before the last economic crisis, developers were primarily focused on maximizing profits and building structures that were aesthetically pleasing, often without considering their environmental impact. As sustainability has become a more pressing issue, developers have started integrating more sustainability practices into their projects, focusing on long-term solutions.

In recent years, there has been a growing awareness of the interconnectedness of environmental, social, and economic sustainability, highlighting the need for a holistic approach towards sustainable development. Despite the growing recognition of the importance of sustainability, private real estate developers still struggle to fully adapt and reach the climate goals. This is largely due to a lack of knowledge and market incentives (Alkhani, (2020); Candel, (2022); Storbjörk, (2017)). Many developers prioritize short-term profitability over long-term sustainability, as its main challenges are the high cost of sustainable building materials and technologies, unclear regulatory frameworks, and a general lack of awareness and education regarding the sustainable practices.

Private real estate developers have the potential to play a critical role in building a more sustainable future. Enabling sustainable development has become more interesting for spatial planning and real estate (Heurkens, 2016). Developers can make a significant impact by prioritizing sustainability alongside profitability, adopting a long-term perspective, and shifting cultural values towards environmental and social responsibility. However, conflict arises when profitability clashes with sustainable measures. Municipal rules can create challenges, as there is often an imbalance between profitability, sustainable measures, and market demand, which may not always benefit future urban developments (Boanada-Fuchs, A, 2022).

Changing organisations strategies is a complex process that requires awareness, and willingness of the individual to acquire knowledge (Cummings, 1993). As new regulations, such as the Paris Agreement's emission free mandates shift closer, organisations are increasingly motivated to take a proactive role in addressing these issues. Taking a leading stand, in front of the competition makes this possible and shows motivation, vision and a drive to perform.

Given the knowledge gaps in implementing new strategies, and the barriers and drivers in attempting to implement change, change strategies are essential strategies for every developer organisation. This research will focus on identifying how change strategies that comply with and exceed sustainable and ESG regulations are implemented within organisations, and how these strategies can benefit the employees and organisation.

1.1. Problem statement

In recent years, the rising concerns for the environmental and social problems as global warming are causing whole industries to change. This raises the relevance of adapting towards new future-proof development projects that concern the 2050 Paris Agreement. Concerning the real estate and area development companies, a more significant role is needed. However, developers remain conservative and see lots of risks when thinking of sustainable and emission-free projects. While the technology is there to be used, it shows the importance, but it is not being implemented. The slow transition is also due to new balancing out the needs and urgency with risk takings.

Studies so far have shown an increasing focus on environmental goals, as well as more understanding for sustainability in general, which increases the readiness of building organisations. More sustainable investments are obligated to be more transparent, following new ESG rules, and investors are getting more interested in new innovative buildings. The transparency in the sector is due to ESG slowly transitioning to identifying the barriers that developers encounter in their work. These barriers often arise due to high risks and costs associated with competition in the field. Furthermore, the ever-changing nature of the technological and regulatory environment adds complexity to the tasks performed by developers. This readiness and inevitable change puts developers into the position to implement change within the organisation. Here, social theories can provide valuable insights on the dynamics of organisational behaviour and the factors that influence the successful adoption of new practices. Legislation is changing, and this presents a challenge as developers often lack proactive capabilities as well as the capacity to fully understand their own knowledge gap for the change that is needed. However, we know little about how companies can go beyond compliance and actively embrace practices that go beyond regulatory requirements. Understanding the internal change process within developer organisations themselves is still limited. Further research is needed to dive into the experiences and motivations that drive developers to adopt innovative approaches and technologies. Hence the question; how do private real estate developers implement organisational change in the organisation and projects? Furthermore, there is a lack of comprehensive and shared knowledge about strategic change towards frontrunners in the environment. Organisations that are leading the way in sustainable and innovative practices use certain strategies for change. There is a need to implement change measurements and strategies by 2030 and 2050 to address these challenges. Balancing risks and competition are also a complex issue, as companies strive to align their performance goals with sustainability objectives. Finding concrete solutions to enable both short-term and long-term change and profits (environmental and financial) remains a significant challenge, especially when attempting to shift beyond prevailing cultural norms. There is a need to increase awareness and understanding to enable a collective commitment towards futureproof practices, it is time to go from urgency to action by implementing management change strategies

1.2. Societal and scientific relevance

The building industry is characterised as a conservative industry, often risk averse, and not eager to do more than what regulations see as minimum requirements, this image is however changing. The role of how private real estate developers are characterized is important to find out as this is usually the beginning of most developments and their perspective on the regulatory requirements

With the emergence of ESG standards and new regulations for investments and circular building benchmarks such as the BREEAM certification becoming the standard, developers are faced with the need for new strategies. However, these assessment criteria are often project-specific and fail to provide a complete picture. There is a distinction between the quality of these measurements and how the organisations use benchmarking tools.

Customer demand is shifting, with more organisations seeking detailed information and implementations on reducing the environmental impact, lower energy consumption, and supporting a new, sustainable era of living, whether newly built or regenerated buildings within an urban development. However, this must be in line with market expectations and viable solutions towards real estate developments in urban areas.

Sustainable urban development has become the new normal, as stated in the article of Alberts & Den Otter (2020). However, the enforceability of this urgent matter is still a route with lots of hick-ups. The stacking of ambitions often requires addressing multiple sustainability issues, delaying implementation. The stack of ambitions leads towards the loss of realistic plannings as well as communicating these ambitions properly. This slows down the transitioning towards futureproof urban developments. Organisational change is needed to align internal processes with societal demands of tomorrow.

The literature highlights the relevance of the problem that is ahead, emphasizing that time sets the perspectives of the private developers. However, the scalability and affordability of suitable new structures and cultural benefits for the developers weigh heavy in these changes. The competitiveness in the new era of real estate developers in urban developments must be guaranteed or seen as a solution to larger challenges. Barriers identified by Warren-Myers (2020) need to be addressed or removed to enable development of new innovative ways of organizing long term strategies for their own future demands in the industry. Recognizing the importance of these issues is essential, nevertheless it is not sufficient on its own; new strategies must be implemented within the organisation to ensure successful outcomes for projects.

To establish leading organisations that go beyond compliance, and adopt flexible and motivating leadership, both on an individual and organisational level, responsibility for effective organisational changes is required. This is necessary to adjust to the shift towards zero-emission construction and sustainable future-proof developments.

However, while private developers are still primarily focused on the compliance side and lack the will to move beyond, putting the concepts into practice can be difficult, particularly given how well-known this issue of change is. Furthermore, the fact that most of the organisation's current operations remain unclear, makes it even more relevant to address the need for organisational change. As well as shifting from short to long term goals and visions, that is beyond compliance.

2.- Literature review

2. Literature - Changing field of development

Searching literature for the changing field of development, literature of public real estate, and public developments are found easily. However, information explicitly reporting on the projects of private developers can be tricky, mostly when concerning construction and real estate practices.

The real estate industry is constantly changing which leads to new innovations but also comes with barriers. With new regulations and sustainable goals in the future, this constant change could be a gamechanger. In this chapter, the background of developers, change, future, organisational behaviour, future proof, and other subthemes are discussed.

Sustainable development goals form a fundamental basis and gives relevance to the acknowledgement of new area developments. However, in the building projects practices, other key assessments are nowadays more critical. Benchmarking tools such as LEED and BREEAM, are considered a solution that allow institutions to transparently show their hard work (Parker J., 2012). However, these tools are primarily applied towards institutionalized investors in real estate and focus on green project management. While transparency and locality of resources and reductions are good, private development is mostly customer oriented. When implementing ESG criteria and conducting associated assessments for the organisations behind these projects, this step is often overlooked due to a lack of knowledge and barriers that hinder developers from progressing. This lack of standardization within the companies is specific and requires changes, stressing the limits of current practices (Rigby et al, 2014).

Figure 1 : Common benefits of BREEAM



Source : BSRIA field research^[3] (client respondents only)

Figure 2: Benefits of BREEAM (Parker, 2012)

As 77% of the industry recognises the standings there are lots of benefits from BREEAM to be used (Parker J., 2012). Since BREEAM is a project-based assessment tool, it is considered as one of the more important benchmarking tools and is therefore required by many municipalities in other nations.

2.1. Developers

The role of developers in urban development has impact on the kind of partnerships and goals the market wants to achieve. The role of developers is described within the context of their employment and partnerships and gives an understanding of their influence on urban projects. (Boanada-Fuchs, 2022).

Searching for a niche in the development market has benefits, as dominating a niche often results in a leading position. Developers tend to focus on the short-term aspects of a project, from initiation on to operation, mostly bearing the risks associated with the development.

Developers operate in different niches and business models to ensure their position in the market. Generally, five categories of developers can be described, many of which are linked to other companies, which can be either a construction or financial institution (Nozeman, 2010). The first category includes developers with ties to construction firms, whom are generally part of construction firms or are closely allied with trusted partners. Developers linked to investments often focus on building their portfolios and financing their projects. Another type consists of the developer with links to financial institutions, such as banks. Development can also be part of a larger conglomerate or company, investing in its

portfolio. The last one is the independent self-executing developer, often linked to banks, and private investors, and primarily focused on their specific markets, this is the largest group of developers.

Developers can also be categorised based on their focus, such as housing developer or commercial developer. These developers are often connected to institutions and have a better view on the sustainable notion, frequently working with LEED and BREEAM. Depending on their focus, developers may be orientated towards housing or commercial projects, or both, and can operate with either short-, or long- term development goals, depending on the kind of developer (Nozeman, 2010).

The changing role of developers might lead to setting aside profits for innovation and change, as well as taking on more risks. By doing so, they position themselves as leading companies within their context, and enabling policies

2.1.1. (Beyond) Compliance

There are different levels at which an organisation can position itself. It starts with (non)-compliance, often seen as reactive behaviour and complying with regulatory demands, using sustainability only as a means. Going beyond compliance involves actively looking for ways to go beyond the regulatory requirements by implementing sustainable practices, which are beneficial for the society and environment. By implementing changes and exploring how the business can generate incomes effectively with new sustainable measures, companies can achieve a constructive and economic feasible state of sustainable interventions. The change can occur on multiple levels within the organisation. Leadership and effective decision-making can lead towards proactively integrating sustainability dimensions into the business. This represents a step beyond compliance (Senge et al. (2010). The highest level, according to Senge, is to envision a sole purpose away from the competition only to see the benefits of sustainable strategies. With bold and rigorous statements, such organisations are ahead of the market, and impact society at a different level.



Figure 3: Five stages of emerging drivers (Senge, 2010)

Senge illustrates that when a momentum of change reveals a better path, employees start to see the potential and benefits, encouraging both proactive and reactive parties in the market to become frontrunners depending on how they adapt to changes or innovations in their sector. This includes implementing new rules and visions ahead of the market or adopting regulations before they become standard. While this approach may seem ideal, it is the frontrunners' perspective on progress that defines their ideals and vision (Vazquez, 2021). Being ahead of the market allows companies to take risks and experiment with new ideas and strategies, shifting beyond compliance to make these initiatives both productive and feasible (Senge, 2010). Once the shift beyond compliance is initiated, it

means a better integration of goals such as sustainability and profitability securing the competition lead to show the majority what is possible.

Figure 3 illustrates how organisations, such as developers, can be categorised based on their approach to marketing their projects. Senge highlights the distinction between reactive and proactive changes, where innovators and early adopters can be seen as proactive, moving beyond compliance toward their own set goals. Within five stages, proactive organisational innovations involve greater risk, whereas reactive approaches are less innovative and tend to engage only after risks have been mitigated. Moving backward in this regard leads to a loss of competitiveness within the organisation, often due to internal barriers such as risks and short-term visions.

2.1.2 Barriers

There is growing concern about the future of real estate companies as conflicts and barriers prevent them from taking direct action (Li, 2021). These barriers obstruct progress and hinder communication. Barriers include financial risks, policies and legislations, corruption and lack of knowledge, all of which prevent companies from enabling them to progress. On the other end, sharing knowledge, communicating, making aware (participate), and providing incentives are drivers that enable certain companies to thrive. Most of them are aligned with competitiveness and profit margins, significantly impacting a company's ability to overcome barriers and enabling drivers both external as internal.

Regales (2017) presents a detailed list of a multitude of barriers that developers face and are struggling with to innovate and gain success. By offering the bridging values and drivers of change, these barriers can be minimized. According to Regales (2017), barriers and drivers can be divided into political, economic, social, technology, legal and the environment dimensions. Based on various research, Munaro & Tavares (2023) show that political and technological categories are the most influential in advancing the circular economy. They state that there is a responsibility for both governments and private parties to take responsibility for the transition, here five categories are highlighted: Economic, Informational, institutional, Political and technological. Important barriers and drivers for the five categories can be seen with influence on internal and external stakeholders. This is seen from a perspective in between partners in the chain of the circular economy. Heurkens (2016) discusses serving the public good, there needs to be an alignment of interests where public as well as private interests are better aligned. To understand the origin of the barriers, is also to understand that developers play a part in this circular economy.

2.2. Future proof

Defining 'future proof' involves considering resilience and flexibility, both of which introduce new perspectives on development. In essence, adapting to new norms and values, as well as the speed and efficiency of change, is important for measuring the impact on now and future goals. Taking precautionary measures and integrating entrepreneurship and leadership instincts can help private developers transitioning towards more future-proof projects, such as those that are being energy neutral and emission free. Climate adaptability, resiliency, cooperation, and shared responsibility are key factors in this process (Lazoroska, 2019).

A future-proof approach requires resilience and flexibility, approach results in adaptiveness and innovative new ideas (Tuominene et al., 2004). In short, adaptation towards the new norms and values, the speed and efficiency of the change are important to measure the effect of now and future goals. Integrating entrepreneurial thoughts helps private developers transition towards more future-proof projects and stimulates change. To initiate this, climate adaptability, resiliency, cooperation, and shared responsibility is needed (Lazoroska, 2019).

The concept of futureproofing is the process of anticipating the future, therefore developing methods or strategies to minimize negative effects, and optimize positive trends/ effects (Worschech & Lützkendorf, 2022). Identifying trends and sustainability aspects which lead to actions and long-term

changes within the context of housing. Consider the environment in three layers, the global environment, the real estate industry, and the business environment. Within these layers, the flow of information and the resulting actions lead to structural transformations, with decision-makers accounting for a wider range of variables (Rich, 2016). From this perspective, a future-proof development anticipates relevant future needs. This means that the relevance and complexity of the implementation of Futureproof are constantly shifting (Pee, 2020). Because of its adaptive and resilient nature, futureproofing provides guidance through the process of promoting flexibility and adaptability. (Rich, 2016). Withstanding shocks Rich states is that it is not particularly necessary to know what is going to happen with the environment, it is the power of absorbing and adapting towards the future, in other words, resilience. This represents the need to change towards possible futures while reducing undesirable outcomes.

Futureproof in this research has two implications bound by the context, both at organisational and project levels. The development of strategies connects the thinking with the implementation. This process generates information on how the changes work and provides feedback to restructure the organisation. Taking advantage of opportunities leads towards adaptability and innovations which are important pillars (Tuominen et al., 2004).

Future-proof organisations are inevitably subjected to change. Worschech & Lützekendorf (2022) indicate an increased responsibility for the environment and society in this dynamically changing environment. Adding to this, the process holds strategic significance for stakeholders, resulting in business models to align with the goals.

When aiming to become a futureproof developer, steering and actions are required. How these actions will flow through the organisation, and influence the development of new projects, depends on the use of the structures and processes within the organisation. The relationship between the structure's performances and the decisions that shape the adaption to the new situation is created by changing environments. This will then be implemented innovatively and assessed. However, failures and optimism biases can cause problems to externalize, and be picked up by policies or experts. This cycle generates experiences and new feedback to refine the organisation's strategies.

2.3. Change management

Due to the changing environment, organisations become uncertain about the future and the context in which they operate, prompting more organisational change. Planned change at the organisational level is encouraged (Cummings, 1993). In the work of Heurkens (2016), management is defined as consisting of any type of directives that influence the realisation of urban development projects. The current complexity of projects and management causes a need for flexibility, leading to more integrative approaches that broadly address these complexities, making them better suited to the complexity of rapidly changing environments (Heurkens, 2016). As Boonstra (2021) argues, 'change in the organisation is not the goal in itself it is for the strategy for the business for the future as well as its contribution to society'.

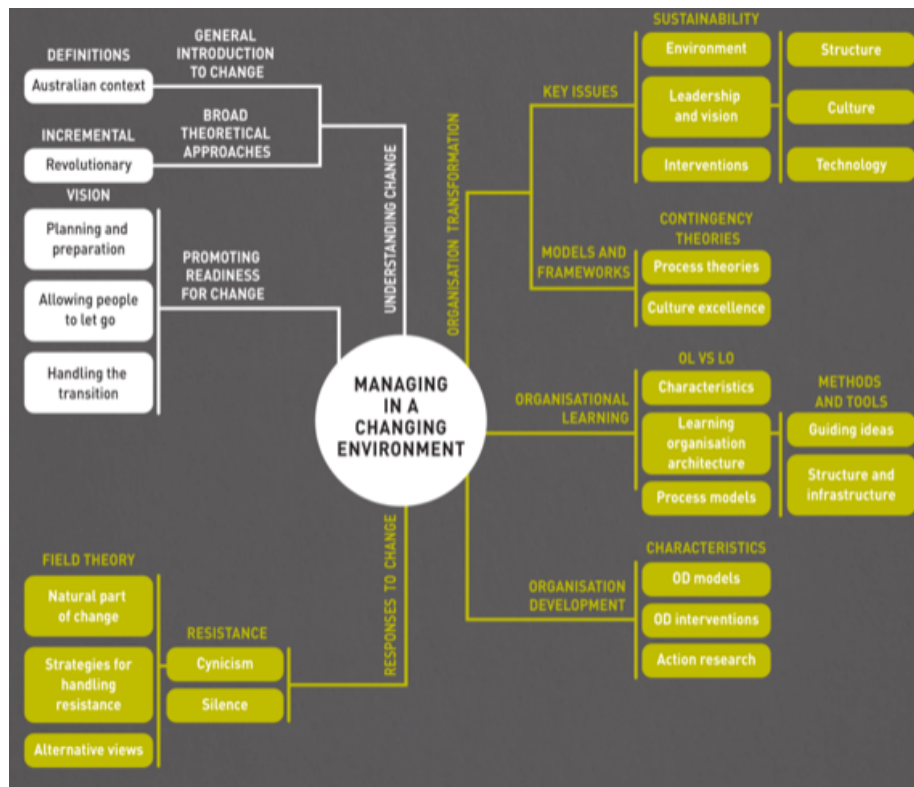


Figure 4: Managing in a changing environment (Waddel et al. 2018)

Managing in a changing environment first starts with the readiness and participation of individuals and implementing a vision for the transition. Since change is often inevitable in evolving contexts, it is the nature of all companies to implement some degree of change. Strategies for implementing change are essential to overcome barriers. For organisations to evolve, certain interventions, either incremental or progressively, are necessary (Waddel et al, 2018).

Organisational learning can be used as a strategic tool to for gaining knowledge and creating advantages, contributing to a more stable organisation. As change is overarching, organisational learning at multiple levels can result in employees taking action (Bredillet, 2007; Rodney,1998). The need for change is often caused by a disruption in the market, and effects both the short-term, and long-term strategies. So how can organisations enable change effectively? Change processes are aimed towards the ideal setting of the organisation (Margulies N.,1988). Goals are defined in terms of the organisations needs to achieve these objectives, as these are also specific to the processes of the organisation’s development. The values underpinning these goals provide the underlying systems that reflect on the appropriate view on the design for the organisations processes, including knowledge of the change, engaging and participating, performance objectives, and aligning individual efforts with the overall organisation. In the context of urban development projects that are built for the people, work or homes, it is essential to consider what norms can be adapted for the organisation, and what values can be changed for future orientation within the context of the environment.

2.3.1. Models of change

Multiple models for organisational change have been made to develop a theory for changing organisations, these include Lewin’s model, Action based model and the positive model (Cummings,1993) (Rodnem,2005). Whereas Lewin’s model focusses on the forces that can be arranged in the eyes of the problem, the Action based model is feedback driven, the Positive model is a reverberation of Lewin’s model and looks at the positive of the organisation and sees what is good and what can be better adjusted. All working with planned change (Cummings, 1993). In contrast to these models, Boonstra (2021) suggest a more playful manner of a more dynamical and continuous process,

where programmed efforts can change. Iterations on the Lewin model show similarities and offer multiple steps specializing in different sorts of change management. Kotter for example, has eight steps focussing more on the successes (Kotter,2012). Other fields on behavioural science developed a stages of change model focussing more on the individual behavioural changes.

2.3.2. Strategies for Change

Implementing strategies for change creates a new balance, impacting both the outside image as well as the inside. As protocols and structures shift, different levels of change become evident, depending on where the strategies are implemented. Strategies for change are used from every level in the organisation and depending on where an initiative for the development of strategies takes place, signifies the importance of the pending change.

According to Boonstra (2013), there are six strategies for change, when combined, they form a powerful toolkit. Depending on the situation, the level of engagement of the organisation or individual tells what kind of strategy is used. FLoyd & Lane (2000) shows that change strategies can mean adjusting the formal structures for facilitating flexibility in the organisation and exchange when emergent strategies remain, to synthesise relevant point for the strategies.

Strategies focus on directing values within a certain framework, using value-creating processes that are often transparent, and can be initiated on multiple occasions. Engagement differs from strategy and requires different approaches in actions to be taken in the culture of the organisation and how the behaviour is affected (Boonstra, 2021)

Figure 4: Views to choose and combine change strategies

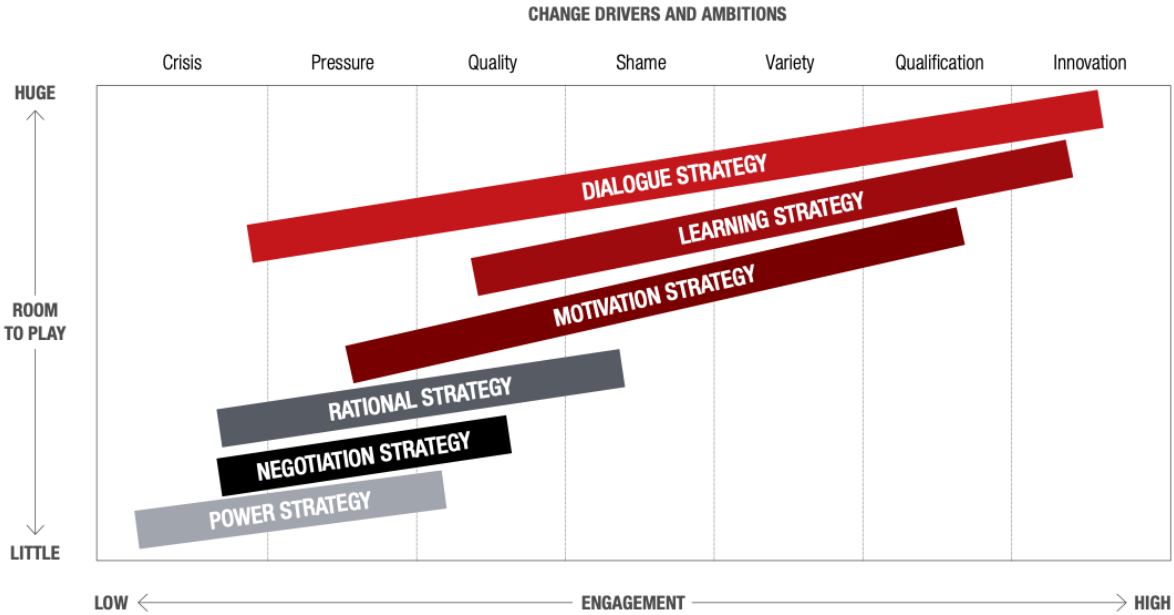


Figure 5: Choosing and combining change strategies (Boonstra, 2021)

Choosing the strategies of figure 5 scopes out the length as well the impact strategies will have on overcoming barriers that have been discussed in Tavarez, (2021) and regales (2017) The implemented strategies demonstrate different levels of engagement, suggesting different approaches with the terms in figure 5 above. Strategies require empowering the competence, knowledge and orientation of the organisation to actively engage in identifying the correct in and output of the strategy.

Table 1: Approaches for sustainable change in organizations

POWER STRATEGY	RATIONAL STRATEGY	NEGOTIATING STRATEGY	MOTIVATION STRATEGY	LEARNING STRATEGY	DIALOGUE STRATEGY
FORCING	PUSHING	EXCHANGING	DEVELOPING	DISCOVERING	EXPLORING
<ul style="list-style-type: none"> • Steered by top • Goal oriented • Position power • Input controllers • Linear process • Pressure • Tell and Sell 	<ul style="list-style-type: none"> • Initiated by top • Solution oriented • Expert power • Input consultants • Planned process • Persuasion • Convincing 	<ul style="list-style-type: none"> • Multiple actors • Result oriented • Position power • Coalitions • Iterative process • Negotiation • Compromising 	<ul style="list-style-type: none"> • Transition • Problem oriented • Seductive power • Input employees • Circular process • Participation • Guiding 	<ul style="list-style-type: none"> • Active and reflective • Purpose oriented • Informal power • Input learners • Spiral process • Action learning • Coaching 	<ul style="list-style-type: none"> • Interactive and active • Future oriented • Visioning power • Collaboration • Emergent process • Mutual learning • Dialoguing

Figure 6: Approaches for sustainable change in organizations (Boonstra 2021)

Boonstra (2021) illustrates that these six strategies are dependent on the orientation of the change, appropriate power is used to create input. Input can differ from internal levels towards external levels in the organisation, requiring the input of experts. The power strategy operates at the top level, addressing urgency from external threats by leveraging organisational authority. On the other hand, rational strategies focus on adopting logical solutions by convincing individuals. Negotiating strategies seek collaboration between employees and stakeholders to find solutions. On the contrary, motivation strategies seek a supportive environment where individuals are motivated to initiate through their own capabilities to solve problems. The learning strategy seeks to find underlying motives, patterns, and challenges for behavioural change. Lastly, the dialogue strategy, in contrary to the previous strategy, seeks to encourage the collaboration and exchange of expectations and perspectives for innovation, basing change on the experience within the organisation. Depending on the communication, these strategies are conceived as guided, convincing, mitigated or in dialogue with the market/ internal teams/ individuals.

2.3.3. Structure

Horizontal, client-oriented, network type and autonomous cells are different forms of an organisation's structure. According to Câmpeanu-Sonea et al. (2009) there are phases where organisations can work with various modifications, Developers mainly use a project structures.

Organisational structure can be explained in the way the resources are used and divided into teams or departments that have interrelationships, here informal and formal structures can be misleading for the structure as horizontal and vertical structures are common. Within the organisation context, there is a distinction between horizontal, client-oriented, network or autonomous organisations.

Increasing companies' dimensions and knowledge will inevitably make more complex structures leading towards more quality management. Structures can change due to the usefulness of changing environments or modifications and alterations to the dimensions. Changing norms and values due to climate or environment/ niche approach seeks for change of culture and the way of working affecting the structure of the organisation. Floyd & Lane (2000) demonstrates that in an organisation undergoing strategic renewal, competence at all levels, from top and middle management to operations is essential, as directives are provided by the selected strategy. Implementation in this context is about structuring and motivating employees to focus on executing the strategy without the need to create new ones. Floyd (2000) also highlights that strategies can emerge from the bottom up, where innovations developed at the operational level are presented to middle and top management for consideration. Depending on the level of the change in the organisation, either, strategic or project level can be aligned to find a common outcome (Muller, 2023).

2.3.4 Culture

Culture has gained recognition over the past 60 years and can be seen as the personality of the organisation and contains the values and individuals that work there, with procedures, leadership styles and what is considered a success. The culture can be classified in power distance towards the team or individual, the level of uncertainties encountered, the ratio of the group versus the individual and what kind of masculine environment the organisation is in (Cummings, 1993). Other theories show that power and the role and focus on the organisation and the focus on results. More criteria can be the flexibility of the culture and the stability and control but also on how to internal and external focus is explained next to integration or looking for differentiation.

Identification of sorts of culture is important to see what kind of culture there is within the organisation as well as for clients. Câmpeanu-Sonea et al. (2009) shows that there are models for organisational culture, clan culture, adhocracy culture, market culture and hierarchy culture all operating with different appropriation of business strategies and kind of companies, being frontrunners or innovators or compliant companies (Stanley et al., 2010). Stanley et al. (2010) illustrates the connection of performance due to aligning business with culture. Given a specific strategy, an organisational assembly of different characteristics would fit the strategy implemented.

2.3.5. (Individual) behaviour

The impact of change is dealt on different levels in the organisation, from top management to Individual employees within every project team of organisations, teams and individual behavioural display characteristics of management styles.

Within the individual, change is an inevitable part of organisation and within cultural aspects only works when individuals can maximize the potential of change. Within the behaviour of change of the individuals the impact of efficiency and the capabilities eventually come down to the individual. Finding good and working dynamics have effect on the behaviour and efficiency of achieving results (Cameron & Green, 2019).

Within the organisation, individuals make the decisions, work in teams and provide the services. Behaviour and ability to achieve or maximize potential are important as it is both internal and external. Providing the own cultural differences and inner agendas to change topics within the organisation.

Organisational change is about management choosing and combining change strategies and try to innovate. The environment defines the change process needed (Cumming, 1993). To embed change into the organisation, engagement, transparency, knowledge and engagement is needed to learn from allowing innovation and proactively preparing for future focused strategies (Boonstra, 2021). Open communication, leadership and individual motivation will help in cultural change Middle management plays an important role here as well (Floyd & Lane, 2000). How these strategies from individuals or groups get to the designated places, relies on choosing and synthesising the best options. The connecting of management and projects is important as both top-down and bottom-up principles rely on individual managers that can inspire and operationalise change. Individual can therefore be better explained from the top, bottom and middle approaches rather than individual choices.

When incremental change becomes a radical change, organisations consider external help is when the organisation has limited capabilities in knowledge or operational power to achieve the desired adjustments in the organisation. Supporting staff or external advice then have a role within the change agent to implement the new strategies. This often is the case when large scale changes offer radical adjustments in the organisational capacity to operate and process the changes within the organisation (Siebenhuber, 2007)

2.3.6. Team-Project

According to J. Turner, (2003), teams can be formed for change-oriented projects since it is unclear whether these initiatives inside the organisation will be viewed as successful. This is due to the uncertainty that the change will benefit the organisation.

It shows that management processes of teams, as the team can be seen as a temporary organisation within the organisation, flexible goal oriented and staged, limitations to the teams are the usefulness forced in roles and purposes (Turner & Muller, 2003).

Fascinating is the way a team can be used as an agent for change as projects deliver change (Andersen et al, 1987). As small teams are advancing, change can be used as a test case to insert change. For organisations that want to be in front, these teams could work as a strategy to initiate change.

2.4. Impact

According to the dictionary, impact is mostly used to express the impression of one subject to another, Influence, and the contact between multiple subjects. Mostly seen to measure, impact is used to assess certain factors and their weight on a subject. Impact can be defined as a significant effect on something. Such as environmental impact on construction projects. (Miriam-Webster, z.d.)

Enablers and drivers provide the incentive for change by using innovative techniques, especially as the growing impact of climate raises the demand for more adaptive housing projects. Expertise may come from internal sources, but can also come from external partners, reaching or stretching boundaries requires engagement and knowledge on how to innovate effectively.

Impact of leadership is important as Anderson & Anderson (2010) states. Leaders have to implement leading change and change capabilities can be used in every environment to foster improvement. This can be seen as an objective as change is inevitable. When achieved, change capabilities become a strategic advantage, whether for leading futureproof projects or acting as change with enough capital, depending on the kind of capabilities. Managing impact is carried out through a framework based on the theory of change, where processes and activities are monitored. When change theories are implemented effectively, they serve as a tool to focus strategy and monitor the processes, thereby strengthening the impact of change.

2.4.1. Impact of change theory

Every change has impact on the process, as the process is the heart of transformation. Before changes can be applied at an organisational scale, they must first be integrated within the existing structure, through team pilots or smaller scale initiatives, and eventually it could be rolled out and give a leading position, exploring new processes that might work and new niche opportunities. Depending on the scope of the change, impact varies as the roles required to facilitate it.

2.4.2. Environmental impact

There are differences between environment, social and economic factors. Economics has been most researched out of the three. Up and coming and always in the back of the mind are the sustainable and social changes. However, environmental and social priorities are often the first sacrificed for profit, even though economics can be seen as a product of the other two.

Reporting on ESG (Environmental Social Governance) and improving performance assessments provides more incentives for financing, as they promote rules for environmental and social outcomes. Healthy, green, and liveable environments both support social and environmental advice.

As organisations face the same steps towards innovation, institutional profit organisations have most influence, thinking about this idea differently, gets more and more the priority as sustainability becomes one of the new priorities as ESG suggests. Many organisations often see the economics as priority where within the profits, there is room for sustainability and social responsibility. Rethinking this, is that within the environment and society, there is room for economic gains. Shifting these priorities makes for a more stable environment and will generate more impact on organisations. (Senge et al., 2010). Stuk over Senge passage

2.4.3. The impact of changing core values

As values are an outcome of choices and the influence on those choices. It is powerful and yet not tangible as these are guiding principles for management and individuals. The change model of Lewin also stresses about the underlying choices and powers that can 'unfreeze' to enable modifications. Changing these values can create chaos as well as rejection or modified according to the models, reducing its impact (Cameron & Green, 2019).

2.5.5. Assessments of strategies for change

Understanding the full scope of what influences change strategies have, and assessing what has changed is a crucial part for arguments whether these changes are successful and feasible and the actual consequences for the organisation and its projects. Implementing the ESG frameworks offers a transparent way to monitor process initiatives for more long-term impact as ethical and environmental concerns are becoming regulatory issues for organisations. (Pome, 2023). Measurement systems aim to for assessments these frameworks offer mostly organisational performances, usually key performance indicators, in short, KPI, indicating the process and the outcomes are used for measuring the progress and for setting goals. It is defined as a set of quantifiable measurements that is used to monitor a company's overall long-term performance (Twin, 2024). For projects, discussed in the beginning, BREEAM and LEEDS are tools that indicate the performances of individual projects (Rogmans & Ghuniam, 2016). Measuring strategies operations and implementation is needed to see if the baseline of quality, efficiency and especially the indicators for performance are met. Whether this is due to a change or company processes is up to the measurement goals as well.

Measuring can be done through performance measurements and set goals and is seen as essential in management to measure progress through quantifiable indicators towards an intended result. Pome (2023) elaborates on the indicators of ESG frameworks that are important for real estate markets and development operations. Choosing indicators for sustainable practice performance as well as generating indicators to support ESG assessments. Breaking down the indicators and clarifying them shows a drop in biases. Measuring only important individual indicators for sustainability performance of operations (Rogmans & Ghuniam, 2016). Weighing the indicators by putting them on a scale means that after the assessment, this scale is used to put the performance in perspective (Pome, 2023).

Assessments should identify a clear definition of its measurable phenomena as well as the use of justifiable transparency. The relevance the projects have on the environmental conditions, an after evaluation and an understandable rating. Last one is the costs and the. Here, KPIs should be assessed on. to be able to compare the changes as well as the effectiveness of time and resources (Rogmans & Ghuniam, 2016).

2.6. Conceptual framework

By linking developer's organisation theories with social theories of organisational change, a framework emerges to assist us understand how these concepts interact. According to the notion, there are many levels of participation and influence inside organisations (Waddel et al, 2018). Individuals, teams, and management can use either top-down or bottom-up approaches to the change process. Based on the literature of Cummings (1993), the model of Lewin can underline the baselines of the conceptual model as Waddel describes, are based on three moments, start and preparation, implementation with overall chaos and the institutionalising of the change process. Freeze phase where change is institutionalised, dividing it into five phases gives a more detailed change process. Waddel shows the environment on how organisations deal with change and how different factors lead to learning, adapting and characterising the organisation. Floyd & Lane (2000) shows that middle management plays a vital role in connecting the operations and top management in the change process in strategic renewal, change needs to be operationalised and implemented. Muller (2023) suggests the alignment of both project

and strategic level for sustainable where from soft to hard factors, from vision to feasibility are in between strategic and project level. This all leads to the five steps model from current state through the change process towards the new state of the of the change, implemented in the organisation.

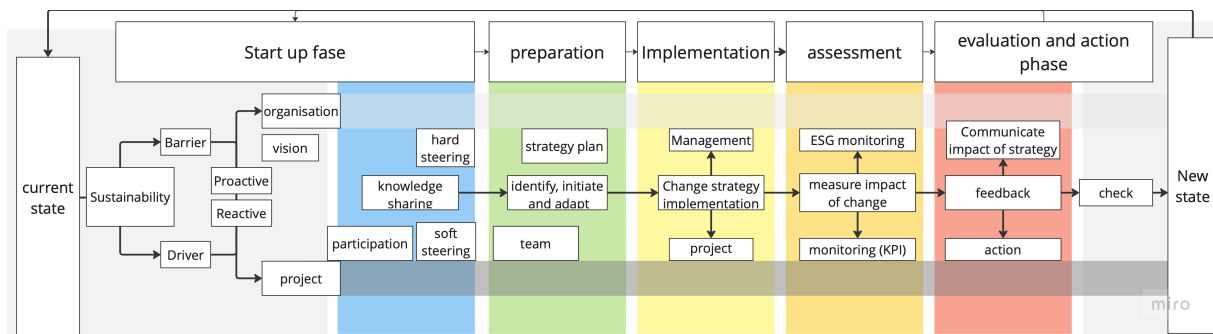


Figure 7: Conceptual framework of private developers' positioning in the process of change (Own work based on Troost 2020; Heurkens, 2016; Waddel et al. 2018; Cummings 1993; Floyd 2000; Muller, 2023).

Starting Phase: Literature on change management emphasizes that each phase of the process relies on both proactive and reactive preparations. Here, a new sense of awareness of the existing problems, while setting future-oriented goals that go beyond compliance. Change management is a method organisations use to create and activate new ways of processing, using the capacity of employees to address both internal and external barriers and drivers for change and deal with them on a proactive or reactive manner (Senge, 2010; Boonstra, 2012, 2021; Câmpeanu-Sonea, 2009; Pome, 2017). Assessing this is necessary to provide employees and the organisation with tangible solutions regarding their stance within the building environment. Based on the literature, this framework addresses the background focus of this study, encompassing the internal factors within the company that influence behaviour and values connected to the change process. Barriers and conflicting drivers for innovation within developer organisations are addressed by implementing new strategies. At the end of the startup phase, the vision is synthesized into a few significant ideas that have a high probability to work on further (Floyd & Lane, 2000). Choosing the right angle in the organisation and showing the potential will address more participation and learning along the process.

Preparation Phase: The startup phase and the preparation phase are closely linked. Sujova (2017) proposes a change project model for managing complex changes. In the startup phase, an analysis of the current situation is required to address critical barriers and drivers, both internally and externally. Identifying the organisation's current state and knowledge and potential changes aims to reduce risk. Boonstra (2022) suggests that in the preparation phase, the context of the change determines whether it is simple or complex and integrated. A leader, a development team, and an external viewpoint are essential in determining the plan based on the vision. Here, the basic setup of the change strategy is developed, and small interventions are made. Before full implementation, a set of KPIs is determined based on this analysis. These criteria, based on the findings, and knowledge available will then help in choosing and combining fitting strategies for the action plan in the implementation phase. Depending on the specifications of these strategies, the implementation process can start based on the set criteria's for the plans that initiate the first steps for change.

Implementation Phase: Before operationalising the plans, it is essential to identify costs, technology needs, future scenarios, and conducting a final assessment for the intended effects. Operationalising the plan may require board approval or team consensus. Here middle management determines the implementation of the change strategies operations on project and strategic level. Assessing the chain

of strategic changes and aligning organisational processes with the context can be challenging. However, remaining critical and motivated helps align the three points of interest. The start of change is usually sparked by a trend or policy change, requiring implementation to secure support and planning to 'unfreeze' the current state (Cummings, 1993). Pilots allow organisations to implement change on a smaller scale, testing strategies before scaling up. Allowing a long-term plan with short term gains helps in mobilising the involvement as well as the interest.

Assessment Phase: Strategic alignments involve cultural and process changes, planned or unplanned, often requiring radical shifts. This demands motivation and knowledge to integrate changes into the organisation's structure, setting new standards. Assessing how these changes impact organisational culture, processes, and behaviour is crucial, and monitoring KPI progress ensures alignment with long-term goals. Learning from previous implementations, mistakes, and successes helps identify what can be improved, generating insights into how to optimise future change processes.

Evaluation and Actions Phase: Based on the literature, a new framework is presented to better understand how external factors and change strategies impact an organisation's transformation of culture and values toward higher standards. Teams play a key role in implementing strategies into the structure, providing feedback for iterative improvement. Maturing these strategies and incorporating them into standard processes is essential. Bredillet (2007) emphasizes that creating value through competence by understanding the capacity to learn and adapt, leads to competitive advantage. Mobilising new values gives experience, and both individual and organisational competence are required to ensure that change is sustainable and beneficial in the long run by monitoring and evaluating. Testing the effectiveness by evaluating shows the realistic impact of these strategies implemented. Taking the improvements towards action means that one or multiple phases will be repeated ensuring a better result. If there are no action, this means a new balance of a new status of the organisation is reached for the implemented change strategy, this process is then institutionalised. (cummings, 1993).

Chapter III Methodology

3.1 Research questions

To better understand the characteristics and strategies in the changing environment of developers, organisational change will be explored through both theoretical frameworks and practical insights derived from the case study, along with observations from the literature review. Qualitative data on how change is implemented, as well as the role of the individuals and teams within the organisation, will be gathered to assess the organisations position among frontrunners. This will inform recommendations and the development of a change model. The findings will be connected with management strategies to project-level implementation. The research question will be answered using the four sub questions underneath, with short objectives and methods explanations to clarify the overall approach.

Main research question:

How does a private real estate developer manage the implementation of organisational change strategies for sustainability impact?

- Sub question 1. What factors contribute to effective organisational change management?
- Sub question 2. What barriers and drivers contribute to change management in a developer organisation at the starting phase
- Sub question 3. What change strategies are integrated in the developer organisation and development projects in the implementation phase?
- Sub question 4. How does a private developer manage the integration of sustainable business and project development strategies in the assessment and evaluation phase?
- Sub question 5. How could a guide plan for organisational change be designed in real estate developer organisations.

Sub question 1: How can we, based on theory construct a conceptual framework for change management in private organisations like developers?

Objective: Find out how theory private organisation strategies for change be categorized into a conceptual framework for implementing change

Methods: Through literature review

Sub question 2: What barriers and drivers contribute to change management in a developer organisation at the starting phase?

Objective: Find important factors (barriers and drivers) that form the starting point for potential change in the organisation and projects.

Methods: Conducting literature review and interviews.

Sub question 3: What change strategies are integrated in the developer organisation and development projects in the implementation phase?

Objective: Find and categorise strategies that are integrated inside of the developer organisational processes.

Methods: Document review and interviews, linked to the literature.

Sub question 4: How does a private developer manage the integration of sustainable business and project development strategies in the assessment and evaluation phase?

Objective: Find evidence on the integration of sustainable business/project strategies in the evaluation phase

Methods: Conducting document reviews, conducting interviews and doing observations help identify the gap in integration and add how and what to implement.

Sub question 5 : How does validating the empirical findings assist in designing the guide plan for organisational change.

Objective: First use the expert meeting (statements) use principles for the conceptual framework within the case and compare findings to work out a guide plan for organisations to implement organisational change.

Methods: expert meeting and design method

3.2 Research methods

In this research, a single case study will be used to acquire the necessary information to develop and work towards answering the research questions. Setting criteria for this case study helps in choosing the right case. Within this case study, eight interviews will be conducted after desk research. Together this empirical study will form the beginning of the synthesis that will be tested through a small workshop to see if the findings and recommendations are accurate or not. Figure 8 shows a schematic overview of the title, underneath, the type of study and the research questions will be further elaborated.

3.2.1 Type of study

This research analyses management practices and projects of private developer organisations, assessing the potential for implementing change strategies. Furthermore, from the individual level to management, this research will find connections on the influence on the steering mechanisms and assessments that have impact on the scale of the change strategies used within the projects. The impact of these strategies will be further developed with qualitative research as a small sample size will be used for gathering data. Unravelling the different levels within the organisation, a profound understanding of the organisation's structure is valuable for projects and external stakeholders. This will lead towards understanding how these private developers use change for future implementation.

Objective: Identify organisational principles and strategies that foster sustainable practices at both management and project levels. Developers can implement change strategies. In practice, this comes down to failures and successes that make the change and the competence of integrating change to achieve an advantage in the market.

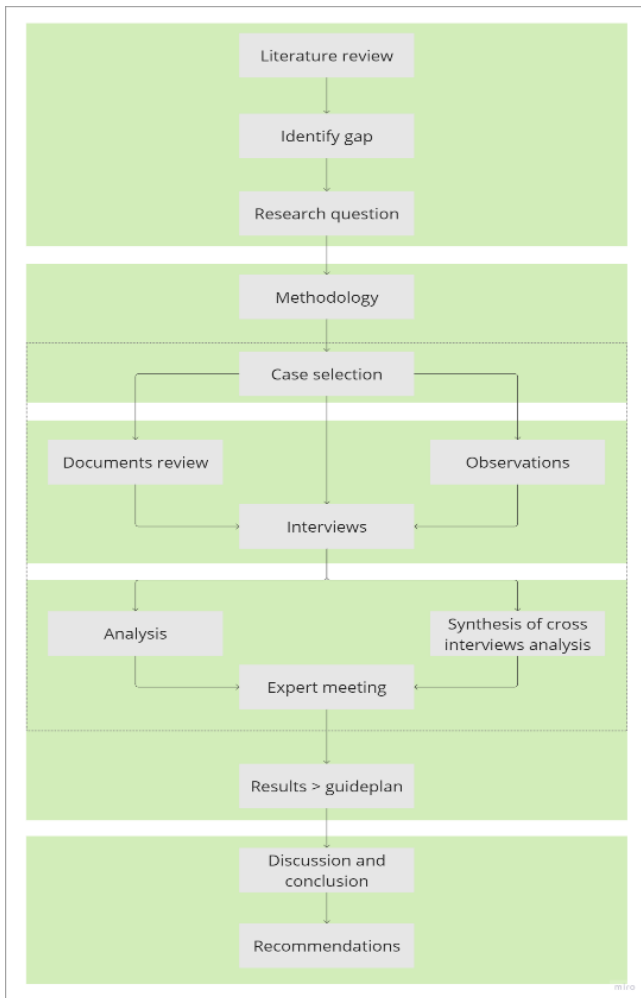


Figure 8: research design (own work)

To determine whether a conclusion can be reached, a retrodictive approach will be used to compare the discovered ideas with the underlying mechanisms and the environment of the developers. Interviews and a case study are recommended because of the qualitative and retrodictive approach as it provides a deeper understanding of the mechanics and the context. This process has inductive effects as well as the underlying theories found and generalised into recommendations. In inductive approach can be in relation to retrodictive as new knowledge can be generalised into the recommendation model. For the research, it is important to research the different developers, focusing on frontrunners if possible. Looking at the knowledge of the organisation and individuals' processes are planned (Blaikie & Priest, 2019) (Maruster, 2013).

On the logic of inquiry Blaikie and Priest (2018) show the research is both explorative and qualitative makes it interesting to test case findings at the end. To have a theory of how change and private developers are within the context, different levels of practice will test the connection between the theory and practice. Sequencing the research means first, observations will be conducted and afterwards interviews will be conducted.

What may be learned from the interviews is an in-depth knowledge of the actions previously done to address climate change and how the developer and its employees' values can be altered to effectively use change strategies. Looking for validation in comparing with the case study. In this research, all questions need to be answered to answer the research question and make a validated conclusion and recommendation model.

Answering the first question literature studies are done to give an insight, later interviews will clarify the implementations of change management by the interviews. Validating the conceptual framework answers the first and the fifth question.

Relating to the first and second questions, a case study will be conducted looking at the changes in an organisation where three sub-questions are asked, concerning the barriers, individual, team and effects on the projects. Question three is related to how the implementation of strategies that use and overcome barriers are used for organisational change. Research question 4 is to see how sustainable impact based on the change can be assessed and evaluated. Validation and a guide plan will answer the fifth question.

3.3 Case study

Case studies are important for gaining in-depth knowledge. As decisions are made, the reasoning behind the strategies used or changes implemented becomes a major focus point. When the connection of the phenomena is not explicit (Robert, K, 2006). Variations in the methodology of case studies can impact the generalizability of the findings. Therefore, selecting multiple cases provides a broader perspective and may lead to more generalizable insights. However, selecting a single case study will provide a deeper understanding and more thorough insights (Alisa & Senija, 2010). Flyvbjerg (2006) highlights that single case studies provide in-depth insights; however, they can introduce bias due to their focus on a single instance, potentially limiting the selection of the case as well as limiting their repeatability in future research. While a single case can be considered specific, generalizability may be restricted. Nevertheless, single case studies can still yield broader applications and contribute to the development of theories based on observed patterns. They offer valuable insights for future applications and present opportunities to learn from human expertise, which aids in identifying context-related factors that influence information. L

Case study – projects and strategies (either organisational or project related) within the organisation have managed organisational change on the scope of between the organisation and project level. A small or large ‘restructuring’ for change implementing more future-proof measures in the working ethos and c of their employees and structure of the company with a new empowering culture (Tsang, 2014). As mentioned, projects are on the management of the organisation their practice, development projects. Scoping toward the implementation of strategies, the case study needs to incorporate various criteria.

3.3.1 Case criteria

Justifying the choice of a developer’s organisation, there are certain criteria’s concerning the scope of this research.

- Developer is considered a private organisation.
- Statements of trying to be a frontrunner or trying. The market and regulations starring their vision have in their own way a niche where innovation takes place.
- Clear statement and work strengthening their nature inclusive or circular or emission free vision of the future.
- Active team/individual(s) in the sustainability department
- Clear change strategies deducted and aiming to keep the strategy implemented.
- Projects with these visions and strategies in development/ execution projects/ finished project (with emphasis on the last)

Based on meetings with bpd and the responsible employees at BPD, most This case study will show the implementation of change, how this affects the company and how projects are affected. The feedback towards the organisation and the process are essential in seeing this change being integrated. Searching for this organisation, there are articles and a sustainability expert team that tries to embody the new changes and strategy in the environment as well as a findable strategy. Furthermore, there is transparency in yearly reports on their strategy and operations. Implementing has barriers, so observing and looking at their projects shows the results and their considerations towards the futureproof changes made. To get a more in-depth view on how the organisation functions, individual interviews are conducted with protocols in place to ensure proper data.

In the case study, this research will be based on individual, team and organisational input, biases may arise as these are interviews and in-depth interviews. However, as there are multiple perspectives it gives better insights. Interviews will be conducted across the relevant designated sustainable department and developing branches.

Blaikie and Priest (2019) shows that there are lots of ways to look at a case study, as it is hard to generalize a small sample size, it is not impossible, as natural generalizability can be used as to see what transferability or similarities there are. It is a matter of judgement on the evidence collected. Looking for features for the case, the phenomena are defined through interviews and formulated with a general hypothetical explanation. It is more common to be seen as deductive logic as the is reformulated with the practice of the interviews and observations done.

3.3.2. Scope of analysis

For the case study a system is needed to research. In this study BPD is our unit where we dive in deeper, as it has a market position in Europe and a dominant Dutch market position, this research focusses mainly on the regional office of Zuidwest and the BPD headquarter in Amsterdam. As it is a BPD wide project of corporate strategies and implementation in one of the regions, Region Zuidwest is the highest scoring region in keeping track of the sustainable goals and the implementation in projects and the organisation. Especially developers and management of sustainability will be defined as scope within the case of a Dutch private (area and property) developer.

This focus shows organisations culture, structure, steering, employees, and projects as part of the matrix organisation. BPD is an area developer and property developer, maintaining contacts on the whole spectrum of building-oriented companies and municipalities and other stakeholders.

Within this scope, together with the usage of the three techniques, the methods used can improve the data that is found to improve the credibility as biases can be easily spotted comparative to the desk review, observations and interviews as well as the expert meeting.

This qualitative research therefore gathers information from multiple perspectives to get the full and entire complexity of where the methods are designed to be used.

3.4. Case – BPD

For this case study, most available data and access are granted for an intern. Meaning that not all documents can be gathered. Access to their boards, notes, strategies, work maps and meetings will generate the data and knowledge on how BPD operates.

3.4.1 Documents review

Documents such as strategy papers, project documents, and reports will be reviewed, while passive observations will be made during sustainability meetings, as these are scheduled events (not involving social or behavioural studies). With the help of sustainability ambassadors, the department aims to identify practices, strategies, and behaviours during these standard meetings (Qaddo, 2019). Although bias is a limiting factor, monitoring the meetings will still provide valuable data to understand general developments. For document reviews, memos, strategic notes, and annual reports will help track changes in the company's strategies. The integration and implementation of new sustainability initiatives and strategies are supported by these meetings and documents available for the research. It will be examined whether these strategies are built from the bottom up or top down, as well as the level of freedom and motivation observed in individual actions. By following the work of specific participants, we can identify the individual and team culture, values, and how leadership emerges in both meetings and day-to-day activities. Comparing observations with data will reveal challenges, as well as strategies that have already been implemented.

Development Projects:

BPD defines two types of projects. One in five is considered a distinctive project, featuring new experiments for the future of BPD. The remaining four are standard projects that comply with existing rules and incorporate strategies proven successful in distinctive projects. Both types are subject to change and variation in approach during the process. Each project can be seen as both a 'success' and a 'failure' to some degree, as all projects experience ups and downs that impact their progress.

3.4.3. Interviews

The interviews will have a semi structured approach of questions and steered towards the direction of the organisational and individual views on how the cultural values and organisation function now and whether sustainable measures are in place. This topic will be elaborated through semi open questions about individual and organisational willingness to anticipate to new strategy changes. And why or if private developers want to be front runners or see conflicting interests.

Within BPD, exploratory interviews are conducted to probe and find out more about their position and their position in the market and their stand on sustainability.

This positioning helps in finding the projects as well as finding strategies that help in changes around the projects processes. More insights on these projects help in finding the demand and strategies used and employees involved for further interviews on those projects.

When interviewing the management and the sustainability department, the position of management is questioned as well as their power and governance concerning the environmental strategies that are being implemented in the last years to make new changes possible. Further findings are to be proactively engaging the management to act and see whether that is equally the case on projects. The difference between acting, thinking and executing are two different fields that need connecting and are to be distilled from these interviews.

The interviews both suggest exemplary projects and failed projects in certain optics. When the projects are found, project leaders are interviewed and questioned about the strategies used to change the projects on a general view in the past 8 years and relate it to the exemplary projects that were or are one of theirs. Within the projects, probe for failures and changes made and how feedback might help the organisation and projects to learn from that project.

Qualitative interviews will be conducted in a semi-structured manner. Since project team perspectives are mostly for short-term to middle-long-term developments, the practicalities of the plans and the findings from the previous interviews are tested here. The impact and feedback are important findings that give a better understanding on the changes of strategies and the actual performed execution. Management on the other hand focuses more on long-term. Together, this will answer multiple research questions and confirm the hypotheses. The interviews are conducted to partially answer the main research question on behalf of three of the four sub-questions that focus more on these parts.

3.4.4. Validation session

Depending on the readiness of the case company to share the information, an internal group will be asked to look at the results of the interviews and the observations made of the phenomena.

Experts' criteria are experience in the development, management of development company and participants with experiences with change and sustainable work groups. The experts help in making explicit what may not have been put forward through four statements, this group will be asked their opinion on the topic. In addition, a new categorisation and consensus of all ideas is sought after. It is important that experts can differ in perspectives as well as having a range of expert knowledge. This helps validate the research outputs.

3.4.5. Research output - Goals and objectives

The goal of this research is defined by the search for a more sustainable future, with a focus on the climate transition that private developers in urban development must navigate and how implementation of change management can enable sustainable impact. This research aims to gather tangible information on how private real estate developers implement and utilise change strategies in daily practices, and how an organisation's culture and structure enable change and adaptation towards new objectives. The interaction between management and projects is essential, offering insight into how all individuals are interconnected internally. Additionally, the research seeks to gain more insight

into how private developers apply change strategies across both management and project levels. The focus is on the feedback and assessment of teams and individuals undergoing change, which provide insights into the impact on projects and how this is processed within the organisation's structure. The objective is to find evidence of change, whether it has already happened or is taking place, and refine it based on recommendations and validation from the case study. The objective is to find changes that are already implemented to identify the impact of the steering mechanisms of the developers. The aim is to provide necessary knowledge on how strategies are embedded in the organisation and recommendations to engage the community of the organisation towards new changes and standardizing part of the strategy to assess for future goals.

Delivery of a guide plan to help developers' organisations plan their own changes and give conditions and recommendations for innovation and transition towards the future use of new sustainable strategies to gain more knowledge and awareness for impact on the context of the organisation processes.

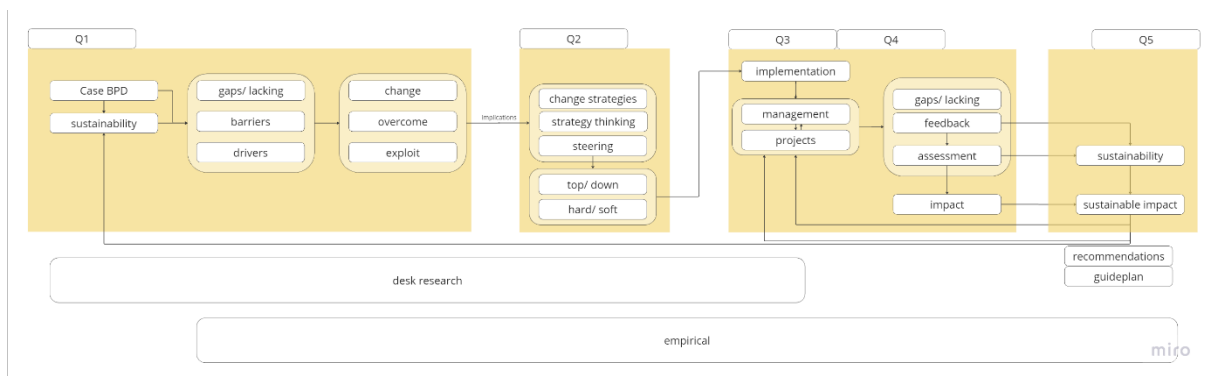


Figure 9: research output put from the research questions (own work)

3.4.6. Deliverables

Based on the literature and the case study, this research aims to give a plan for compliant developers to become beyond compliant as change inserts with feasible strategies that enables innovation and change for the future. A sort of map with recommendations based on the case study will be provided with recommendations on how the organisation can implement change for sustainable impact.

Conclusions from the expert meeting will show the validation of the findings of the research and thus resulting in validated conclusions and a better conceived recommendations for the model plan of change strategies for developers that can change towards frontrunning companies.

It will provide with a guide plan with conditions and recommendations on how to act and what are recommending outputs. Not only the laggards but companies that are on an advantage and leading in the market of urban developments and see how new innovations or cultures for the individuals could work on another level and it shares experiences through the recommendations.

As part of the findings, a timeline of changes, strategies and innovations are made for the purpose of getting the full picture of the actions taken. Here projects and vision documents, found and analysed by desk research and interviews are put into recommendations.

3.4.7. Data analysis

The TU Delft provides students and researchers with five ethical considerations concerned when doing research, a short description is needed to give insight into how data is managed and how information is gathered through trusting channels.

As data includes how corporate organisations work and how individual participants work there will be no tracing back to the participants and the case study.

No personal information other than the function of the participants is used. This will be handled via an informed consent. Every participant in the interview will receive information of participation and information about the research. This concerns how the interview will be conducted and how the gathered data will be processed. The participant will be asked to agree to the terms of the information gathering process and how the research is conducted. This will be done before the start of an interview. As data of the participants is anonymised it will not be traced back, it does not mean that the data is fully secure. Mitigating and preventing data loss or data to be leaked, encrypted data will only be accessible for those involved in the research and after publications for further research. As it is anonymised. It is important to prevent the data from being used against the human participants as they can be identified through anonymous answering of the questions. The participatory interviews as well as the expert group are on voluntary basis meaning that when asked for consent and afterwards, the participants can still draw themselves back from the research unintentional harm has to be prevented, to look at how anonymised data is collected and processed in the research, finding the way back towards the participants has to be general personal information about the work experience and motivations of preferences for the looping approaches. Confidentiality is having to be one of the pillars to prevent tracing back data towards a participant or organisation. Therefore, a bigger sample group could limit these risks and look out for the things that are quoted in the research, sharing data should therefore be done after the publishing of the research.

Chapter IV Empirical research

4. Empirical research

4.1. Desk research Case

BPD is an organisation consisting of 700 employees with operations in both Germany and the Netherlands. A part of new developments, in 2019 BPD initiated their own 'woningfonds' focusing on middle rent. The Netherlands are divided into four regional offices with a central office integrated with one regional office. Consisting of a workforce of around 50 to 70 employees per region, the rest is management and BPD Germany (BPDaily z.d.).

Making sure that BPD sends the right and the same work method towards clients and employees, BPD central makes sure that in collaboration with the regions and experts in the different field, knowledge and work methods and tools are available together with know-hows on every kind of collaboration form and how to proceed in the development process. In 2022 an updated version of the platform was launched to centralize the work in a more streamlined manner. Of course, this is just a set up and every employee can work as most fitted in this situation, if the guidelines are being followed in a way. Here differences per region are interesting.

BPD Noordwest and Central share their office resulting in shorter lines. BPD Zuidwest has the initiator of the sustainability department as head of the region. Meaning that small adjustments or a stricter policy on sustainability can be expected as the norm, however these differences are marginal. At the end of 2023, BPD Zuidwest scored best on their Sustainable goals and BPDs KPI's (BPD, z.d.). Differences are the wake up or awareness of strategies and mission directives for everyone at the regional office, monthly reminders and posters near the coffee machine show this as well, the production, the mpg scores and sustainable goals set to better this year. Communication and streamlining processes are conducted through BPDaily and sharepoint for information and updates, the Microsoft surrounding of open IMS is the database where the decision-making documents are processed through.

Whether A regional office can decide their own strategies and themes are for BPD central to decide is an intricate process as embedding strategies from BPD Central sometimes feel resistance towards change. Time, knowledge sharing and taking the teams to see and trust new methods are key to incorporate the corporate strategies better.

4.1.1. Organisation structure

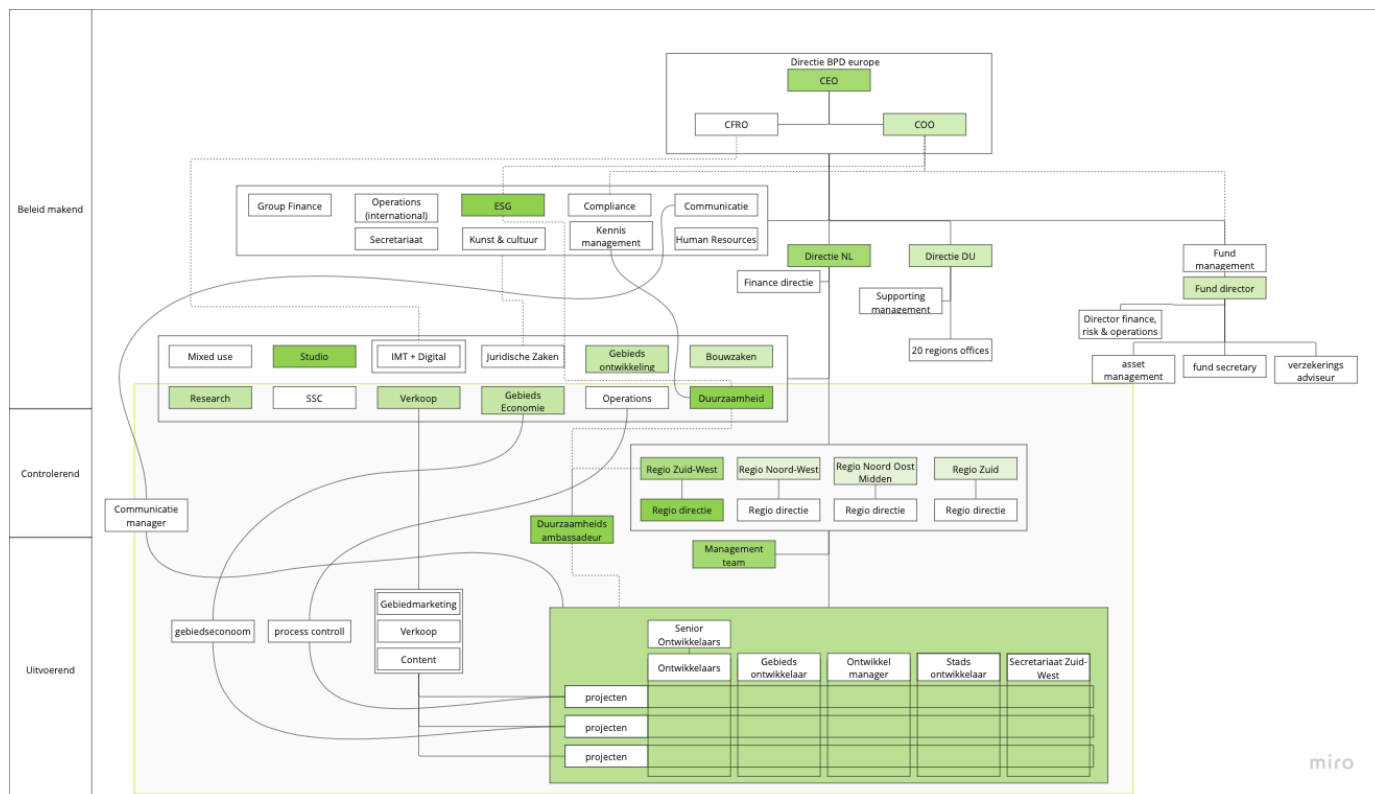


Figure 10 : Organisation structure (own image)

The structure of the organisation in figure 10 can be divided into three layers, the organisation, where the Europe managing board is situated with supporting functions such as ESG, compliance, finance, secretary, communication area economy and human resources (BPDaily, z.d.). Underneath the MB Europe, there is the NL board, German board and Woningfonds. This organisation is flatter than the structure suggests. In green colours, the functions that are dedicated or touch upon the sustainability practices, this shows a distinction as well as the match and the role of communication in between the processes to go from management to projects and the other way around when implementing strategies. While most function fall under ESG or sustainable practices that are obligatory, not all have a focus or implement changes for sustainability, impacting the internal and external environments of BPD (BPD, 2023).

Focusing on the Dutch board, there is a distinction between supporting management and overall management: Building affairs, sustainability, ICT, digital, judicial, operations, research, Shared service Centre, area development, sales and the design studio are the supporting functions. From centralized functions to regional, there are four regions with its own directory and secretary. Within the regional offices, a project/matrix organisation is at place for integrated and complex projects. The structure matters for the management and the roles in the organisation, however at projects there is a hierarchy, but it can be considered as mostly flat (BPD Navigator, z.d.; BPDaily, z.d.).

Potential bureaucracy for the organisation is that there are 22 directors for every department in the organisation, ultimately answering to the Managing board Europe. Furthermore, diving into the lines and the answering of supporting management, it is seen that sustainability, is answering to the region

director but must comply to the mb Europe. In addition, there is an integration of all supporting staff in the office Amsterdam and in the regions, most functions are represented most of the week. This means that formally the structure clear but how the structure operates is more complex and vaguer.

Drivers for sustainability answer directly to the regions and to the managing board of BPD, meaning that their proposals when agreed on, this will be operationalized and implemented directly or in phases into the organisation (BPD, z.d.)

Here we see a clear distinction of management and project systems that shows the steering through operational systems. What is apparent is that certain levels of the organisation find themselves in a position of top down, from level of region, management and BPD Europe.

Readiness and easily accessible proactive FTE (full time employees) make that this project organisation is not that hierarchical, instead, particularly in the regions, a flat approach is desired as lines are kept short. Varying from employee to employee, the hierarchical structure can be seen as a flatter organisation as everyone can be approached within on to three handshakes for information sharing.

4.1.2. Organisation culture

Motivation for multiple projects and decisions are made based on research and the information available through communicating both internally as externally. Intrinsic motivation and curiosity to look for solutions is incentivized if it does not compete with that.

A basic level of different bases of knowledge is addressed as employees are aware of certain strategies and tools to use for their projects. Because of that, the structure of the organisation is clear as well. Sustainability and the culture around this can be described as cautious, as it is known and implemented through companies' strategies and phase document. However, as it does not affect the people working there necessarily, it only comprises to the sustainability expert team and for their projects, when relevant. New regulations including electric vehicle policies, mobility packages and carbon footprint experiments are introduced for employees and offices. Varying from region and employee, reactions are resistance as well as curiosity varying from region and individuals. In meetings with the teams and departments, sustainability and updates on new trends become standard agenda items.

4.1.3. Impact of ESG policies

With new ESG policies and regulations introducing new strategies and corporate attitude towards this development is a transition. As the organisation must respond to new trends. ESG management has started as a new group to implement and integrate new ESG matters. As a part of a bank, continuous updates in a balance scoresheet are handed over to check if all aspects are in line with agreements. Creating an own ESG strategy is a business strategy to institutionalize and press integration of ESG within the company. As it is vaguely described, lots of room is given to operationalise and give meaning towards the project development. The ESG strategy and management team are alignment strategies to align BPD with EU taxonomy and EU policies as far as possible. Factors in play are economic, social and governance that demand transparency and mere focus on the individual as well as diminishing the CO2 emissions. However, ESG is mostly seen as an investment strategy towards investors, and government agencies to work with. As a clear ESG statement and transparent showcase of the business, investors and governments can better understand and see whether to invest or checking the investors as well. The ESG management will have a soft landing as in the next few years, the strategy is further developed and can be seen as a change where BPD wants to be more transparent and prepare for future regulations as well as adhering towards sustainable goals as well as creating a critical view on developments and partners (BPD ESG, 2023; BPD, 2023).

4.1.4. Timeline:

The data of the timeline goes back eight years of BPDs, mainly from Paris agreements till 2024.

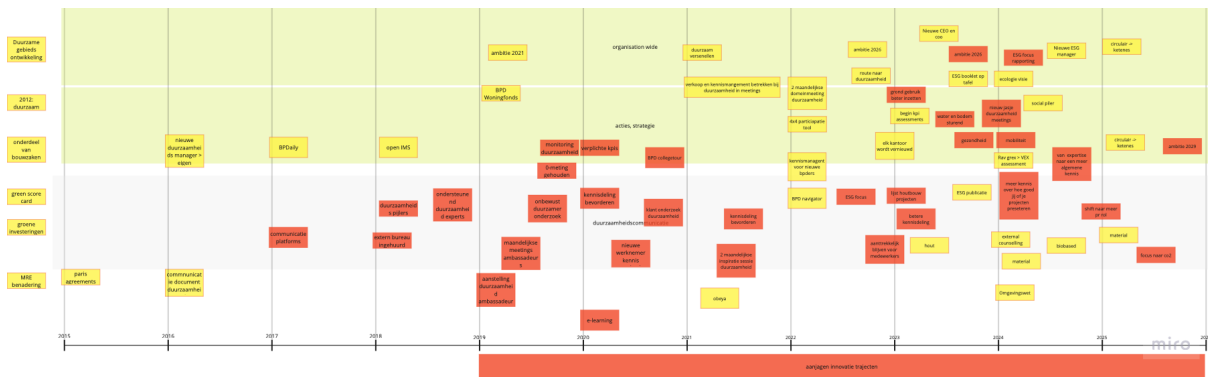


Figure 11: Timeline of actions on different levels of the organisation (own image, see appendix I for a largerversion).

Before 2016, the subject of sustainability was not specific and was mostly on project level. The sustainability manager at that time had no department on its own, together with other green employees working at other departments, this was called the ‘green corner’. In 2016, an initiative was taken to bundle and create a sustainability expert team reaching out to all departments. Together with the director of Zuidwest, the decision was made to attract and hire external offices to analyse BPD’s way of working and what a sustainability strategy integration would mean. Centralising this new approach, a new sustainability manager was appointed to give depth in the new strategy as well as assemble team of experts. As part of this strategy, ambassadors were asked to motivate and set up a structure so that everybody within the organisation could be more aware of sustainability. From then till now, 2024, the first steps towards a sustainability strategy were made with their first strategy and pilers on where to focus on for employees. The function of this theme was to generate and provide data of sustainability related questions. This was later brought on to the board and implemented in the 2018 and 2026 visions and ambition, incorporating sustainability in the organisation as a corporate strategy. From 2022 measuring the performances where on the agenda. The digitalisation of the project documents meant a shift in workflow and digitalization, and as for project document, there was an obligatory sustainability paragraph that needs to be filled in to monitor and assess if all performance indicators are adequate or not. The next steps are generating data for yearly co2 and goals for energy, landscape and water and more to be assessed.

As organisations strategies main points for governance on organisation level: these points are important as learning and doing are important pilers for their social and knowledge sharing base, this is important.

4.1.5. (Proactive) positioning

BPD wants, as seen in this strategy layover, to be disciplined and front of the competition, requiring every project to do more than regulatory accordance, BPD takes the lead and wants to inspire the collaborative partners and reserve extra room for innovation inspiration and experimentation.

However, as bpd is a large organisation, it does not want to have the lead of group in front, scaling up is the biggest card and experimentation of proven concepts means that more than the standard. Apart from the sustainable strategy, three main points show the new way of learning, doing and stimulating as a way to exercise sustainable goals together without hard decisions.

Learning: Access to expertise and experiences is important, as is receiving inspiration and proof of concepts. Expertise from universities and sustainable partners is used to share knowledge in projects. Together with collaborative partners, internal and external sustainable plans and knowledge environments are set up. BPD will monitor the impact on sustainability.

Doing: Sustainable area developments want to be recognized. To do that, toolboxes and methods for every suitable phase are developed based on the needs and experiences from the field. Knowledge

about sustainability and feasibility helps define the impact on the business case and communicate to consumers and collaborative partners what BPD does and achieves. Buyers are informed on all fronts. Stimulating: A significant group of employees are intrinsically motivated to develop sustainable areas. To facilitate this, barriers must be taken away as much as possible. Projecting our pre-station an exemplary proof of concept projects is part of appreciating the important values for BPD to provoke sustainable consciousness and behaviour. One familiar point is to practice what you preach, in this case, the internal organisational processes are under the loop as well; feeding, facility management housing of the offices are the main points to be considered (BPD Europe, 2019; BPD Europe, 2020; BPD). Interestingly, energy and materials for future social and cultural values in this sense, offices are being retrofitted and might be looked for new locations for offices as well. The wellness of employees is implied but not mentioned, and energy interestingly is not mentioned (BPD, 2019). Here, active monitoring of projects and incentives for bonuses are not discussed as there are internal points not reconsidered. Points that are still missing are the end evaluation and a social and digital strategy.

4.1.6 Strategy notes and documents.

In late 2018 an external reports reflection on BPD (BPD, 2018), where the organisations position in the market is and the level of sustainability. Based on this communication report BPD's strategy is to be a sustainable developer. Concerning this, a sustainability manager shows where BPD as Sustainable developer Here a bright and elaborate setup of sustainability was set up, in 2019 sustainable publications were brought to the attention (BPD, 2019).

4.1.6.1. Sustainability meetings from 2020-2023

One of the first corporate strategies incorporating sustainability was the ambitions for 2021; groei 21 launched. After the start and set up of the sustainability expert team, consisting of three experts, the first ambition was approved by the board. Sustainability strategy 'Duurzaam versnellen' came after 21 for a healthy and future-proof living environment. This strategy consists out of four pillars, climate and landscape, energy, circular and mobility. (BPD, 2020-2023)

Within these four Pillars, the goals and objectives are vaguely describing how to improve sustainability. Consisting of the next 10, 20, 30 years where the focus points, given the context of 2020 are based on and points to be improved in the next years. Making sure that the goals are reached, KPI's, key performance Indicators were set up to ensure that the Strategy 'Duurzaam versnellen' can be monitored to see the progress of the goals set in the KPI's.

4.1.6.2 Ambition 26 strategy Plan

Launched in 2023 is a BPD NL wide ambition set by the sustainability team and approved by the managing board. Here clear goals towards 2026 are divided into three pillars, affordability, climate, landscape, and health. Incorporating and fitting the sustainability strategy into the ambition 26 means a better alignment of goals and a better position of sustainability. From the environment to the building, this strategy comes with its own KPI's and is integrated in the phase documents (BPD, 2023).

4.1.6.3 Model van simplified versie van. ESG Corporate strategy

In November Of 2023 the ESG guidelines for BPD Europe, a bpd broad corporate strategy was announced. The ESG strategy was launched and printed on booklets and can be found on the bpdaily platform as well as in the booklet on every desk. Here the focus is found on the area, the building, social and governance. Aligned with the sustainability strategies and more (BPD ESG, 2023).

Rabobank, the owner of BPD has its own ESG strategy, however, BPD does not necessarily need ESG as it is not obligatory yet. Nonetheless, as a transparent organisation BPD wants to integrate ESG already to learn and monitor. On the contrary, BPD Woningfonds, a private equity fund associated with Rabobank, is obligated to monitor ESG on its portfolio. In this case, with 35% of the dwellings being sold to BPD Woningfonds, this new ESG policy will be interesting for new institutional investors. The COO

and the sustainability manager form the temporary new ESG manager as a bridge between Rabobank and BPD. A team of managers will form and communicate new ESG guidelines. Accessing amounts of data through the tools that are available for the intern, informal meetings concerning sustainability and the role of management from vision to practice proved to be an interesting opening for developers (BPD ESG 2023; BPD,2023)

4.1.6.4. 75 years of bpd

The rise of sustainability within BPD for the past 20 years has, after one of the first sustainable urban developments of 'Ecolonia' largely been unnoticed, one of the first signs that BPD was busy with sustainability was not an organisational approach perhaps, as in 1980 Sustainability became more important, social and tailor housing and the living environment became more and more apparent and integrated, the next step is sustainability (BPD, 2012).

One of the first recorded moments where BPD and the terminology of sustainability raised awareness, BPD took the opportunity to acquire and show what it would mean in a new form of environmentally aware developments. The project, named 'Ecolonia' at the municipality of Alphen aan de Rijn is one of the first ever sustainable neighbourhoods created. Developed by BPD at the time, the idea was to create and generate new ideas and to see if certain innovations would work on such a scale, for water drainage, materials and more. developed in 1980s, it was finally delivered in 1993 as one of the most innovative neighbourhoods for sustainability, one of the first isolation packages, sun boilers, sedum roofs, bat houses and cars having a less important role as water and landscape were the leading characteristics.

An important ideology that was tested here was 'milieu bewust bouwen' whereas Ecolonia was seen as a project demonstration for energy efficient and environmentally aware building and living. Nine architects were selected to build this project, and each given a single point of consideration for their part of the 101 dwellings. From Ecolonia till now, it is obvious that certain plans still must be figured out still, and that the solutions thought of then are still applicable in a certain way. In this project, collaboration and working with new ideas and techniques requires time and changes from every partner in production, details and development. Here, a gap between the ideas and the implementation of these techniques were shown. Prefabricated materials and factory-made components were tested here as well. Lessons for these kinds of projects are that partners must be on the same line and a limited number of collaborations is needed to make the process feasible as well. In comparison to the situation right now from start of sustainability till 2024, still the same interesting problems and techniques are being used and still there are the same problems occur, only now with better equipment and more knowledge.

4.1.7. Expert team of Sustainability.

Monitors KPIS and holds guidance over the corporate sustainability paragraph. Here a team of 8-10 experts work on their own expertise to help and support projects based on sustainability. Educating and coaching is part of the sustainability's team. Here ambassadors are connected to be the green fingers of the organisation (BPD, 2019).

4.1.8. Regional office of Zuidwest

At the regional office of Southwest an interesting link between sustainability and the office as one of the regional directors is involved with the setup and coaching of the sustainability expert team setup. From here, the first meetings were planned for sustainability department domain sessions and for the region, ambassadors and interested employees are asked to participate in inspiration sessions that repeat and show inspirational innovations and strategy updates from sustainability.

For sustainability in the regions, strategy meetings for the support management functions are being planned only for ambassadors. Secondly, Zuidwest hosts inspiration sessions with ambassadors and interested people, discussing recent trends and outcomes of sustainability.

To address the goals and ambitions of BPD, every month and quarter, a lunch meeting takes place to remind the region of its goals and ambitions for that year and how sustainability fits into this picture.

Every month the progress and a small overview of where the region of BPD Zuidwest is standing now is given by the regions directors and presents the tasks ahead, new trends and new points that have been or will be approved by the board. In this setting, the progress of projects, transactions and the sustainability part are also incorporated so that this is no surprise to everyone.

On the quarterly start-up, a quick revision and small overview of goals and achievements are given to see if the region is on track. For sustainability, affordability, the opstal, sold, agreements and more to see if the prognosed dwellings agreed on are on the right track, if not there will be a reminder of the goals of BPD.

In addition, every quarter, the activities committee plans an afternoon with speakers and subjects chosen that are of interest of both sustainability, elderly, mobility, landscape/water, it is chosen to follow the trends and to follow the strategies and ESG movements from BPD. Lunch meetings are organised as well with a selection of sustainability and upcoming trends. A subject and a speaker will talk about the subjects.

To not lose track of the goals and objectives for the 2025, a physical board is placed at central places to show main points at the coffee place of the office. As this is a regional goal, only Zuidwest organises this board, in other regions, this is addressed in an alternative way. Booklets, tools, and other sustainable related matters can be found near the coffee stand as well as at the desks when new booklets are published and shared internally. At the project level and planning, developers of BPD use the techniques of an obeya board, here progress of projects and the steps already taken are shown to from begin to the permit to build and the marketing. Every project has its own compartment where a checklist of steps is crossed of when the plan progresses.

For sustainability paragraph following up at the phase documents for KPI assessments, BPD monitors the process of project developments. Here monitoring and assessing the phase documents are used to facilitate judgement as well as advice. Because all documents have a different approach and a different place in the process, three points are crucial to measure the plans based on the set KPI's or give advice. The RAV Grex (new) is at the front of development during the ground exploitation, Rav - Risico aanvang voorstel is during development when rough calculations are made and Duv- Definitief uitvoerend voorstel is at the end of the development process before building. The sustainability attachment of the Rav grex, the Rav and the Duv have different evaluations. The rav's are meant as an update from to address, monitor and steer the process.

In contrast, to the DUV that is definitive and is meant as approval document. This means that with monitoring, the sustainability attachment based on the KPI's, a statement of the performances can be made for projects. Monitoring every project within the year gives the average and percentages of BPD performance that year. Notable is that these plans are already 2-4 years in progress and are yet to be approved / built. This is one of the major changes and is still under development (monitoring KPI documents).

4.1.9. Expert team sustainability:

The expert team organizes meetings together with all related ambassadors and interested employees. These meetings consist of round through the fields and interesting topics concerning departmental developments are discussed, however, due to lack of time, input and output for just two hours for 4 full regions is small and with side projects for knowledge sharing purposes, efficiency can be higher as well as the sharing of experiences around the fields of every ambassador joining the meeting. Every region has 2-3 ambassadors joining. Discussing the agenda and highlights of the achieved goals and addressed points concerning the sustainability department are addressed and sharpened afterwards. The meeting functions mostly as an update rather than discussing newly found points and discussions. These ambassadors can be seen as the green fingers of the organisation proactively closing the gap between management and projects putting sustainability on the map on every meeting (Duurzaamheidspijlers, z.d.; BPD, 2022; BPD; Duurzaam, 2024)

4.1.10. Tools, strategy and data

Centralizing models and using a standard format for all documents and phase documents is necessary to streamline the organisation going through one assessment portal. Using the same kind of knowledge documents and models as guidelines for every project shows that integration of models and usage of these models are essential for an organisation such as BPD. From agreements, calculation models to environmental permits and sell plans, every aspect of the processes that might be of use for the designated project has a guideline procedure to be followed if applicable.

21 Phases for every project makes it difficult to oversee every step and have the whole transparent truth. In all these steps, compared to ambitions, a loss in every stage means a weakened version at the end. As there are five main documents that are obligatory. Interestingly, only two-phase documents are measured for sustainability, at the beginning of 2024 differentiated, an RAV GREX concerning ambitions is added to these procedures to already think about the pilers and KPI's for sustainability. However still flexible at that phase, this means that ambitions can be set on early stages of the process. It is noticeable that only a BENG 'kennistegeel' document is one of the only points that has to do with sustainability.

Corporate strategies				
Groei 21		Ambitie 26		ESG
Sustainable strategies				
Sustainability team	Duurzaam versnellen		Ambassadeurs duurzaamheid	ESG team
Sustainable tools				
4x4 participation duurzame gebiedsontwikkeling	BPDaily and other guides	Phase documents sustainable paragraph (e.g. KPI monitoring)	Exemplary projects	Sustainable meetings

Table 1: Overview of most strategies tools and projects concerning sustainability at BPD (own work)

Due to the efforts of sustainability and the willingness of project related as well as managing board, multiple strategies and tools have been implemented along the past 8 years where these strategies are still in development by periodic monitoring. Table one shows most of the strategies implemented for sustainability (BPD, 2019; BPD, 2020; BPD, 2021; BPD, 2022; BPD, 2023).

4.2. Concluding desk research case

Sustainable buzzwords are often used to describe the direction in which management and projects should go. This typically marks the beginning of defining strategies and projects, where flexibility is considered important. However, the terminology used in sustainability has not been adopted by project development as expected. There is a basic knowledge expected from management, but how this information is important for employees remains unclear, as different expertise is required.

Regarding individual motivations, sustainability is often integrated into procurement processes without being explicitly mentioned, making it an unrecognized yet already available.

Current documentation and external queries need to be streamlined for better efficiency. Evaluations often fall short or are unavailable, highlighting the need for a better understanding and standardized language in phase documents to improve alignment and comparison across regional offices. Given the scale of the organisation, managing a large volume of data requires improved data organisation. Additionally, social pillars for ESG and sustainability within projects and the organisation need to be effectively implemented. There is awareness of job boundaries, however greater awareness is needed to enhance intrinsic motivation and encourage employees. Although information is available, it is often siloed and does not reach across the organisation effectively, despite the abundance of experience and knowledge.

Looking at the projects, 20% of the plans are reserved for innovation and every regional office has 1-2 projects where innovative experiments are implemented. In reality, the 20% is not achieved, partly because of other factors and partnerships. This might result in doubt of meeting the new regulation in two years. Positioning Sustainability and the CEO's office next adjacent to each other might be important for future implications,

Importance of sustainability as shown in the paper Hippias on the third floor (Wright et al., 2012), by setting sustainability and knowledge management close to the CEO and, communication and secretary, show the importance of sustainability and how to manage changes and personal/ intrinsic motivation. Another point of findings is the relatively older age of employees at BPD, as there is a low change rate of employees this means that conditions for employees and the usage of their potential and the challenges for this large organisation are appealing enough for employees to stay. This shows more commitment and knowledge built up as well for future implementation, this however together with a probable lack of communication between colleagues about this knowledge will remain with these employees.

Mostly a flat organisation with these knowledge hubs has more potential, partnering up and buddying is therefore a solution placed from the regions.

Different levels of interventions and strategic or tactical changes show that the organisation is on busy on multiple fronts of sustainability. It is clear that BPD because of the current strategies, tactical a project related optimizations and possible redesigns of parts of the strategy have limited impact but do initiate change on a scale, there however, lies the need for more performance assessments and monitoring and knowledge on the analysis for measuring.

It is the repetition of the same story and knowledge. Consequently, repeating the same points and framework for employees -> meetings with sustainability there is lack of time to address multiple points. Lacking are meetings and evaluations, fully committed to that, next to smaller evaluations within project meetings. It is often seen as a by-product or not that necessary and time consuming.

4.3. Projects

Development projects – sustainable attachments review area development and projects with usage of RAV and DUV documents

Every project since 2018 has undergone the process of filling in the phase documents. Within these documents the projects and the decisions made in the process are being concluded into the. The RAV is more a form for asking permission to investigate the project further working to the RAV, a temporary design proposition (BPD, 2023).

And the DUV where the RAV is an in between document to see the performance of the process and the DUV is the final proposition door where the whole project must be calculated and ready for to be operationalized to be built. In the RAV and DUV, there is a Sustainability section to fill in what decisions and specialties the project or area has to offer and how the developer's argument can convince the expert team and the process controllers and the directory. The projects below are selected based on sustainable efforts shown in the RAV and/or the DUV (BPDz.d.; BPD 2022; BPD, 2022).

					
Project	vlietvoorde	Wilderzijde	De SAX	SWITi - Gooische kant	Proeftuin erasmus
Municipality	Gemeente Leidschendam-Voorburg	Bergschenhoek - gemeente lansingerland	Rotterdam	gemeetne amsterdam	Den Haag
Projectphase	In development	In development	in development	built	built
Size of plan	17 ha - 150 sustainable dwellings	totaal 2600 woningen	916 appartmetns	304 dwellings	71 appartments of in total 350
End date	2027	2030	2027	2018- 2024	2024

Table 2: Overview of projects (own work)

Project Proeftuin Erasmus: First project is the Proeftuin Erasmus, for its time a sustainable newly build project, translated into a climate adaptive and nature inclusive area development where wadis and bat routes are laid out throughout the open spaces. Every apartment will be provided with a water pump. The demands for the sustainability paragraph are simple, say yes if used with an explanation. It is divided into energy, based on BENG and EPC. When this project started, MPG had to be under Bringing it to 0.85, with circularity and material passport was higher than the standard. Climate adaptation is with sewer/water dividers which say yes and rainwater storage that is not there. Health is important here (BPD, 2022).

Project Vlietvoorde: In 2017 a tender was published by the municipality: a restructuring of the 'glastuinbouw' area to low scale dwellings. This area is a buffer zone for the government as it is between a highway and a nature area. BPD is the only partner together with the municipality and has plans to develop three categories of dwellings on the buffer zone. The RAV has been filled in together with the sustainability note. No impacting energy measurements are discussed yet and circularity and a minimum MPG score of 0.5 is expected. Water measurements are slowing down water and dividing the rainwater. There is no clear health indication given and mobility must be assessed yet before the DUV and discussed with the municipality. This project is still in development and has led to hiccups due to higher costs and low area to living ratio (BPD, z.d.).

Project Wilderzijde: With the municipality, agreements about the location were made. All dwellings will have an energy positive restriction and a minimal GPR score of 0.8. The whole neighbourhood will be sustainably developed and intervened in a climate adaptive way and heat stress resistant and water nuisance will be considered in the design of the public space. The municipality states that a sustainability plan will be handed over by all market parties with at least 10% water and 18% green with 9% green in the neighbourhood. In addition, a material passport will be used as experiment (BPD, z.d.).

Project Sax: In Rotterdam south, kop van Zuid a plan to build a mega tower for 900 apartments is approved by the municipality to be worked out. A hyper social tower filled with social and public program for the 900 apartments on a small footprint of the building. This plan however will be built in concrete as it is the most feasible options, will be providing 900 new homeowners with services and social program to help the projects sustainability ambitions. That is a consideration that was made to contribute to the transactions of bpd as well as the social sustainability of the building. (BPD, z.d.)

Project SWITi: One of the first cases of modular industrial built complexes is SWITi, a project that is still ongoing. This project was initially started for the municipality and asked to expand and with that use the agreements clause for wooden structures of Amsterdam to experiment and implement wood into the buildings. As a motivated developer, this project was to see and learn from. The developers that took over are less of the intrinsically motivated, however, it had to be subjected to these clauses and

with every decision budget and permits this project had many difficulties and barriers that were throughout the whole project. Eventually, the structures were considered as sufficient and within the time it was build, the mpg scores where 0.8.solution-based abilities to react and proactively solve problems with construction and the business case, till the DUV, this process lead towards a in the context of 2019: a wooden sustainable apartment building as well as dwellings for families in Amsterdam. As many demands and regulatory choices and specific qualifications of wood were not considered of the MPG and BENG, this project had to react towards a set their own goals for using wood as material for biobased constructions (BPD factsheet duurzaamheid, 2022)

Wood in development projects in the strategy of BPD is stated that every region will provide 2-4 projects that will be a circular and wooden development. In a list of potential projects, these projects are given, in region Zuid west, 8 projects have the benchmark of wooden projects, however a sidenote is that these projects will not be built in a year, in either case, in a year at least 2 projects need to be started in every region to provide to the 20% rule for innovative projects being advised by the board and the sustainability department (Houtbouwprojectenlijst BPD, 2023).

4.3.1. Findings of the projects.

All projects must fill in the same forms, sustainable projections of the projects differ as one, focusses more on social sustainability, the other more in materials such as wood. The projects show that Sustainability is one of the factors considered by most projects. Every project however only has few options to be monitored by the KPI's that are in place. The sustainability paragraph is a part of the hard assessment moments of the DUV where all points, from KPI, to finance and the pilers of the corporate strategies are being tested. Rav Grex and the Grex are softer documents monitoring the process. Point to consider are that a basis of the same language in filling out the form is needed to make a transparent and a better interpretive view on the sustainability and feasibility of the plan as well as the long-term plans. One other remark is the context of the timeframe where plans and arrangements are made for the input of every plan. There are considerations that must be made that influence other points of the forms and ultimately lead to possible ambition losses along the way. What is then sustainable in the view of BPD might not be the view, 5 years later. Whether the sustainability strategies are being used to the full extend cannot be seen from this point of view. As it is only from the preliminary and assessment moments.

Developers show that solution-based thinking, is a part of trying to be aware of the sustainable impact of the building and make decisions based on multiple factors, sustainability is one of the factors that affect the development and building processes. Here, being sustainable in mind does not mean that the projects are sustainable, however, meeting the KPI's is not a hard demand, if there is a reasoning behind the decisions made.

Projects as shown above have a sustainability attachment, what is shown at these projects is that intrinsic motivation and believe to find things that work are key measures that enable a project to be in front of innovative developments. Consequently, it requires the right context of municipality and knowledge and problem-solving qualities from the individual developers. However, as the document are basic it is vital that projects are filed in a same manner. Next to that is sustainability.

4.4. Interviews findings

The interviews conducted vary from position and their involvement with sustainability and changes of impact and awareness.

Informal meetings were conducted were to information and create a wider understanding of the beginning of the thesis, before the interviews, informal meetings took place to get introduced into the organisation and on the topic of sustainability. Here a focus on the organisation's sustainability perspective and the changes that have happened, and the further development of the strategies are discussed, although not an official interview, this can be used to gain accessibility.

Take away from the interviews were the gaining of knowledge and expertise for sustainability as well as building functional tools to be implemented are essential for monitoring the process. Together with the usage of ambassadors, soft landings and direct connections to the projects and sustainability is a key point for promoting intrinsic motivation. Here, effective communication for participation and sharing updates. Communication for sustainability is participation of standards and guiding processes to address expectations and needs as well.

4.4.1. definition of sustainability in development and organisation.

Interviews	Definition of sustainability
Interview 1 Sustainability	There is a need for ESG. Sustainability encompasses social and environmental aspects. However, it cannot compromise the economical perspectives of the organisation. Social sustainability still must be developed in this organisation
Interview 2 Developer	Sustainability is defined as 'we' together with nature is very nature centred, every choice and definition have to do with your behaviour that impacts the natures ecology.
Interview 3 Sustainability	Sustainability is about harming as less as possible by creating healthy living environments minimizing our impacts on the environment. It shows that integrating more towards a sustainable basis level, the whole organisation can better incorporate innovation, business case and projects for our goals.
Interview 4 Develop Manager	Sustainability is broad and has to do with minimizing the impact of (work) activities on the environment, goes further than work, efficient and futureproof usage of spaces. Furthermore, within the phases, sustainability must be on the agenda
Interview 5 Developer	Sustainability can be best described as the south African word 'volhoudbaarheid', it involves considering your impact when practicing your work. It is the journey towards the goal that happens to be sustainable.
Interview 6 Developer	Sustainability is about analysing chances for environments. it has a big umbrella for social and environmental and can help in better planning.
Interview 7 regional management	Sustainability is giving theory and ambitions a practical action. Safeguarding and ensuring achievable goals in the frontend till the end. Coaching is therefore important.
Interview 8 Sales and marketing	Sustainability is something personal, incentivizing choices with less operational costs, might be the only way to attract customers as well.

Table 3: definitions of sustainability by

This definition of sustainability will be used in the synthesis. Table three suggests the interviewees, apart from their function is in one or another way motivated to define what sustainability means and especially how it correlates with their personal as well as how they use sustainability in their projects. Regarding the functions, there is a distinction in the thinking of the certain on a practical note or a more goal and future oriented. Most mention impact as well as the dealing with the environment in a way that knowledge as well as the integration.

4.4.0.1. Differences in definitions

Interestingly there are differences to be seen in the definition, while one focusses more on the broad and social scope, the other underlines the intrinsic connection between human and nature and another underlines the impact for a healthy environment as well.

Environmental impact also considers societal implications as well as developing organisational practices while the other is more interested in how to assess the impact of sustainability and strategic planning and decision making for long term visions interview one focusses on the environmental impact due to the measurements and suggests a better integration of facilitatory change management of the organisations culture.

Altogether, these findings align with their roles and the overall vision also endorses the strategy and ambitions set on the one hand area, water, landscape and circularity and on the other hand healthy living environments for dwellings and the social part of strategy and organisational work. as well as the 'duurzaam versnellen' strategy.

Summarized: Sustainability is a concept that encompasses social and environmental aspects, but it cannot compromise the economy. It is defined as a nature-centred approach, focusing on behaviour that impacts the ecology of nature. Sustainability aims to minimize harm by creating healthy living environments and minimizing our environmental impacts. By integrating sustainability into organisations, they can better incorporate investments, businesses, and projects for their goals. It goes beyond work, focusing on efficient and future-proof usage of spaces. Sustainability is best described as the South African word "volhoudbaarheid," which involves considering your impact when practicing your work. It analyses opportunities for environments, has a broad scope, and can help in better planning. It provides practical action, safeguarding and ensuring achievable goals from the frontend to the end.

Lack of clear vision and clear goal setting for new innovations as well as fragmented approaches between the regional offices and colleagues do not help. Still a knowledge gap on how to implement policy and goals into practice. Furthermore, a better intricate communication about every ambition, steps, KPI's and more are needed, especially in between departments collaboration is key in the steps from preparation to implementation, it is expected that a general change strategy is clear as well as the direction the change leads towards.

Traditional behaviour is still a stubborn barrier, a change is needed or a cooperation strategy both internally and externally this plays a significant role. Barriers here are the high costs and risks for new materials and new innovations in energy.

Drivers on the other hand, incentives of new policies and boosters for innovation in sustainability help as this accelerates. Challenges of feedback assessments and a better understanding of monitoring the process impact the goals and amount of success. Furthermore, these KPI's play a role together with strategies to create tools to streamline and steer the processes in a structured manner. At last, consumer demand must be researched to find new strategies to make consumers aware and change their behaviours eventually.

Although these barriers and drivers can be distinguished into the organisations processes and the other towards the projects.

Challenges in this area are the time for feedback, collaboration, regional but also on centralized level. Furthermore, interest of sustainable innovations implementation in the projects needs to be initiated from bottom up. Moving in front and balancing the benefits and risks of social and economic and sustainable goals. As in interview 3 is stated, top-down approach is only subjecting new rules onto people meaning it, not making it their own, instead of getting a movement started where the changes are coming from employees and their own beliefs changing the culture and making it their own. This however means that knowledge is needed before making decisions as stated in interview one.

4.4.1. Barriers and drivers

Drivers and barriers are compared and listed below. A distinction is made between desk research and interview to show that barriers and drivers differ occasionally as interviews are more focused on personal motivations and desk research shows most projects and the organisations through the eyes of documents and management. Differing from concrete and vague barriers and drivers.

Desk research barriers	
Process	lack of proper use of pilers of strategy
Knowledge sharing	lack of proper decision on monitoring
Lack of integration	Prices of materials
Lack of leadership	Scalability (partners)
Lack of sustainable image	Lack of sufficient actions
Lack of political motivations	Healthy environment
Lack of innovators	Current inhabitants
Lack of suitable options	Landscape
afraid of processes taking too long	Climate of area
Lack of hard decisions	Amount of data
Soft skills	PPS - public private partnerships, partner up again takes long
Hard skills - culture change	Reactive culture> proactive
Lack of motivated culture	kind of proactive, early majority
Lack of involvement	proactive culture it must be.
lack of proper use of urban development	Capacity
age	
Interview barriers	
Material costs	Clashing ambitions
Net congestion	Awareness
Easy solutions	Decentralised ambitions
Collaboration for innovation	communication, where to begin knowledge sharing about subjects not discussed earlier
Knowledge sharing	Lack of knowledge materials
Transparency	lack of long-term vision
Social program	long to short term translations
Isolation > islands of departments	Lack of feedback after projects end
Flexibility	sales: consumer is not, biases exist

No hard rules	Financial motivation for sustainability
Partners	customers miss the sustainable facts, not interested
Sustainability is not number one.	More visible/tangible sustainability
municipality's own governances, or lack of	Common language in communications
Money incentives(customers)	missing base line knowledge to some extend
Public vs private	Pile of information -> needle
Front-end initiatives	Consequent commitments
Changed profession	Lack of proper integration

Table 4: barriers from desk and interviews (own work)

Desk research driver:	
Intrinsic Motivation	Incentives bonus
Strategies	Incentives for budget sustainability
Scalability	Green mortgage
Knowledge management	Department of knowledge
Pps > method for more collaboration	Young bpd
Partner up again	Better educate young employees
Work together	Level playing fields
Awareness	80-20 rule of innovation
Leadership	Monthly updates
Sense of doing right	Sustainable sessions
Sense of belonging	Exemplary sustainable pictures
Proactive culture	Sustainable sessions
Vision documents	
Interview driver:	
Knowledge sharing regional offices	motivate people to find information or experiment in their own way
Intrinsic curiosity/motivation	bottom up > motivate, intrinsic or show
Potential usage employees	Ambassadors
Social themes	same documents for policy to fill in
Communications of innovations and feedback	Exploit strong pilers
feedback moments in process/ afterwards.	Eu taxes
Emerge colleagues, raise awareness	Eu ESG
Sustainable ambassadors	ESG management
Guidelines	Focus on employees
tools to work with, (handvatten)	anchoring ambitions to set base
Incentivise innovations	power of ai, data management tools
Hard steering	Proactive sustainability
Know your ambitions	

Table 5: Drivers from desk and interviews (own work)

Addressing these drivers and barriers will provide answers to Q2, as similar challenges are identified in the literature. It is important to distinguish between the influence of all drivers, as projects and management can handle direct effects but must also be aware of indirect effects caused by trends and changes in the development context. Appendix 2 lists strategies for exploiting and overcoming these drivers and barriers. The table of 4 and 5 also show a distinction between practical and organisational barriers and drivers. This distinction has a strategic implication well.

Five main barriers and drivers are compared to the theory barriers and drivers: Based on interviews and desk research, five main barriers show potential at organisational and project levels. These barriers include a lack of knowledge sharing and awareness, resistance to change, market and customer demands, policies concerning financial risks, and the need for effective leadership. These issues lead to

a lack of innovation and flexibility towards change, as well as financial risks, as demand and financial models and most processes must meet specific criteria. From the categorisation of Alvarez (2013) Institutional, economic, and political categories are most represented and considered as barrier categories for change.

Drivers identified in the interviews, from economic, institutional, and technological categories, show the most potential. Political drivers, such as regulations from the EU and Dutch building codes, function as incentives to improve, although it is assumed that regulations will eventually catch up with projects. Market demands require long-term investments. Financial incentives for sustainable innovations and improved communication are needed for better collaboration and leadership. For technology and the organisation, knowledge management will raise awareness of trends and challenges ahead. Monitoring these developments will help implement change strategies effectively.

In short, barriers are things that can be countered with an open culture as well as a flexible approach and strong leadership whereas drivers are mostly communicative and good knowledge management where awareness is needed to meet market demands and seek long term investments in sustainability and regulatory independence as a form of walking in front. Incentives for experiments and effective leadership are most important as bottom up and top-down approaches need to meet in the middle. As Boonstra illustrates 'successful leadership in organisational change is connected with the passion and vision for the future'. Here, interviews 3, 5 and 7 agree on this as they argue that it is the

A general lack of knowledge makes change and awareness to initial costs of new trends hard to invest. Here, a crucial part of flexibility in collaborative and leadership is the dialogue that starts with experimenting as well as overseeing the scope of the organisational change starting from bottom up. Comparing the drivers, on the economical category, incentives for long term investments for sustainability are too far away and not institutionalized, here, stronger leadership and willingness for collaborative leadership from top to incentivize bottom-up awareness and new innovation. The political barrier is the irregularity in the regulations and the EU regulations sharpening where there is a need to be prepared and be in front of these changes.

How these factors affect BPD is simply said not to be overseen as most are deep organisational and personal motivations for projects and management. When barriers prevent processes to be carried out to their full extent, such as the usage of the phase documents or when communication is getting through, intrinsically motivated employees try to address and initiate change proposals. In the process of management functions, this will be suggested, this could be seen as resistance and people that want to help are

Because the barriers and drivers occur throughout the whole process and especially in the beginning as well as the end of a process, there is a tendency towards first pinpointing the barriers and drivers as a way to focus on setting up awareness of the lack of knowledge or feedback. As generally, the basis of the processes and finding missing links in the performance, barriers and drivers are at the forefront of developing organisational change strategies.

From the interviews, these are the points of interest that relate to the barriers and drivers:

- Islands of departments
- Motivation; more consequent actions
- Knowledge sharing
- Integrated Feedback and evaluations
- More authentic leadership, coaching role.
- Better integration sustainability goals
- More flexibility in the whole process, more room for negotiating as, however not too loose as it takes time and resources.
- Better understanding of customers; more information and strategies to gain their trust.

- Financially instituted, incentives

4.4.4 Cross-interview analysis

The interviews are coded and give interesting findings. The coding however also gives the chance to compare interviews, as a way to find out what the relations between codes. Conducting a cross analysis shows similarities in the data collected that reference from interview to interview showing codes that are used multiple times or not with similar or contradicting opinions. Observing the occurrence of codes and the interviews it shows that there is a distinction in codes being used the most in in groups as well. The codes are the subjects summarized:

- **Ambition**
In the interviews general points for ambitions come forward as a better feeling and interaction with sustainability is needed for decision making. Here on and social aspects for decision making need to be more prevalent and involves the community more for long term resilience. Ambitions set for more knowledge and preparation for more sustainable building methods as well as making the ambitions concrete are important for generating impact and setting ambitions towards this is based primarily on the intrinsic motivation. From interviews it becomes clear that ambitions need to come from motivation, not necessarily from sustainability as interviews 2 and 6 suggest, happiness in the living environment. Furthermore, ambition means discipline as well as a solid basis of knowledge and skills. Furthermore, ambitions need to extend toward future implementation and will need proof and adjustments in criteria for(interview 2). Individual ambitions here also have impact on how the organisation readies itself
- **Awareness**
Being aware of sustainability is important for your own perspective as well as focusing more on the gained knowledge on sustainable organisations and its challenges through communication and the roles within the organisation in bringing sustainability towards practice, transparency and involvement are essential for implementation. awareness and knowledge of how behavioural changes and expertise lead towards better collaboration is needed on multiple levels of the organisation and external as well. This awareness of knowing the coming regulations and social impact of certain step. Urgency in this case needs become the general awareness. Here, individuals and team should invest in becoming experts
- **Challenges**
Multiple challenges lead towards innovation and with that, own motivation and regulations might be the most important challenges for the organisation and individuals. For management providing strategies for change affect the How do consumers go with sustainability and how do flexibility lead towards well organized and better sustainable impact. On the regulations play different norms and values that benchmarks use and with that it affects how material passports can be used. Offering the total picture and bring that towards the buyers and partners are challenging. Motivation, flexibility and knowledge on how the regulations and sustainability goals will work for the projects are most important as it shows innovation.
- **Boundaries job**
Setting the extensions of boundaries on where to operate where employees can work comfortably and challenging enough. Here, collaborating with partners and other teams define the frame is important as there is not always a lot of flexibility in projects, extending the boundaries towards more front-end ambition settings could help in more mitigations of barriers and will offer help and knowledge toward municipalities without a sustainability department. Working together and know what is expected to motivate teams and set goals towards. Boundaries are often financially instituted but can also be a chance to set external consistency and goals for a better image of the organisation, exercising and offering help will change the

relations with municipalities and might help in better collaboration. Look beyond your own job is important to be aware of the whole picture.

- Change
Change happens from bottom up and external factors have influence on how this change will affect organisation, giving clear examples and clear vision on strategies used for changing facets of the organisation. Change is affected by factors of leadership, intrinsic motivation and incentives from those factors. New changes towards the social pillar and new transparent. Next to that there is a need for an efficient and communicative strong incentivized and sustainable corporate culture. Early involvement on how to integrate new influences from regulations and financial incentives are necessary to go beyond and apply tool for a better integration of change. Need for more collaboration and visibility of sustainability internally and externally.
- Implementation
Mostly towards projects: Find working methods and to integrate the balance of sustainability of social, environment and economic aspect into concrete goals so that enforcing these implementations guard the positioning of the organisation. Implementing green, social and consumer aspects into the process will help in better integration.
- Intrinsic motivation
Potential of innovation lies in the hand of the employees as 'it is purely on free basis to become an ambassador of sustainability' (interview 1). exercising these skills and curiosity will help in motivate other employees to in steps use different sustainable practices. Involving and motivating most colleagues have priority. Proactive making sustainability tangible shows a rising awareness of implementation are drivers for successful and happy environments. This is mostly from a bottom-up approach and requires own motivation as external incentives. 'The question is where is your own driver to show sustainable behaviour' (interview 3) as 'there are just colleagues that want to do the extra into their projects and there are colleagues that prioritise other themes' (Interview 6).
- Knowledge creation and sharing
One of the most sought-after components of implementation and awareness is knowledge. Importance of gaining knowledge through meetings, participation processes and influences from financial and external regulations and policies helps in embracing change effectively and communication of that gained knowledge plays a role in involving knowledge partners and managing and creating these streams of awareness and new motives are crucial for development and the steering of management. Realism and ambitions will go hand in hand to generate most impact in short term processes. 'Sharing successes is something you take towards the next projects or incorporate into your own projects' (interview 2) Sense of urgency and transparent communication are essential for the integration. Involving employees and proactively sharing these tools and knowledge will affect the implementation of sustainable environments and change in the perspectives between of projects and management.
- Sustainability
Shifting expectations of colleagues and regulations show the essence of a better integration of sustainability in projects, as shown in table 3 of definitions, multiple definitions are made from the perspectives of employees and centralized in a strategy. Noteworthy is the justification to do sustainability by intrinsic motivation or the alignment of goals that can be achieved through sustainability.
- Impact
Making impact by environmentally friendly and sustainable area development with focus on circularity and behavioural changes from consumers and organisations. Adding value in long term are developments. Impact is measured with KPI's and can be further developed by showcasing exemplary projects. Awareness on this impact is needed to set these KPI's in perspective from a to z (interview 4). Furthermore, impact also is a result when people are

aware of their perspectives, it is more than KPI's, it is the culture in the organisation as well (interview 7).

- Behaviour
Here, behaviour is discussed on how the organisation uses ambassadors for its integration into the whole organisation. Behaviour is subjected to collaboration and asking the right questions at the right persons, this is stimulated, and employees can ask around for guidance and coaching (interview 1,3,7). DNA and behaviour are also connected to how employees operate and conduct their operations on what is agreed on and how ambitiously the project is handed over. When new projects are started, the culture needs to be openminded to communicate innovations 'showing that management is open for innovation 'aanjagers' (interview 2). Behaviour is also connected to sustainability as it shows how the behaviour of individual employees can generate new initiatives for co2 reductions for food, travel, and materials. Interviews 2 and 8 also express their way of living directly influences their choices and how their curiosity involves reductions at any level.
- Information
Exercising a better way of generating and get information across is crucial for ambitions and knowledge documents to be more accessible for all employees. Making information better accessible and more tangible for transparent governance to better integrate change in the process of the project will lead to better communication and taking chances for sustainability. Efficient market consultation will also help in the usage of trends and information to use in strategies and offers an important notice to use the information to move towards the goals, it is about the information gotten from the road towards the goals that is essential, trends come and go , so information should be used to steer towards the ambitions.
- Responsibilities
The responsibilities are based on the importance of sustainable decision making on multiple levels of the organisation, especially projects, challenges and chances will arise, and it is up to the ambition setting for sustainability to put the emphasis on social responsibility to develop environmental low emission environment for liveability. Here awareness and the shift towards more sustainable measures show importance. Responsibility by employees and management to proactively steer governance and continuous involvement and knowledge. Social responsibilities also encompass finding the missing links.
- Top down and bottom up.
Generally managing boards are eager to address topics from more top-down approach as employees, depending on who speaks, prefer a bottom-up approach, setting a precedent in incentivising and employee goals and growth to be the most important. Using the position and experts to influence can work. However, multiple interviewees prefer a bottom-up approach so that the rules apply to all and that will be seen as an incentive to work towards/ start from. Management on the other hand also suggests that innovations need to come from the projects and intrinsic motivation and curiosity of the employees for new techniques or materials to be used. From those experiments if chosen, the company can learn. Realistic approaches towards these forms of steering as well as involving employees, trough ambassadors help in choosing as well as gathering support for change (interview 3,6,7).

4.4.2. Patterns

Intrinsic motivation alone is insufficient; discipline to consistently document, coach, and motivate is crucial (Interview 7). For sustainability initiatives to succeed, teams and departments must collaborate more effectively, while partners need to stay up to date with monitoring goals and taking responsibility for them as well as getting interactive and in dialogue. Effective internal communication must prioritise disciplined knowledge sharing, as project outcomes and measurements are dependent on accurate communication between departments. Right now, interviewee 2 suggests that there are islands of departments, meaning that information or participation for certain strategies does not always reach the

designated place, reducing its awareness. This also depends on the level of involvement a department needs to have on the subject.

The emphasis should be on social sustainability; however, the importance of material properties durability and future implementations. Since material aspects are essential to project longevity, it's crucial to integrate considerations for material durability within internal processes, such as through practical tools like material passports. This improvement must be supported by both a bottom-up approach and at the governance level as the importance of human wellbeing and a happy living environment are essential for development projects. Selecting future-proof materials that meet sustainability standards will positively impact the environment and benefit new inhabitants, one of the main goals. Interview 5 shows the importance of sustainability however this should not be the goal but the way towards the goal that is on the horizon, the pathway. Flexibility in goal setting is essential, with an iterative process to ensure goals meet both needs and sustainability standards.

Change can be seen as dynamic and external factors can influence initiatives. Integrating sustainability into the organisation's culture and procedures requires adaptive principles and tactics that respond to internal and external trends. Though choosing strategies are useful, referring to the demand and cultural changes within the organisation.

The organisation needs to show how to embrace trends and changes in the process and set ambitions to benefit from these trends and changes. ESG strategy shows a new framework for different levels to integrate and manage the impact of BPD. Sustainability, with its broad scope, particularly impacts environmental goals but needs further development in social and governance areas to ensure internal energy efficiency and affordability.

The key to successful integration is commitment and discipline for implementing tangible steps. Implementing new strategies often requires considerable change across specific fields, including tools and action plans that integrate sustainability into daily work. This requires leadership and coaching. However, these changes take 2-3 years before results materialise in projects (Interviews 2 and 5). Regulations and new ambitions introduce complexities that within the organization require thoughtful implementation, meaning changes can be repeated strategically and with patience to ensure alignment, time also gives opportunities to put aside trends and focus less on trends.

The vision of thinking and doing is emphasized by management to help fostering a more proactive environment. It is open for new innovations, and this encompasses communication of knowledge as well as acting. To be that enforcer, communication for innovations in the field within the thematic of sustainability are between regional offices to help. Here, repetition leads to consequent narratives in meetings. KPI's help in making and maintaining the organisation accountable as well as in generating awareness and tasks. KPI's are measurable but minimise unclear KPI's as they do not directly show results.

Sharing knowledge and creativity among colleagues, communicating feedback and best practices, and ensuring that tasks are completed are all beneficial. Additionally, it is good that employees know who they can ask for help in certain situations. Being dynamic means adapting to the context by aligning sustainability KPIs and strategies regarding the level of knowledge. The right motivation will help set and achieve goals. Communicating could benefit from promoting awareness for employees to understand the importance of water and land in terms of sustainability, not just by telling the story but also by making it clear and understandable, tailoring and collaborating the approach is therefore essential for good communication between departments and change strategy experiments.

4.4.3. Contradictions

Four main contradictions in the interviews were found defining the differences between function, level of organisation and role of the participant. While there are patterns found, interviewee responses can also contradict as their views may differ.

Firstly, the tension between Top-down and bottom-up, interestingly, employees in the project organisation argue that, firstly top-down approach is faster to propose new strategies as few visions and opinions are needed. However, there needs to be a balance. The management levels say innovating mostly begins from the bottom-up as there needs to be a certain level of motivation to do so 'I think it has to come from bottom-up because when it is top-down, it's not a driver but more an obligatory regulation' (interview 3). Conversely, hard steering from top-down is also a tool to use to guide and discipline the organisation employees as interview 4 shows 'Top-down works if you can show how to implement otherwise there are too many contradicting answers and demands.

Secondly, there is the regional versus the Central office. Depending on the issue, management is generally supportive, and regions often have their own opinion or way of working, often regional. Centralisation and steering are essential for delivering a consistent message, yet differences arise in how goals and ambitions are communicated within regional offices.

Thirdly, during the initial phases of implementation, there is a choice between steering hard or soft. This distinction relates to the engagement involved and what can be learned from it, thereby raising awareness and knowledge. Depending on the chosen strategy and the importance of measurements, a harder or softer approach is chosen in the beginning phases.

Lastly, there is a contrast between flexibility and commitment versus conservatism and risk aversion. For change to be implemented, flexibility in the process is needed to guide and coach the process. Commitment is essential for maintaining the change experiments. However, due to the high risks, conservatism inside of the organisation might lead to no real change. Looking at trends in change there is also a positioning of the organisation. While there is a desire for new innovation in the projects, as shown in documents and most interviews, the scale of the change in the organisation plays an important role. Risk management and waiting for trends to further develop can be seen as a skill to not directly act and wait scale up experiments.

There needs to be a balance and a decision on which sides to choose from for a well-implemented strategy for sustainable impact. It depends on where and from which level in the organisation it will affect, meaning, the scale of impact. Knowledge of these implications of implementing and integrating from management to projects makes the switch apprehensible. Making sense of your reach and the context is important to understand.

These contradictions highlight the balance required for new decisions and strategies. Every cultural change within the company or management change strategy needs to be subjected to a certain level, choose how it will be implemented, and make sure that it does ground somewhere in the organisation, the scale and manoeuvrability of the organisation then also plays a role in how strategies can work out showing that different approaches can differ in the operationalising and on which level in the organisation this change can be implemented.

These correlations as well as contradictions speak of the use of a general model or a strategy that guides this change as there is a need for balance as well as flexible and future proof organisational goals. To communicate these points effectively within a strategy, it is crucial first to highlight the relationships and strategies that best suit the organisation. In addition, based on findings of the interviews how to change in management and projects relates to the background for implementation.

4.4.4. General findings interviews

A combination of top down and from a bottom-up management are necessary to successfully tackle sustainable and internal business operations. Here, a middle way in between as Floyd & Lane (2000) suggests choosing and implementing suitable sustainable measures, a combination and functional middle management are important. By allowing all people, not just those who are already intrinsically motivated, to think about this issue, better awareness is achieved. Listening will also make employees feel heard. Depending on where the boundaries may be in relation to figure 10, the top-down approach may differ as interviewee 1 suggest that depending on the change, approval is needed when it involves a more integral part of the organisation or projects.

Both top-down and bottom-up approaches takes motivation and interest in the proposed change from the top, with less flexibility and involvement as well as from the employees where involvement and flexibility are higher. However, successful implementation requires discipline and time. In addition, if the change is imposed, it creates a common foundation. A level playing field is essential but differs from departments (Interview 1 and 2).

The interview shows that monitoring is important, but monitoring is already taking place on points that in fact do not yet have a hard KPI. However, not everyone is equally concerned with it, as it depends on the function.

The organisation is still too focused on production and returns whereas sustainable importance depends on the feasibility to do more than the standard. Depending on the function, this shows interest and involvement in sustainable practices. This also results in the 1-2 experimental eye-catching projects that bpd has to realise every year per region (interview 3 and 7), however, these projects and experiments take time and are not always started. Showcasing these projects serves the purpose to motivate and interact. Interviewees 1, 2, 5, 6 and 7 also highlight more interactive knowledge sharing and next to the meetings, a kind of workshop for increasing dialogue and more interactive knowledge creations together with finding the right people.

From abstract topics to clear implementation examples in the field, through example projects, talks, conversations, meetings, and presentations on a specific topic. Unfortunately, evaluations and feedback moments are rare, but more is needed, to learn from. Multiple developers question more evaluations as this mostly happens as well while interviewees 2, 3 and 7 suggest a lack of proper evaluations. Interestingly, interviewees 5 and 6 suggest that a balance is needed and specific evaluation points as not everything is relevant.

Looking more at the individual level; When strategy goals are introduced, interview 5 suggest that only the road towards the goal and the goal after that are important to work towards, in terms of using innovations such as wood or more co2 neutral materials or new sets of rules, think on the long term as short-term gains may not benefit the future. Other than the gap of presence, the now how to find knowledge quickly and who to contact is important as multiple projects in every region has different takeaways and methods used. Work consistently, set simple frameworks and goals to move towards. Easy for everyone in the organisation, just flatten out a bit so that ideas really reach that basic level for everybody to understand and work up from there.

A general finding is the age as well as the many new innovations needs time for employees to get along with, this common knowledge that is found in shared documents as well as policy documents. Keeping knowledge inside the organisation and taking the time to adapt and integrate the changes that have been implemented better as there are lots of new regulatory (interview2, 3,5 and 7). Here communication sources vary. Anchoring the current knowledge and strategies inside the organisation is therefore important for future successes.

4.4.5. Findings and the conceptual framework

From the occurrences, awareness, ambitions and communication are more significant in relation to other codes as the amount significantly more related towards other codes rather than other terms. This means that awareness whether non- existing or very existing and ambitions are important. But are linked with most other terms to form an answer. `ambitions must be safeguarded and adjusted at times,

awareness, is therefore one of the important links. Categorising the interviews based on the quotes shows another view on categories. Here, a strong focus on communication, motivation and awareness as well as strategy and vision are seen as most named.

Communicatie en kennisdeling	Bewustwording en motivatie	Strategie en doelen	Implementatie en uitvoering
communicatie	awareness en meningvorming	ambitie om verder te kijken dan de lijst, wat kan er nog meer worden gehaald, buiten de kaders kleuren tbv het project	implementatie en integratie
communicatie document	bewustwording	doelen stellen en uitvoeren	experimenteren
communicatie en samenwerking	bewustwording communiceren	doelen uitwerken	experimenten
communicatie in voortraject	bewustwording en communicatie van de ontwikkelingen	prioriteiten stellen	evaluatie: kan workshop zijn
communicatie intern en extern	impact en bewustwording	prioriteiten stellen ambities	evaluaties
communicatie van urgentie	meer bewustzijn	strategisch	risicobeperking
communicatiekansten	urgentie en awareness	marktonderzoek doen	proactief veranderen
communiceer	urgentie communiceren	tijd voor veranderen systeem	proactief verhaal communiceren
communiceer duidelijk	motiveren		
communiceer bewust in proces	motivatie vast houden		
communiceer kennis	personal motivation and curiosity/awareness		
communiceer verantwoordelijkheid delen	Organisatorisch	Duurzaamheid en innovatie	Projectmanagement
kennis delen	cultuur en doelen	basis duurzaamheid	project gericht met hoger doel
kennis > implementeer	cultuur en houding collega's, prioriteiten	basis stellen duurzaamheid	vroeg in het proces
kennisdelen en feedback loop belang interne samenwerking	organisatorisch inzetten op motivatie op alle niveaus verantwoordelijkheden toewijzen	duurzame expressie opties voor duurzaam	evaluaties goed te traceren
externe communicatie, samenwerken	wergroepen opzetten op thema	ruimte voor innovatie	duidelijke terugkoppeling
externe opdrachten, uitdragen values	bureaucratisch proces		feedback op meerdere momenten
feedback en monitoring			proces van implementatie
feedback terugkoppelen beter vindbaarheid communicatie			

Figure 12: Categorisation of interview coding results (own work (Dutch))

The categorisation of these findings of the corresponding interviews shows seven important themes deducted from the interview quotations that were summarised and categorized.

The list is as follows:

1. Communication and Knowledge sharing
2. Awareness and motivation
3. Strategy
4. Implementation
5. Organisational
6. Sustainability & innovations
7. Project related management and evaluations

Comparing the list with the co-occurrences, it is seen that the codes may fall in multiple categories as it touches multiple subjects, and that the 7 categories are bound by communication as well as a clear understanding of the responsibilities and changes that generate impact on the organisation's projects and strategies. The basis of knowledge, for development of sustainable change strategy understandings and the feedback are essential. It also relates to the responsibilities of the cultural behaviour for the project and management operations.

Corresponding with the framework as well, there are five steps that have resemblance. As Cummings (1993) and Pretprapakorn (2019) show there is a distinction in the 'freeze', 'unfreeze' and 'refreeze' however that overall explanation has deeper layers that resembles the 5 colours used in the framework.

Most are Here, the organisational and project related points as well as strategy and implementation are closely related, suggesting responsible leadership as well as early involvement of strategy and a disciplined basis.

These findings and cross analysis suggest an important relation with the willingness and challenges implied in conducting change strategy operations inside of organisations. Realizing that the codes that were used for the cross analysis, interviewees show that perspective and their role play an important role in how their own interpretation of sustainability and the strategies that are implemented in the past years have affected that perspective and show how

From management to projects, multiple steps and hurdles need to be overcome before implementing the right measures. As interviewees 6 and 4 say, change and strategies need to be primarily come from management. How that affects the workings will challenge us to do more. Both active in at the front have different opinions and see sustainable practices differently because of their job descriptions and activities. However, as most people have sustainable intrinsic motivation, as interviewees show are not always motivated to go further as there is a general opinion that the scale of the company shows that beyond compliance is hard with the market share of BPD, suggesting other strategy optimisations for the 80-20 rules (interviewee 1, 3, 6 and 7). In scale that is seen as most effective to use Senge in scale with experiments, directly influencing the use of the conceptual framework.

Feedback, in general, is the step back that generates knowledge from the process and the overall insights of the projects and employees. As int 7 suggest, there is often a lack of time take a look back towards the process, int 5 and 4 also mention that there is a shortage of time in that way, but int 7 suggest that there needs to be a way to incorporate it to give clear feedback. While often a lack of motivation after the project is finished and the phases documents and meetings with partners and the theme ought to be enough, there is still a general feeling that there is a shortage of feedback. Often, lack of time and motivation prevents more evaluations. Here, as interviewees 3, 5 and 7 suggest, the time after finishing is relevant as well to take into consideration for a complete evaluation, effecting how knowledge and trends can be chosen and used in longer term successes.

Interviewee 2 suggests feedback is easier when everybody is on board or at least knows about the potential. Based on the workings of change management strategies, feedback is an essential part of the processes. However, it must not become feedback because of giving feedback. Interestingly, four out of eight agree that knowing the purpose and projects takes time to plan is necessary. Multiple interviewees (1,6,8) have not engaged in feedback as their projects have not been that far in the process or have not been hired that long. But mention that feedback is given on multiple moments through the process.

Interviews 3, 5, and 7 also press the matter of discipline and consequent behaviour and leadership as well as showing how these documents are specifically filled in means a better iteration of the feedback and data given to support approval.

4.4.6. Strategies

Through the interviews, individual, team and organisational strategies for change in the organisation. These change strategies have a scope and perspective for and from individual projects and the organisational level. Whether a strategy is suitable and understandable, as said, goes through the intrinsic motivation that certain people inside the organisation have. Here, consequent use of values and transparency play a role. Understanding the role of actions and realistic approaches helps. Moving towards earlier involvement of sustainable principles from the strategy notes and integrating these better into the organisation through projects and continuous assessments.

Boonstra (2021) introduced six strategies, comparing the desk research as well as the interviews, interestingly, there is a need for more dialogue strategy as well as learning strategy as most interviews show that more flexibility as well as involvement for dialogue and interaction are important. On the

other hand, power, rational and negotiating strategies as well as motivational strategies are strategies that BPD is already implementing, dialogue and learning strategies to a certain extent.

Table 1: Approaches for sustainable change in organizations

POWER STRATEGY	RATIONAL STRATEGY	NEGOTIATING STRATEGY	MOTIVATION STRATEGY	LEARNING STRATEGY	DIALOGUE STRATEGY
FORCING	PUSHING	EXCHANGING	DEVELOPING	DISCOVERING	EXPLORING
<ul style="list-style-type: none"> Steered by top Goal oriented Position power Input controllers Linear process Pressure Tell and Sell 	<ul style="list-style-type: none"> Initiated by top Solution oriented Expert power Input consultants Planned process Persuasion Convincing 	<ul style="list-style-type: none"> Multiple actors Result oriented Position power Coalitions Iterative process Negotiation Compromising 	<ul style="list-style-type: none"> Transition Problem oriented Seductive power Input employees Circular process Participation Guiding 	<ul style="list-style-type: none"> Active and reflective Purpose oriented Informal power Input learners Spiral process Action learning Coaching 	<ul style="list-style-type: none"> Interactive and active Future oriented Visioning power Collaboration Emergent process Mutual learning Dialoguing

Figure 13: Iteration on model of Boonstra (2021) of change strategies and the interview findings (own work).

Boonstra (2021) also illustrates that the values underlying principles are essential for incentivizing the reasons why change is needed. These four approaches are also linked with maximizing the potential and achieving results. As there is a difference as well in how individual behaviour changes. The model of Cameron & Green (2019) emphasizes that four approaches to individual change endorse behavioral change or maximize the results and potential of the individual. Individual change is needed to enable a cultural change as well as the potential to achieve more impact.

Looking at the room to play and the engagement of the sustainability as well as the ESG and KPI monitoring, are examples of power, rationale and negotiating strategies. Projects according to interviewee 4 often work between negotiating and rational strategies as persuasion, negotiation and expert power as well as multiple actors are at play. Interviewee 1 states that for the facilitatory and business operations, a mix of dialogue and motivation is at play where in the end a power strategy decides whether it will be implemented. Reflective and interactive transitions instead of forcefully or top-initiated will, as interviewees 3 and 7 suggest as well. Exploring and discovering sometimes a coaching role is more appropriate where collaboration is needed.

The strategy to use, as most find reasonable strategies interesting, in a hard or soft steering manner, there is a need for combing strategies, as strategies tend to be more power strategies.

From the interviews and the comparison, 1 to 3 strategies can be combined to have a maximum effect as the need to be interaction as well as persuasion and knowledge sharing to start experimenting with the changes that are being envisioned and if successful embedded inside the work culture. Operative processes are therefore iterative and a circular and spiral process.

Trying to standardise and iterate on that process will need more future and purpose-oriented goals as well as the support from top and bottom.

Therefore, a power or rational strategy will also go hand in hand with discovering or a dialogue strategy whereas now, motivational strategies are used for developing new strategies together with a rational strategy.

Combining the findings and putting them inside of the model framework shows key points where bottom-up and top-down mutual points are divided into the five phases. Although BPD says it is a flat organisation, the corporate structure and the gateways to insert change have boundaries and are a bit more hierarchical. As a normal project organisation should be, a flatter organisation is in the project teams of developers where controlling functions guide and advise on the feasibility. Here, is a diagram of key points corresponding with the interviews and framework.

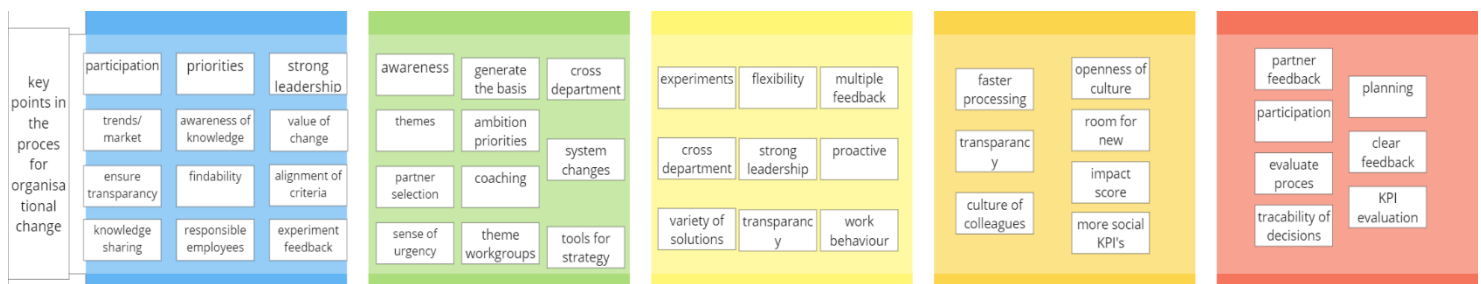


Figure 14: Generalisation of important points from interview placed in the phases (own work)

Identifying and adapting shows to value trends and how to change, Finding the right people to generate a basis of committed employees as well as alignment of criteria for barriers and drivers if a certain change is needed. Seeking support and offer guidance as well as a strong leadership in the experiments that are likely to star ensures transparency and urgency for awareness. Prioritising ambitions and selecting partners in this sense is therefore needed. To ensure the basis, there needs to be active coaching on all departments of the organisation as this offer experiments a better chance of generating enough feedback to use it into the strategy plan that is chosen accordingly by that team as well as the approach that is most fitted for the change depending on the scope. This concludes the first two step Choosing the right strategy gives room for flexibility in dialogue and more.

As small experiments are already carried out, the change team needs to implement the strategy plan with a future perspective that is both realistic and ambitious. Proactive and flexible leadership shows that there is room for multiple solutions as long as a transparent reasoning backs up the change. Short- and long-term goals need to be implemented to show short-term gains for support. Furthermore, these middle to long-term effects, can be evaluated by shorter and effective meetings on the functionality and effect of the changes used in these experiments or strategies.

Monitoring the process by set KPI's and criteria set in the first phases will make the evaluation more transparent and valuable as well as for the impact. Monitoring faster is possible if digital tools are used in multiple moments in the process.

Searching for moments of evaluations, and assessments should offer clear feedback on the set KPI's. If unsuccessful, participation and action planning to initiate after the evaluations will be reiterated for further implementations short-term gains are expected as long as it serves long-term goals.

4.5. Concluding findings

The experiences of interviewees across different functions offer valuable insights into how sustainability is approached and the level of commitment to it. Moving beyond the standard performance indicators (KPIs) set by organisations can provide advantages but has to be communicated efficiently on a basis level. Analysing how strategies and trends are implemented, utilised, and experienced reveals obstacles to sustainable innovations and change strategies. Given the broad and complex nature of sustainable impact, it is crucial to translate these barriers and drivers into actionable recommendations.

Understanding how to overcome barriers and leverage drivers will provide the initial motivation needed to implement meaningful changes within the organisation and its projects. Effective communication of a baseline level of discipline and leadership, along with coordinated individual and team efforts, is essential for bridging the knowledge gap and aligning the organisation's ambitions and goals with the needs of developers and employees.

Maintaining discipline in documenting actions and creating opportunities for knowledge sharing is vital. Clear communication regarding accessibility and motivation will significantly enhance the implementation of change.

and interview 1,2,5,6 and 7 sustainability has become a strong basis, but not necessarily the most important factor. Statement two as all interviews suggest, there is a general lack of information sharing along colleagues and a lack of strong communication across departments. Statement three as shown in the last part, there is a distinction between bottom-up and top-down approaches on how to steer and influence decision-making, at the management level it is generally seen as a bottom-up approach to come up with innovations and from project related, there is a general view that harder steering and leadership is important in leveraging innovation into projects and organisation. Depending on the change. The level of the change can also be important for resistance or motivation. Statement four represents the urge to produce more feedback due to monitoring, as shown by interview 7 and 5, there is not that much room for more evaluations, however important and as well as interview 2 and 3, as documents are evaluated more, the standard is better understood.

Differences of strategic, tactical and project levels are for different levels of the organisation to deal with. Strategic is overall, more toward corporate strategies and holds the overall picture. Tactical is a move to gain advantage, such as workshops or meetings for knowledge and implementation. Tactical can be seen as an optimisation of the process or redesign of a strategy. Project level is a practical implication that has to do with the process implications for the projects.

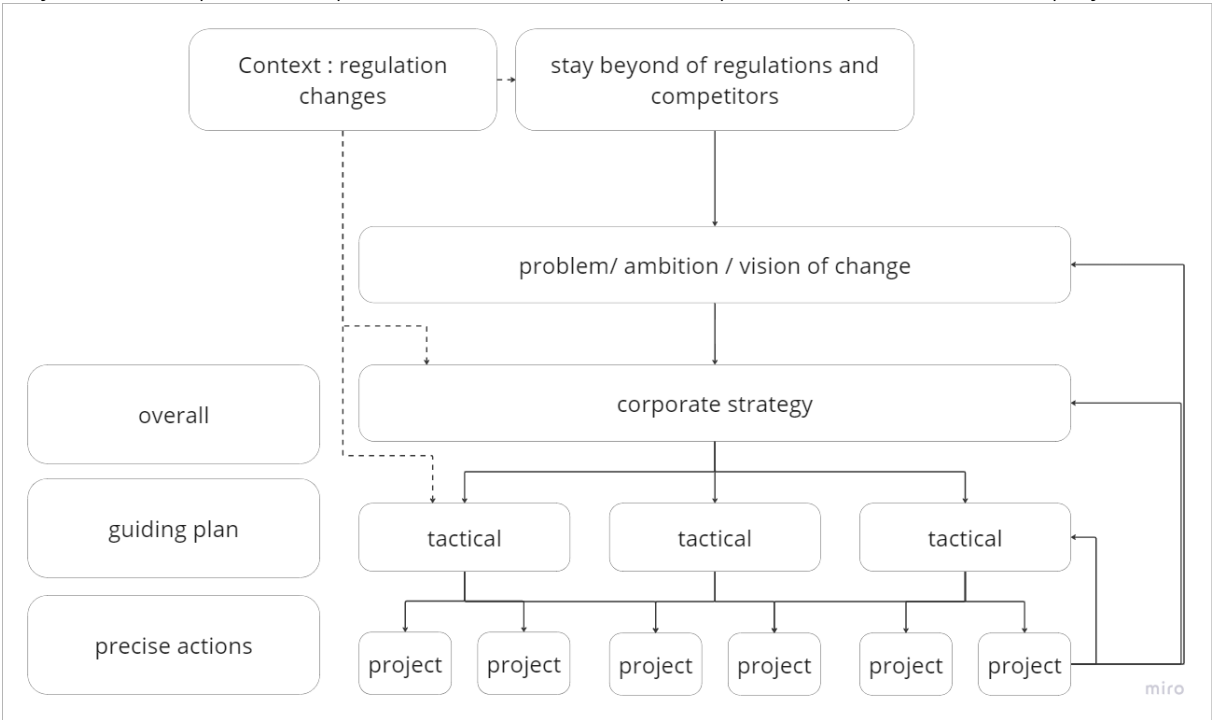


Figure 16: Levels of strategies (own work)

As part of the monthly start-up, the small validation session of statements gave insight into how the regional office representatives react to the statements of this research on multiple levels that will be used in the guide plan.

The help of a Menti-meter, the responses of the participating 27 remained anonymous in this way.

This session has four statements that were put on the Menti-meter. Preparing the session took time as a monthly start-up only takes up half an hour, and this part took 20 minutes longest; this meant a revision on how to present the questions and research as, in this case, time is precious.

Executing the validation session

Expert selection: expert selection is not needed in this sense as all corporate strategies and change strategies, no matter the level, concern all employees of the firm. In this sense, a mix of the group is needed for discussion. In the session, participants are evenly distributed in the room to have an argument with the persons next to each other. Although half of the 30 participants are developers process, finance control, area economist, area developers and development manager as well as city developers are available.

The table below shows all answers to the statements in short.

Statements							
1. Strategic level: In BPD's plan, sustainability needs to be prioritized more.	Totally agree	Agree	Partly agree	Neutral	Disagree partly	Disagree	Totally disagree
Opinion:	3	15	3	5	1	0	0
2. Strategic level: Management needs to enforce sustainable innovation	Totally agree	Agree	Partly agree	Neutral	Disagree partly	Disagree	Totally disagree
Opinion:	2	4	1	2	4	9	5
3. Tactical level: BPD can achieve its sustainable goals by emphasizing increased knowledge sharing (workshops) and the exchange of information on the initiatives.	Totally agree	Agree	Partly agree	Neutral	Disagree partly	Disagree	Totally disagree
Opinion:	6	11	3	4	0	3	0
4. Project level: After every project, BPD is required to evaluate the team with a focus on sustainability.	Totally agree	Agree	Partly agree	Neutral	Disagree partly	Disagree	Totally disagree
Opinion:	3	4	4	4	3	8	0

Table 6: all statements with answers from expert meeting (own work)

1. Strategic level:

Statement 1: In BPD's plan, sustainability needs to be prioritised more.

After this statement, the audience—the 27 participants—were given 3 minutes to think of the statements and then discuss them by answering the Menti-meter.

Strategic level:	Totally agree	Agree	Partly agree	Neutral	Disagree partly	Disagree	Totally disagree
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Statement: In BPD's plan, sustainability needs to be prioritized more.	3	15	3	5	1	0	0
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Table 7: First statement with answers (own work)

Discussion points

The participants of the panel show an overall agreeable.

If there are ambitions, we need to show it better; people are often not that busy with sustainability, and most agree with the system to conduct more sustainable measures into the strategy.

Most neutral participants agree that sustainability is already a priority in the organisation. Is it necessary to have more, or do we first need to work on the current responsibilities? Dealing with more regulations and ambition will make it less transparent.

2. Strategic level:

Statement 3: Management needs to enforce sustainable innovation.

After this statement, the audience, the 27 participants, were given 3 minutes to think of the statements and then discuss them by answering the Menti-meter.

Strategic level:	Totally agree	Agree	Partly agree	Neutral	Disagree partly	Disagree	Totally disagree
Statement: Management needs to enforce sustainable innovation	2	4	1	2	4	9	5

Table 8: Second statement with answers (own work)

Discussion points:

There is no need to enforce sustainability pro and contra, as enforcing things means that there is no minimum support to resolve the implementation. It must come from the employees and the developers to see what is needed per context. Furthermore, incentivising and rewarding the usage of innovation in sustainability in projects and management can be seen as a driver for everyone. While bonuses are found to be subjected to only the return on profit, when there are many strategies, this does not incentivise people to choose the best options for sustainability if their bonus is, therefore, lower. When ambitions and KPIs are sufficiently integrated, this must be in the bonuses as well, for example.

Innovation should be more from a bottom-up approach to use the context and intrinsic motivation.

Others say it should investigate the options to enforce first, but it is a necessity to if nobody is building sustainably, it means that there needs to be a steering from the management so that people know the baseline and what is to be expected. Firstly, the statement is clear, but what exactly is expected from sustainability in the context, and what is meant by innovations, from this perspective, more into the projects or on a strategic level?

There needs to be a culture where the plans made need to be believed. If plans you know are doomed to fail because there is no support for less profit, why do it in the first place? But that is not the point. There needs to be support, as in the innovation of 20% of the projects to be actively remembered or tested upon.

3. Tactical level:

Statement 2: BPD can achieve its sustainable goals by emphasizing increased knowledge sharing (workshops) and the exchange of information on the initiatives.

After this statement, the audience, the 27 participants, were given 3 minutes to think of the statements and then discuss them by answering the Menti-meter.

Tactical level:	Totally agree	Agree	Partly agree	Neutral	Disagree partly	Disagree	Totally disagree
Statement: BPD can achieve its sustainable goals by emphasizing increased knowledge sharing (workshops) and the exchange of information on the initiatives.	6	11	3	4	0	3	0

Table 9: Third statement with answers (own work)

Discussion points

Most agree, however question the time it takes for workshops next to work, and the other workshops/ lunch meetings need to be streamlined to not miss time to achieve their goals for the year. However most see it as a motivation and a booster for collaboration and knowledge to use for other projects.

4. Project level:

Statement 4: After every project, BPD is required to evaluate the team with a focus on sustainability.

After this statement, the audience, the 27 participants were given 3 minutes to think of the statements and then discuss it through answering the Menti-meter.

Totally agree	Totally agree	Agree	Partly agree	Neutral	Disagree partly	Disagree	Totally disagree
Statement: After every project, BPD is required to evaluate the team with a focus on sustainability.	3	4	4	4	3	8	0

Table 10: Fourth statement with answers(own work)

Discussion points

The sustainability is important, however, there are multiple things to assess, sustainability is just one of those, to say that sustainability is central, rather a part of as all parts need to be assessed Within the context how do we evaluate the innovations used 5 years ago compared to what is now available and how to do to do it?

How to act on ambitions that were set these years and discarded as more ambitions from BPD are being able to be there. Here, it is necessary to reflect on the work that is open and on how different elements caused a lack of ambitions or too many ambitions, and that is further down the road weakened as money issues or no hard agreements were made in the beginning. To see innovations is just within the context as that innovation were from that time and hopefully are chosen for their long-term availability and qualities, for example, in materials. Furthermore, every project has sub-phases for delivering projects; these phases can be evaluated apart.

Preliminary conclusion small expert meeting

Although interesting data and a validation of the statements were given stating the balances and nuances in the statements. No real revealing information was given.

An observation and perhaps also the reason why many developers and development managers were the ones answering is because of their affection and hands on project approaches do not always offer the best chances for sustainability.

Nr	Overall opinion	Agree	Neutral	Disagree	Total respondents
1. In BPD's plan, sustainability needs to be prioritized more.	Agree	21	5	1	27
2. Management needs to enforce sustainable innovation	Disagree	7	2	18	27
3. BPD can achieve its sustainable goals by emphasizing increased knowledge sharing (workshops) and the exchange of information on the initiatives.	Agree	20	4	3	27
4. After every project, BPD is required to evaluate the team with a focus on sustainability.	Tied	11	4	11	26

Table 11: simplification of table 6 (own work)

As table 10 shows, dividing the result/partly to totally agreed, neutral and all disagreed respondents, there is an overall distinction in how the overall company reacts on the statements and how it falls in the organisation.

Concluding is that most employees want to prioritise Sustainability more into the strategies and have more guidelines on how to use it, however, consider that there are lots of KPIs to consider. Incentives are needed to challenge each other for intrinsic motivation to innovate, this should partly come from management, but there is less support for enforcement of new sustainability operations. However, there needs to be a balance in how to enact, as a baseline enforcing sustainability is necessary, to form the incentive to go beyond that is up to own personal projects. Furthermore, on top of that, knowledge sharing is greatly appreciated in forms such as workshops and project information where certain techniques or ambitions were achieved, countering this is that a balance in learning and working is needed. Lastly, the statement of evaluating has tied as time is seen as a factor and it is hard to see what to evaluate as time limits innovations later on and projects can lose their ambitions, it is not to be expected that these projects have the same ambitions and innovation when comparing the beginning and now, however, steps taken and within smaller projects in this projects these ambitions and lose of ambition/ innovations can be tested and assessed. Another point is that assessing the actual sustainable KPIs achieved is important but still counts as one of multiple subjects to be assessed. Balancing all factors together with sustainability is seen as important. An individual must know all what sustainability means for them and for their project and team but needs to understand what it does and how it can be used to its advantage, meaning that workshops and evaluations that can help in finding the efficient ways to incorporate sustainability into the projects and organisation.

Chapter VI: Guideline for change plan

6. Guideline change plans

Building on the empirical research and theoretical framework, a guideline has been developed to illustrate how change will be implemented, showing how the framework can guide the process. The findings from interviews and validation sessions confirm the need for a structured guide that provides tools and validation to initiate change projects. Therefore, the conceptual framework has been transformed into a practical guide, incorporating insights and ambitions from the interviews to create a comprehensive change strategy. This chapter will integrate the empirical research with relevant literature.

The purpose of the guide is to provide a strategic approach to managing change, supported by guiding principles derived from empirical research. There is a general agreement on the importance of a proactive approach to change, provided it is realistic and aligned with the needs of both the organisation and its employees. Strategic planning should reflect this balance as well as project planning.

Who benefits from and participates in the change process depends on the specific strategies and the scope of the project. Based on the literature, findings, and recommendations, this guide has been structured to account for different levels of change depending on the orientation, perspective, and rationale behind it. Factors such as a clear vision, sufficient support, and a detailed actionable plan, along with meeting organisational needs and ensuring competency are crucial for success.

Recreating the process of three distinct changes from the interviews and desk research highlights how each of these examples, identified through both desk research and interviews, fits within the framework. These case studies serve as a foundation, from which the guide will be further detailed and elaborated.

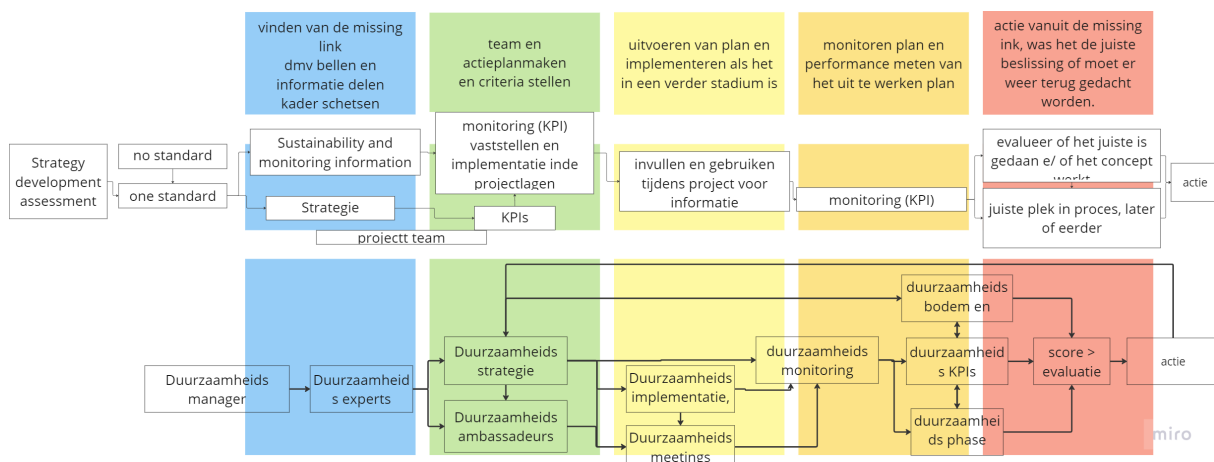


Figure 17: Examples (own work)

Showing that three sorts of changes and trends or adjustments can use the process of the guide plan.

Firstly, the discussed changes depend on both planned and unplanned actions, occurring internally and externally. Both types of plans are structured into processes, and within the model, it appears that structured and planned changes are generally more comprehensible. However, this does not imply that one is better than the other. In the organisation's current state, barriers and drivers, as identified in the empirical research, emerge, where proactive or reactive measures are taken. Overcoming and utilising these barriers and drivers will establish a foundation for managing change when it occurs. As mentioned, barriers and drivers need to be exploited. From the current organisational state, this new vision becomes apparent within the organisation, and it is up to management or individual employees to grasp the essence of this change vision.

The five phases are simplified into: understanding, identifying and adapting, implementing, assessing, and acting. These are the five steps required to implement a change strategy within the organisation's processes, from project level to management. Each phase must be initiated to roll out a change strategy, derived from the visions and structures of the planned objectives. Each phase has its own conditions for starting, its actions, and its outputs, which include both general and organisation specific points. Looking at projects, a distinction can be made regarding stakeholder involvement, as shown below. Based on the interviews and projects, stakeholder involvement will become clearer at the end of the guideline. An overview of the interviewees' roles is provided to demonstrate their connection to the different phases, reflecting a neutral approach to change with balanced power dynamics.

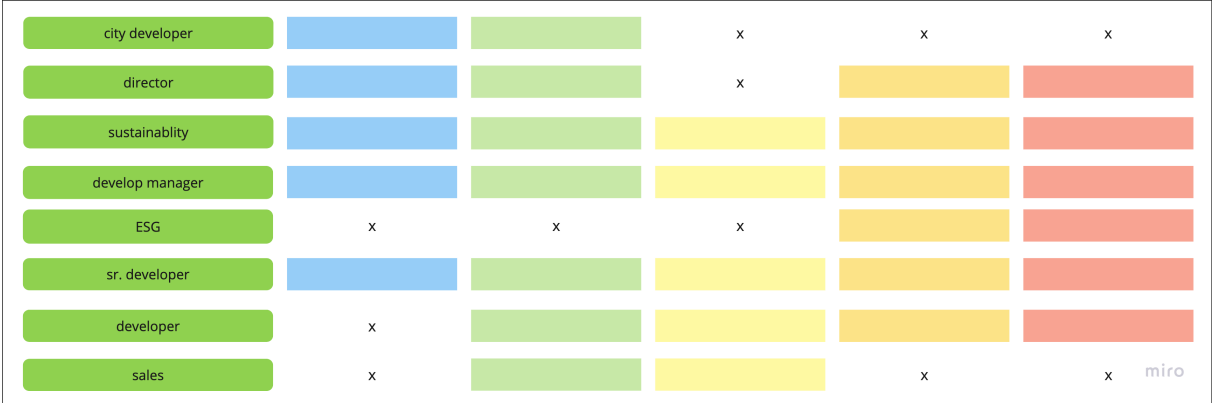


Figure 18: Involvement of functions (own work)

All phases will start with criteria, and conditions that need to be completed in order to start the phase, these are no hard criteria but guides. These conditions will form the basis information from where in the phase actions and steps are taken to complete the phase and gather outputs to be communicated towards the next phase.

Certain criteria need to be in place in order to start the phases, here a shift is needed that triggers actions for this phase, the shift and actions will be communicated through the organisation for the next phase in time.

In short, every phase starts with a set of conditions and as shown in the picture below will mean a set of basic actions that could be used in the phases.

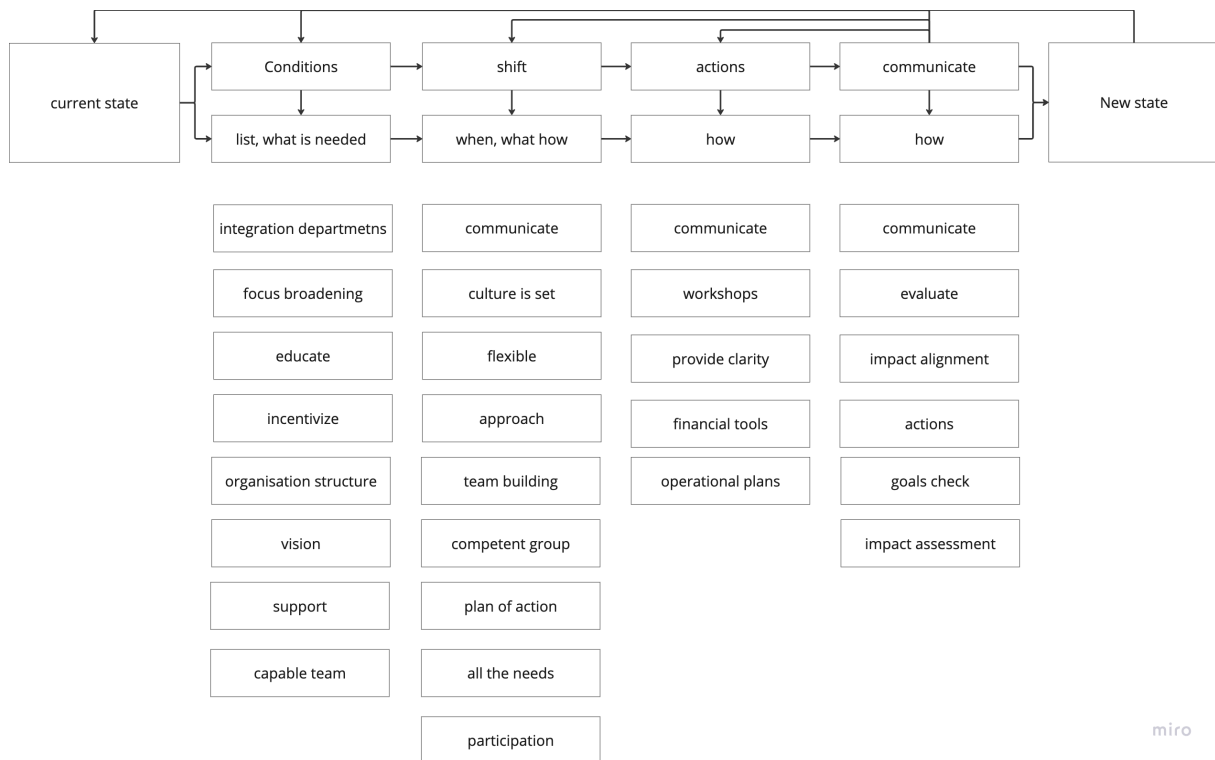


Figure 19: Iteration for guide plan (own work)

Every iteration of the change management guideline starts with setting out a plan and vision, in preparation towards that, collaboration, awareness and communication are essential before going towards action. Every plan has actionable points and will be assessed and given feedback to sharpen the output of the assessment of the action phase.

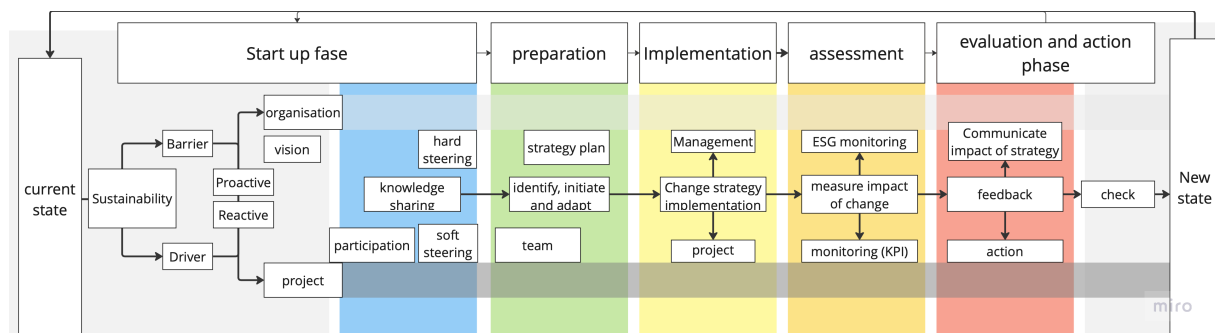


Figure 20: Model for the guide plan (own work)

Blue: Understand change and identify.

Conditions

A clear vision must be communicated to all employees to ensure everyone is aligned with the organisation’s goals. Setting clear ambitions is essential to provide direction and motivation. Establishing a working method will help streamline processes and improve efficiency. Conducting market research is crucial to understand the current landscape and identify opportunities. Searching for incentives in the market and encourage internal support will help drive the change. Proactively search for missing links as well as chartering the factors that make the foundation of this vision.

Actions

Make barriers and drivers of the problem apprehensible first and search for common grounds and awareness in the organisation. Secondly, this awareness needs to acquire support. Therefore, it is

important to research trends and seek references that can validate the change. Organising participation through workshops or teambuilding activities will help engage employees and stimulate a sense of involvement. Seeking competent and enthusiastic team members, including initiators and motivated individuals, will solidify the base for change. Organizing events focused on change will keep the momentum going. Seeking knowledge through experiments and other means will ensure that the team is well-informed and prepared. Constructing awareness and need through meetings, work visits, and pitches will ensure that everyone understands the importance of the change. Urgency is therefore important to generate more support.

Output

The expected output includes increased organisational awareness and a clear plan for strategy and ambitions. References should be clear to provide a solid foundation for the change. A clear focus on where to operationalize this change and how to develop this change strategy further. Furthermore, the direction and the level on where the change is about to take place will be introduced.

Organisational

Informing and gathering information for decision-making and steering is crucial. Creating a basic knowledge network will support the dissemination of information. Steering towards a change culture involves choosing the right approach, whether hard or soft, and determining the starting point in the organisation for the change. Active leadership qualities are needed to coach this first phase. Furthermore, there is a clear positioning of the proposed change in the culture and structure of the organisation.

Projects

A flexible approach towards new trends is necessary to stay relevant and competitive. Structuring change in stakeholder meetings will ensure that all parties are informed and involved in the process. Therefore, a strong and articulated focus needs to be on a theme that is developed alongside a project.

Green: Identify and adapt.

Conditions

The initial steps for implementing the change have been established, ensuring the basis for developing the strategy. Clear ambitions and a detailed plan are in place, providing direction and purpose. There is a comprehensive understanding of the change strategies and the context in which they will be applied. Participation from all relevant parties has been secured, and a resolute change team, or steering group, has been formed. This team will be considered as the motivated employees. The effects of the change on various phases and planning have been considered, ensuring a smooth transition.

Actions

Mapping out where in the organisation the change will occur is crucial for targeted implementation. All needs for the implementation phase must be addressed to avoid any disruptions. The team plan should include an overlay rollout with small adaptations to accommodate the change. Support for the change must be managed effectively to maintain momentum. The plan should be broken down into guiding points for implementation, allowing for clear and actionable steps. Time must be given for the team to adapt and gain knowledge about the new processes. Exploring projects that can serve as examples of the change in action is essential. Completing the team and involving all stakeholders ensures comprehensive coverage. Managing the culture for change, including addressing emotions, is vital for acceptance. Identifying implementation boundaries helps in understanding the limits and potential challenges. Seeking to find the effects of the change, here change strategies are tested and

Output

A detailed plan for implementation should be set, ensuring all aspects are covered. The organisational structure must be ready to accommodate the change. The guide plan and ambitions should be clear and practical, providing a roadmap for success. Plans for management and project processes need to be established. New rules and strategies should be guided and communicated effectively. Performance metrics must be set to measure success. Possible Environmental, Social, and Governance (ESG) outcomes should be considered to align with broader organisational goals.

Organisational

Preparing for expected performances involves setting clear benchmarks and goals. Managing the work culture is crucial to ensure that the change is embraced and sustained. The organisation sets up criteria where the KPI's of this change are being tested for

Projects

Using new tools and changes in projects helps in testing their effectiveness and making necessary adjustments. Managing costs and processes ensures that the projects are completed within budget and on time. Small adaptations to the structure of the organisation as well as operationalising the new processes are at the end in play to start in the next phase.

Yellow: Implement and carry out action plan.

Conditions

To ensure the success of any organisational change, it is crucial to have clear responsibilities assigned to all team members. An actionable plan for the organisation must be developed, outlining specific steps and strategies. Evaluating these steps regularly helps in tracking progress and making necessary adjustments. Clear performance metrics should be established to measure success. Ambitions and new rules must be communicated clearly to all stakeholders. Assessing the level of competences within the team ensures that everyone has the necessary skills to implement the changes. All needs for the change should be identified and addressed beforehand. A comprehensive plan for spreading the change throughout the organisation is essential to ensure smooth implementation.

Actions

Carrying out the plan involves executing the outlined steps and strategies. Implementing new rules, themes and plans in example projects helps in testing their effectiveness. Starting by experimenting and finishing experiments from the last phase are the first iterations that could show potential for the plans. Maintaining intensity and interest in the change is crucial for sustained momentum. Here, incentives are essential. Providing knowledge and short-term feedback on the plan helps in making timely adjustments. Identifying implementation boundaries and financial constraints ensures that the change is feasible and sustainable. Furthermore, the working out short and especially long-term gains will contribute to the ESG structure of BPD.

Output

The results of the change plan should be an analysis that is brought towards implementation. Finished examples of successful experiments finished or provide valuable insights. A completed action plan serves as a reference for future projects. Gaining knowledge on implementation helps in refining strategies. Points for evaluation should be identified to assess the effectiveness of the change.

Organisational

Regular check-ups and process meetings are necessary to monitor progress and address any issues that arise. These meetings help in maintaining alignment with organisational goals and ensuring that the change is on track.

Projects

Focussing on the Using new tools and changes in projects helps in testing their effectiveness and making necessary adjustments. The experiments also ask certain restraints on partners and suppliers to be used.

Orange: Assessment, monitoring and measuring.

Conditions

To ensure the success of any project, it is crucial to develop an actionable plan that outlines specific steps and strategies. Gathering and analysing performance indicators information is essential to measure progress and make data-driven decisions. Assessing team performances helps in identifying strengths and areas for improvement. Practical implementation ensures that the plan is feasible and can be executed effectively. Addressing cultural change and structural changes within the organisation is necessary to align with new goals and strategies. Conducting thorough process evaluations helps in

identifying inefficiencies and areas for enhancement. Maintaining openness throughout the whole process fosters transparency and trust among all stakeholders.

Actions

Sustaining support for teams and individuals is vital to keep them motivated and focused. Regularly evaluating performance based on KPIs helps in tracking progress and making necessary adjustments. Evaluating team dynamics and performance ensures that teams are functioning optimally. Assessing the necessity of the change helps in determining its relevance and impact. Conducting 1-on-1 and team talks provides a platform for discussing progress, addressing concerns, and fostering collaboration. Clearing any irregularities in the vision and plan ensures alignment and clarity. Setting new ambitions based on evaluations helps in driving continuous improvement. Communicating the process keeps all stakeholders informed and engaged.

Output

Identifying steps for earlier phases helps in refining the approach and avoiding past mistakes. Providing feedback for earlier phases aids in understanding what worked and what did not. Outlining specific actions to be taken ensures a clear path forward. Determining the success or failure of the current phase helps in deciding whether to proceed or revisit earlier phases. Collecting and analysing data for implementation supports informed decision-making. Assessing the effectiveness of strategy use helps in optimizing approaches. Evaluating the impact on the organisation and team provides insights into the overall effectiveness of the changes.

Organisational

Regularly checking KPIs ensures that they align with organisational goals and provide accurate measures of progress. This ongoing review helps in making timely adjustments and maintaining focus on achieving desired outcomes.

Red: Feedback, communication and action

Conditions

To ensure effective feedback, communication, and action within the organisation, several conditions must be met. Communication on evaluations and processes of change is essential. Gathering and analysing feedback is crucial for continuous improvement. Comparing the assessed KPI data helps measure effectiveness and competence. Identifying required changes for the change strategy in new iterations is necessary. Additionally, considering Environmental, Social, and Governance (ESG) factors is important.

Actions

Actions to be taken include communicating the impact and further plans to all stakeholders. Addressing and solving knowledge gaps and feedback is essential. Searching for improvements in performances and the environmental and social aspects of the organisation is necessary. Standardising good practices and improving where necessary ensures consistency. Initiating new participation meetings for support, team building, and knowledge sharing fosters collaboration and growth.

Output

The output of these efforts includes corrected plans based on feedback and evaluations. Determining whether feedback results work or not is crucial. Achieving or adjusting KPIs ensures alignment with organisational goals. Assessing the ESG score helps measure the organisation's impact. Conducting standards checks ensures compliance and quality. Communicating the results and successes to all stakeholders builds trust and transparency.

After the red phase, a new state of the organisation is in sight, if it is not a successful organisational change, it means that a new iteration of the process is needed, or at least a part of the guide plan steps.

Part V: Discussion, Conclusion, Recommendations and Reflection

DISCUSSION

This section will provide discussion points concerning the design and findings of the research. Here, the empirical research and main findings will be discussed in addition to the recommendations. Sustainability and change theories are road topics, crossing themes. Applying the theory to a case of a private developer is seen as a gap in knowledge as not many private developers share information in comparison with public instances.

Value of the research

The empirical findings of this study have provided significant insights that have not only enhanced the research but also challenged or broadened the perspectives on the outcomes. The contradictions and diverse viewpoints from both internal and external sources add valuable nuance to how the organisations operate, thereby enriching the research findings and improving the recommendations. These multiple perspectives highlight the complexity of organisational change, where various factors, such as management structures and external pressures, influence outcomes.

Linking the theoretical framework, which includes Lewin's Change Model, Boonstra's strategies, Floyd and Lane's theories, and Senge's concepts beyond compliance, to the practical findings has demonstrated how change can be introduced and effectively managed within an organisation. These theories, when aligned with the practical aspects such as culture, readiness for change, and organisational structure, illustrate the dynamics of top-down and bottom-up approaches. They show how readiness for change, knowledge sharing, and middle management involvement are critical in navigating and sustaining organisational transformation.

In connecting these theories to the practical findings, the five phases of Lewin's model (unfreezing, moving, refreezing) provide a clear roadmap for managing change initiatives. This process-oriented approach is complemented by Boonstra's emphasis on strategic decision-making, where organisations must choose between directive (top-down) strategies and participative (bottom-up) ones. The interviews and case study data reveal that top-down approaches, where senior management dictates change and middle management is tasked with implementation, are commonly used. However, bottom-up strategies, where employees actively participate in shaping and executing changes, were less frequently observed, though they are equally important in fostering engagement and ownership.

The strategic objectives and the practical realities of project implementation often differ. Boonstra's framework highlights the importance of selecting the right strategies and ensuring that the actual execution aligns with organisational goals. The case study findings indicate that there is a clear distinction in the strategies chosen, with a preference for power- and knowledge-based approaches. Interactive strategies, which require more engagement across different organisational levels, are less commonly implemented.

In terms of organisational learning, Waddell's theories on learning and the identification of gaps in organisational structures have underscored the need for a robust model for implementing change. The model developed from this research is applicable to the specific case study, although its generalisability is somewhat limited by the nature of the single case and the available data. Nevertheless, the relevance of middle management has been consistently highlighted. In larger organisations, there is often more structure and specialisation, making it easier to implement change. However, in smaller organisations, tasks are more dispersed across fewer employees, which poses challenges in terms of knowledge centralisation and consistent application of change strategies.

The interviews revealed a significant contradiction between the specialisation of knowledge in large organisations and the decentralisation of responsibilities in smaller ones. Larger companies tend to have clearer structures, which can streamline the change process, while smaller firms may struggle due to a lack of specialised roles. This distinction raises important questions about how change is managed in

different organisational contexts, and whether different models or strategies are more appropriate for smaller, less structured entities.

What makes the proposed model particularly compelling is its focus not solely on hierarchical layers within the organisation, but rather on the connections between the organisation and its projects. This model emphasizes the interventions needed to drive change and achieve KPIs. By looking beyond, the traditional top-down versus bottom-up, the model provides a more holistic approach to organisational change, one that considers the interactions between different organisational functions and the strategic alignment required for effective implementation.

In relation to the role of middle management, the findings align with Floyd and Lane's theory, which argues that middle managers must balance enforcing top-down strategic goals with addressing the operational concerns of their teams. This balancing act becomes especially critical in initiatives like a shift toward sustainability, where middle managers need to mediate between high-level strategic objectives and the practical challenges faced by employees, such as time constraints, conflicting KPIs, or a lack of clear guidelines.

Limitations

As case studies are largely qualitative, biases could slip in as a case and group for interviews are chosen. Expert meetings could have a delimiting view on it as it generalizes and discusses the research findings. Expert meetings might offer a restricted perspective on it because they discuss and generalise the research findings. With a small group to focus the interviews, observations on limitations could be that cases are only for within the company. There are a few forms of biases and questioning that limit the outcomes of the research. This research is a subject where numerous articles are written about a specific topic, but in practice, few research studies are being published on this topic.

Even though many publications have been written on this issue, it has yet to be widely recognised among researchers. By expanding the literature review, this could be further examined. For now, social and business theories and the relevance of the academic research on the topics are used to generate the theory needed. As another field is very close as it concerns businesses and organisations, the limitation is limited but applicable to developers' perspectives. Other limitation is the one case study that gives most data, however due to the implementation side, this possible bias creation is partly removed because of the subject. Furthermore, due to limitations of the developer's perspective and considerable knowledge withholding as this knowledge is used in this research, the participants might have a full enclosure on the use of data outside of the company or selective data. As this is still students' research, it has time and efficiency limitations from until the p4 moment. Limitation to the practice of the model plan recommendations. Generic and approved, but only with specific notes of use and structures in the companies. Further limitation lies in the basis of the concepts, as eight interviewees were asked to be interviewed, as deemed essential for implementing strategies. Before, informal meetings were planned to see which functions and their interests would be important for this research. The attendees of the interviewees were asked on all levels of the strategy. However, in the end, it gave the results, but it could be validated more if two to three more other functions were asked.

The expert meeting can cause other limitations, mixed attendance of all functions needed for the implementation and actions of all levels of the organisation, this however was subjected to a time limit and could not be fully validated due to the time of the break and the time there was for four statements with room for discussion, multiple statements were eventually crossed of as it had to be apprehensible for all office workers.

Dissemination and audiences

This Research is aimed at real estate developers and (urban) area developers who want to gain more insight and knowledge about change management when trying to gain an advantage or go beyond compliance to enable future-proof projects. This developer can either be already committed towards developing change management and making the steps to integrate change strategies or wants to achieve change management and gain recommendations on enabling and implementing change.

For the early adaptors and front runners, results of the research could help in the process of new changing environments to act and improve their processes to achieve futureproof developments beneficial for the developer and reputation and share experiences of how capacity and leadership, as well as values, can enable more future changes to maintain the lead.

Laggards and compliant developers could be shown that becoming aware of the changes needed and the strategies needed are recommended and only require a certain number of innovative changes bridging the knowledge gap and take away barriers to enable change, beneficial for the developers that are falling behind by gaining recommendations and knowledge on participation, knowledge and capacity enablers to implement transitional learning for organisations to change. This leads to suggestions on how to generate impact.

Future research

This study provides insight into how private developers implement and drive sustainability through strategic changes on multiple levels of the organisation. This thesis can be used as a basis for the private sector on the implementation of change strategies and sustainable impact. Further research is necessary to expand and validate these findings across multiple and longitudinal studies. Future implications for the research include comparing this case study with other private developers. By conducting multiple case studies of other private developers. This approach can be widened to other organisations to compare and see whether an alignment is possible for multiple stakeholders. As this research has tried to understand how change strategies are implemented and adjusted to the right state through the steering models, other steering models can also have a different outcome. In further cases, smaller and similar developing companies can be used to see the difference and choices made because of their strategies compared to the model and their position. More interviews and validation sessions with experts from external parties, such as sustainability and other developers, should be implemented to address the validation across markets. In regard to the recommendations and the guiding plan, more research is needed to test the plan in other companies to see if it works for other developer organisations as similarities and differences between developers might also influence the choices made for choosing and implementing the change strategies. Further expert meetings will be with a select group of prechosen roles and knowledge to gain a better and more professional discussion.

In addition, the placement of other developers and employees should also make the distinction in whether a company is compliant or not or even moves beyond compliance. Comparing the impact and their choices to move forward proactively or not. Here knowledge, the culture and structure of the organisation affect the change method as well.

Future research can combine sense-making and decision-making processes. Understanding the gaps and changes between order and chaos will help build and use the information system in another way or a similar way. Knowledge, awareness, and communication are interlinked with sense-making activities. Future research should combine chain and end-user knowledge, such as funding, but buyers of the dwellings created on how to bring sustainability in a manner that is apprehensive and motivated other than financial, here optimising energy and other material choices should be incorporated. With monitoring of these long-term effects and long-term ambition and vision, documents can be brought forward early as arrangements, and other stakeholders can benefit from these decisions.

Conclusion

Q1 How can we, based on theory construct a conceptual framework for change management in private organisations like developers?

In real estate development, balancing top-down directives with bottom-up involvement from project teams is essential. Boonstra's approach suggests that both levels must work together, while Waddell emphasizes organisational learning through knowledge sharing and continuous improvement across projects. Middle managers, as described by Floyd & Lane, play a vital role in mediating between strategic goals and operational realities, ensuring that feedback loops keep the change process aligned and adaptable.

For private development organisations, this approach promotes flexibility by allowing senior management to set clear objectives while enabling project teams to adapt and innovate. Knowledge sharing and continuous learning across projects are essential to improving outcomes and fostering innovation. Middle managers are key in translating strategic aims into actionable steps and providing feedback to refine strategies.

By synthesizing these theories, real estate developers can more effectively implement change, ensuring it is supported by employees at all levels while adapting to market demands, sustainability goals, and regulatory changes. Assessments and evaluations show how to institutionalize the changes made. This integrated approach leads to long-term success in a dynamic and complex industry. Due to these points, a conceptualized change management process framework to show how to use and to pass the steps of the model. If successfully, it shows the new state of change management in the organisation.

Q2 What barriers and drivers contribute to change management in a developer organisation at the starting phase?

The primary factors driving BPD's transition to sustainable construction align with broader economic, institutional, and political influences outlined in the literature. These factors significantly impact the organisation's ability to innovate and adopt sustainable practices. Overcoming these obstacles and harnessing the associated catalysts is essential for successful strategy implementation and steering organisational change towards sustainability.

In comparison to the literature, specific key drivers are particularly impactful for BPD:

Economic Drivers: Despite initial concerns about costs, such as rising material prices, the potential for long-term savings through energy and resource efficiency provides a strong economic incentive for investing in sustainable solutions.

Institutional Drivers: Effective leadership that champions sustainability initiatives and fosters a culture of innovation and knowledge-sharing can drive internal adoption within the organisation.

Political Drivers: Evolving government regulations, building codes, and compliance requirements exert external pressures and offer incentives for BPD to prioritise sustainable construction practices.

On the other hand, the primary barriers faced by BPD are consistent with those identified in the literature:

Economic Barriers: The lack of financial incentives and mechanisms to offset higher costs for sustainable materials and technologies hinders long-term investments in sustainability.

Institutional Barriers: Knowledge gaps, inadequate training and awareness, cultural inertia, and the need for greater flexibility impede the effective integration of sustainable practices within the company.

Political Barriers: The absence of ambitious sustainability goals beyond minimum compliance, along with regulatory uncertainty, poses challenges in establishing a clear strategic direction.

To advance its sustainability agenda, BPD must address these economic, institutional, and political barriers while leveraging the corresponding drivers through strategic interventions such as financial

incentive programs, leadership development, knowledge management initiatives, and proactive engagement with policymakers. Implementing incentives for collaboration, technology, and knowledge transfer will be crucial.

Q3 What change strategies are integrated in the developer organisation and development projects in the implementation phase?

Analysing the desk research and findings of the interviews, answering q3 gives insight into the implications of organisational change. The barriers and drivers found have impact on which change strategies are chosen. Mostly similar to the barriers and drivers found in the change strategies and articles, all categories influence one another given that barriers and drivers are bound by factors generating or softening barriers in the process. Institutional and economic barriers have the most potential to be changed as this provides the strategy and vision of the organisation revealing the incentives needed towards achieving these goals. On the other hand, political factors are important but have small to no steering capabilities, incentivising collaboration on a benchmark and new norms and involving more departments instances can only influence this. Seeing how governments and municipalities often lack adequate measures, collaboration is needed, and governmental changes, can disrupt the emphasis on the market. Incentivising regulatory changes will help in forming an even ground for all market parties. Personal motivations for innovation are important with a proactive and incentivised culture, steps will be taken earlier on and more often. The variation of change strategies and implications means an organisation can use strategies on which level. Catching the essence of multiple models as well as the interview data, conceptualising the progress is done in five steps where from initiation to implementation the concept and strategies define the process and the assessments in the end.

The change strategies integrated within the developer organisation and its projects during the implementation phase combine rational, power, learning, and dialogue for innovation approaches. each serving a distinct role. Based on the findings from the case, strategies start from intrinsic motivation and the need for change towards a more centralized approach for the organisation on handling sustainability, however, on the project level decentralized focuses are important to see innovation and examples arise. Based on external research and the announcement of a new sustainability department based on experts in the market, combining strategies that were. Power strategies, involving authority and influence from senior management, support the centralisation of strategic objectives, particularly around sustainability goals. During implementation, senior management directs key initiatives, establishing a cohesive vision that aligns projects with organisational priorities. This hierarchical approach ensures consistent adherence to high-level goals while still allowing project teams some flexibility.

Learning and innovation strategies are applied at the project level to encourage adaptation and responsiveness. This decentralised approach promotes ongoing knowledge-sharing and cross-departmental collaboration, particularly on sustainability projects. Through these strategies, project teams are empowered to experiment, develop innovative solutions, and share insights, fostering a culture of continuous improvement and enabling the organisation to respond to evolving market demands. Establishing foundational methods for idea exchange and training is essential to empower and challenge every employee across the organisation, building a baseline of knowledge and engagement in the change process.

Q4 How does a private developer manage the integration of sustainable business and project development strategies in the assessment and evaluation phase?

Principles derived from findings and preliminary conclusions highlight three main elements: transparency, inclusiveness (which involves and motivates), and flexibility. These principles support better monitoring and readjustment of projects and management goals in the context of sustainability. Based on the interviews and expert meetings, the specific guideline and strategies can be applied in the assessment and evaluation phase.

Transparency and clear communication are essential for the organisation to maintain through clear reporting about sustainability efforts and progress. This openness ensures that all employees and stakeholders are informed, aligning everyone with the organisation's sustainability goals and ambitions. Regular updates and comprehensive reporting foster awareness and ensure that the impact of sustainable practices is visible across all levels.

Creating a sense of ownership among employees and management is critical to sustaining motivation. This inclusiveness involves all partners, helping them feel equally informed and engaged with the sustainability objectives. Encouraging participation fosters an innovative mindset and challenges teams to seek sustainable impacts. By involving all stakeholders, the organisation builds a committed and motivated culture that supports continuous progress. Flexibility in adopting new strategies and technologies is crucial. This adaptability allows the organisation to remain open to new insights and evolving sustainable practices within its structures, facilitating long-term innovation.

Based on expert findings, incentivising innovation enhances performance on KPIs by integrating a bonus system that rewards sustainable achievements. Setting ambitious but realistic goals (e.g., a 20% improvement in innovation) allows for steady progress. This focus on continuous improvement supports the achievement of sustainability goals and encourages creativity in project development.

Knowledge-sharing capabilities are essential for embedding sustainability within the organisation. Departments should regularly communicate their operations and share best practices, creating a culture of collaboration and continuous learning. An accessible and adjusted information stream enables all employees to engage, fostering ongoing improvements in sustainability.

Regular monitoring of project KPIs ensures that data is accumulated effectively. Tracking KPIs from the beginning to the end of each project enables better data-driven insights, allowing adjustments to be made based on real-time data. With sufficient data, management can steer projects toward improved outcomes and provide timely feedback. This ongoing assessment allows the organisation to balance short- and long-term sustainability goals with real-time insights.

A combination of hard and soft steering measures enables the organisation to foster a proactive and challenging work culture. Hard measures, such as KPIs, coupled with flexible management practices allow both long-term and short-term sustainability goals to be met, enhancing the organisation's adaptability. This approach increases sustainable impact by creating a work environment where the organisation can measure and track its progress. To reinforce sustainable practices, the organisation provides project guidance through workshops that incorporate elements such as the workshops "pressure cooker" exercises. Additionally, calculation models that incorporate social and sustainable impact assessments help teams understand the benefits and risks associated with sustainability in projects. These workshops and tools empower employees to engage more effectively with sustainable objectives. Sustainable strategies are evaluated on three levels—short-term, mid-term, and long-term—ensuring that adjustments reflect the immediate and future impacts of sustainable practices. These levels provide criteria for assessing effectiveness, which then inform recommendations for future actions.

Q5 How does validating the empirical findings assist in designing the guide plan to make a guide plan for organisational change.

In chapter 6 the explanation and examples for the guide are given. How the guide plan works and how the guide plan is built up is self-explanatory. The guide plan is formed to guide change through a set of

planned and unplanned steps that are divided into the five phases that initiate the implementation and of the change. With conditions to every phase, minimum requirements are considered as the output of the phase before also has its valuable information. By using the guide plan, based on the findings and documentation of the case, from the conditions, strategies are chosen and combined to help the implementation process. Aligning the levels in steering makes more explicit outcomes to the strategy implementation. This implementation must be measured to know the impact on sustainability and on the whole culture and structures of the organisation. By using a mixture of the strategies of Boonstra, interactive and proactive measures are taken towards a successful organisational change.

Main research question

Main research question answering the question of: How does a private real estate developer manage the implementation of organisational change strategies for sustainability impact?

Based on the sub-questions answered in the discussion, we can now provide a comprehensive answer to this main question. The identification of barriers and drivers has enabled a clearer understanding of the operations of a private real estate developer and area developer. Finding suitable change strategies allows for the operationalisation of the guiding plan.

Due to the nature of private real estate and area developers, the implementation of new change strategies often requires time to fully land within the organisation. Due to its private nature, it is found that due to risk management and returns on investments, change strategies are seen as risk, even though employees are eager to use new strategies. Although it is often seen as an extra, as mostly trends and actions by the managing board and management directives have been analysed, it is found that there are multiple factors impacting the scalability and efficiency of the impact of sustainability on this manner. On the basis of these factors, it is found that a positive and consequent cultural behaviour of employees regarding sustainability is that it is already integrated because of the many KPI's and phase documents where sustainability paragraph is a go/no go, hard restrictions Meaning that there are no shortcuts concerns.

The process cannot be rushed, unfreeze and move is slowing down to move and excel as finding a new state for institutionalising this change is found to be the freezing stage whereas changes are then fully integrated. If rushed, this could mean a loss of empathy and understanding. BPD freezes in this sense multiple strategies, it leads upon leadership of leading and managing function to adequately manage this process and create a cultural behavioural setting that incentivizes multiple employees to out of curiosity and their own motivation create and innovate new technologies or use new concepts that can be used. Here however management plays a role in incentivizing and handing adequate challenges and tools for developers and other employees to benefit and use it to their potential. Here as well, communication and flexibility and problem-solving capacities are necessary. To be aware and to generate more knowledge and a proactive attitude towards what companies say in being progressively in the market. Evaluating the processes and the innovation and external influences helps in better understand, communicate and steer towards more integral and progressive projects and area development. Where there is an inevitable loss of ambition, reassuring and preventing cost overruns by addressing ambitions early on helps in generating the sense of collaboration and knowledge for sustainable measures from the strategy that is integrated in the process.

Management must adopt a more proactive and collaborative role, integrating more closely with these processes. Interestingly as found from the expert meeting, hard steering is mostly less welcome, and a collaborative strategy mostly takes time but achieves results, alignment is needed. Incentivizing and challenging the employees in knowledge and difficulties of the context of the projects needs to sharpen their senses and cultural awareness towards integrating change strategies. By choosing an applicable strategy that enables and fits best on the scope of the change. Collaborative and future oriented as well

as a guided power strategy go hand in hand. Impact seen from a sustainable point of view is seen as one of the many points to be considered, this lack of awareness and knowledge, is not unreasonable, however, most EU and ESG policies that are written steer towards carbon-zero and energy-positive policies. From this perspective and the sustainable urban development goals as said in the beginning have most influences from a front row seat, meaning that the positioning of BPD in this matter and the partners that are steered operate on behalf or in collaboration with bpd must comply to the ambitions or at least share most ambitions as well. Finding common ground and in the process is important for future monitoring. Sustainable impact can therefore be considered as a result of all named above, the feedback from the progress and phase documents tells the story on how BPD make impact. Sustainable impact however also needs to see in how far bpd is ready for long term plans and. Setting 3-5 main goals to be achieved in the long term. Implementing, transparent and understandable documents for employees to fill in after projects will generate data to be assessed with KPI's and ultimately generate the answers that show sustainable impact on the built environment and have influences from both management and Projects as the feedback will adjust the impact a strategies implementation has on the projects, short term gains impacted by the change is necessary to incentivize as well as maintaining support. By using the guide plan together with findings of the organisation, as suitable change management will help the private developer to go beyond compliance towards the vision of the future.

Recommendation

Recommendations case

In short, BPD, one of the biggest developers of dwellings in the Netherlands, will have to work on making knowledge and awareness better accessible for all employees. All tools and strategies concerning sustainability are step in the right direction, especially if at least the 20-30% of innovative projects are achieved. Communication and collaboration on that front include all internal employees thinking and participating in workshops concerning sustainability in another way than used to be, and other interests and inter-collegial collaboration are expanded. Roadmaps and pilers are a start in grasping the full potential of sustainability that will soon become more than the standard. Choosing a combination of strategies in facilitating new action plans and actionable feasible solutions for sustainable impact is important. In this sense, BPD has to formulate a clear vision and ambitions for going in front of the early majority.

Recommendations practice.

Working together is challenging and vital for retrofitting the market, as private and public partners have similar barriers and drivers. Because this single case study focuses on BPD, generalisation and preliminary conclusions contribute to the result. As multiple developers find themselves at a similar crossroads in finding suitable ambitious, feasible business cases and sustainable visions, this research also applies to other large developers.

Recommendations for guide plan

Landing strategies and embedding the strategy into the departments takes time. With too many ambitions, or stacking of ambitions, where both external and internal parties have to deal with, it is important to know where strategies originate from and what problem they are in to solve as ambitions need to be weighed against each other for efficient and maximum results in the long run. Letting changes slowly integrate into the phases of the projects(structural) and the organisation's culture and giving time in project and management to understand and deal with the new changes helps in getting the right ambitions and strategies maximising the impact. Sense-making, in this sense, is an important aspect. Here, a delicate problem is that if the changes generate friction as they must, people tend to

react averse towards these changes. So, in that sense, prior knowledge of these changes does not affect their affections with change. Experiencing a worse state of being during and probably after the change will lead towards less flexibility and averseness to change as well.

Organisational managers need to manoeuvre through this embedded landscape of wishes and ambitions and let everybody be heard as change strategies impact the company and its sustainability, both internal and external (direct and indirect) emissions.

Recommendations for criteria of the principles and implementation for further research and implementation for the case combine change strategies on strategic, tactical and project levels as mostly, rigorous changes are not that realistic, changes in retrofitting and changing the current approach towards long-term ambitions.

- 1 Incentivize change, show how sustainability affordability can go hand in hand by exemplary. Furthermore, incentivise through a new integration of a bonus structure matched to KPIs as a reward, as monitoring will be 'real-time'.
- 2 Teach, coach and educate more to share knowledge, educate for the future and show how proactive leadership works through a series of Workshops. Another point is the experience sharing, experienced developers at BPD and external partners. Lots of experience and knowledge should be shared more as colleagues have a long work life at BPD, and there are fewer switches of functions outside of BPD > attracting employees to challenge and quickly gain experience. Here motivating and incentivizing is important.
- 3 Evaluate and provide feedback for assessments afterwards, though make short evaluations possible, as nuance in context, time, costs, and collaboration are essential to making + emissions, look for moments later on when the experiments or projects are already in use.
- 4 Communicate transparently and use explicit cross-department language to generate a basis of understanding to act on.
- 5 Adjustable flexibility in how proceedings are monitored and steered, clarity, and early flexible agreements on ambitions and sustainable changes help to get approval in the early stages. However, this must be mitigated with risk management, as early involvement could. Prevent the stacking of ambitions by giving clear instructions and slowing down processes to embed the changes made through the past at a basic level and in the language.
- 6 There has been a shift towards finding financial tools for sustainable solutions and social implications for area and building developments. Here, management (leadership and type of steering) is a mix of hard and soft steering for challenging the departments and incentivising bottom-up innovations. It shows more potential for long-term investment.
- 7 Broaden social piler for projects (how-to's) for happy and resilient community building> long-term investments for woningfonds) and employees, using potential and attracting younger colleagues, mix older experienced colleagues better with new or young colleagues for knowledge sharing.
- 8 ESG and Woningfonds managers must generate an impact matrix to better understand and measure impact by aligning the goals and ambitions and their KPIs for short- and long-term connections, quick wins, and long-term profitability on both economic, environmental and social aspects. Here multiple departments will work together.

- 9 Better department integration following the sustainability meetings and master classes, creating a digital piler embedded in the strategies. All managing support will have a say next to the sustainability expert's department on filling in and exercising more digitalisation. As departments mainly operate independently, the basic level will need more intuitive and integrated techniques for calculating, designing, and weighing decisions for sustainability.
- 10 As Sustainability, combining and highlighting collaboration and knowledge sharing with all data streams available internally and externally, better modelling and integration of components and chains, and centralising operations will also help monitor plans and area developments—digital operations manager.

Reflection

My interest in developing and sustainability interested me in how private parties involve and use sustainable strategies in engaging development projects. From previous endeavours, the housing crisis and implementing circularity have gotten my interest and as the building crisis and the 'Randstad' write their circularity plans, I realised that private developers might not work towards the same goals as the whole chain and municipalities, named stakeholders, and that a complete chain needs to collaborate and align interests. Here, financial, environmental, and social impact research has been carried out in niches or very wide topics such as investment, construction, sustainability, management, public instances and ESG.

Previous studies on transitioning, green strategies, and green investments in real estate developments suggested further research to gain insights into the particular stakeholders and their interpretation and positioning of future orientation. Here, the implications of private real estate developers' originations were primarily undelighted and caused interest. Here, I chose to use a single case study with a sustainability department, case interviews, and desk research with the idea that a model and recommendations would lead towards practical implications for private real estate developers. Building up a framework on change strategies and sustainability for future-proof developments shows and held enough interviews on this part of the organisation's processes to conclude the most critical stakeholders in the process were interviewed. Researching the workings between the organisation's workings and primarily how the regional office and sustainability work together realises that other parts of the organisation are also embedded into the answers,

In addition to relevance; societal relevance is discussed as It provides information on a combination of topics, how developers organise and work with sustainability and how it is implemented, factors influencing these are government policies and play role from market factors as well, the urgency to change and find solution for long term emission-free and technological innovations combined with the need for the housing crisis across the Netherlands and in the EU will benefit from a better balance between financial and societal, social and environmental gains made when suitable and working innovations and organisations proactively contribute to the Paris agreements and go beyond. Like other private real estate developers public and other stakeholders involved in the whole process also need to learn and realistically plan the transition towards a better understanding of the situation now and the situation where stakeholders want to be in 2030- 2050. Monitoring and adding change strategies within the organisation and in collaboration will help as specific barriers can only be overcome with market and policy changes. Academically, this contributes, as stated, to the gap that is found between management and projects as the gap of the private developers is filled on the quest if barriers and drivers are similar and on how relations between chains, stakeholders, internally and externally and especially the sustainability is elaborated and implemented through the organisation. Furthermore, how

steering and change implementation for sustainable impact can be better adjusted based on interviewees and expert meetings to see whether the findings of literature, and the case, this is primarily for large organisations with 100+ employees and may be less applicable for smaller developers although. Results and conclusions might be interesting. This affects the types of developers and transferability.

Although the thesis proposal for p2 and p4 did not go as planned, executing, designing, and defining a more specific topic was difficult for me to do. Writing and making diagrams worked for me to gain more insight into how the case and the literature would work. As there is a lot to consider in this subject, my mentors Erwin and Paul have helped me to be more critical and focused and specify or widen the subjects. Furthermore, to ask the right questions and set your goals. They have guided me in this matter's theoretical and empirical implications. At BPD, Bram has given me a warm welcome at BPD, as this is a large organisation, and guidance on how to navigate and where to find the right employees. At BPD, a more practical and critical perspective made the most significant difference compared to abstract theoretical research. Therefore, the match is vital to show how analysing the organisation shows. Here, I was helped to find the right persons to interview to gain more insights into the workings of central and regional offices. As mentioned, the research for this graduating is entirely theoretical and has complex methods and theories, making it difficult to fully understand. With critical and practical perspectives added to all meetings, small presentations helped to size down and make it tangible and understandable for all employees, especially interviewees. Understanding that sustainability and the expert teams and related departments have progressed towards strategies and evolving KPIs. BPD has taken significant steps to generate and implement sustainable strategies. This has given many insights into how these strategies work and how the organisations try to form the basis for transitions by teaching and showing/ supporting their regional offices in their development.

Through conducting research and getting to know how the organisation's structure works

The research is never finished, and sometimes, it takes weeks to fully understand specific dilemmas, the deeper layers behind decisions, and how different employees deal with today's challenges. Finishing every part of the research made it sometimes difficult to go toward the method entirely. As lots of diagrams and booklets full of notes still had to be processed or read for further implications as well. From barriers and drivers' findings to the analysis of interviewees and finding strategies used, there are constant shifts of focus on different subjects within change strategies and sustainability implications. I mostly enjoyed the motivation and the continuity of the organisation and the open arms to get the knowledge needed. Moving towards P2 and p4, the focus of this research was extensive, it was essential to synthesize the data which on time could be hard. Using BPD as the graduating company for the case made it easier to get to all information needed for this research. Most things are group work and in collaboration, this thesis can be seen as a collaboration as well with BPD. Overall, it has been a difficult and mostly joyful time.

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Appendix 1

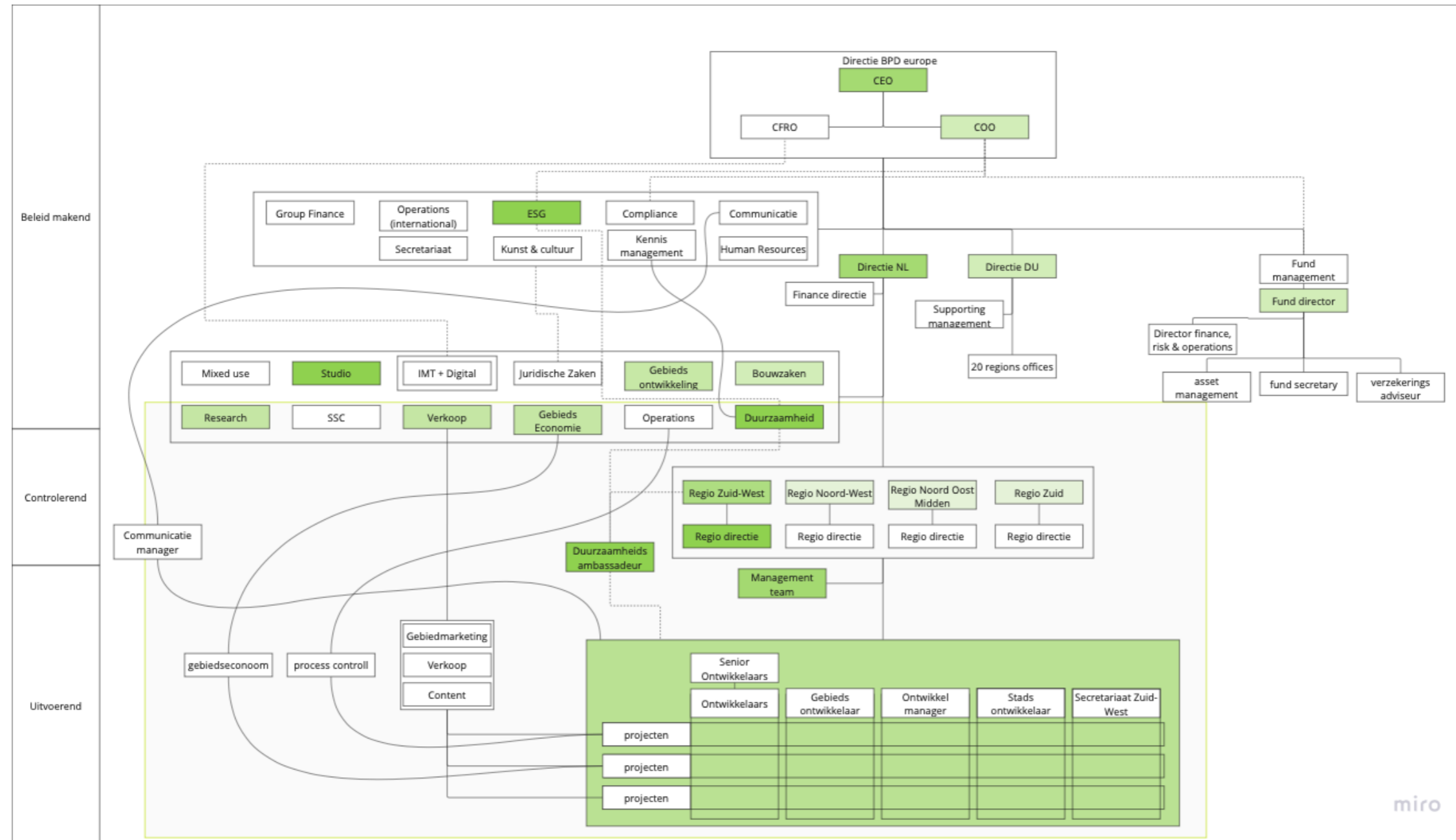


Figure 1: Organisation structure (own image)

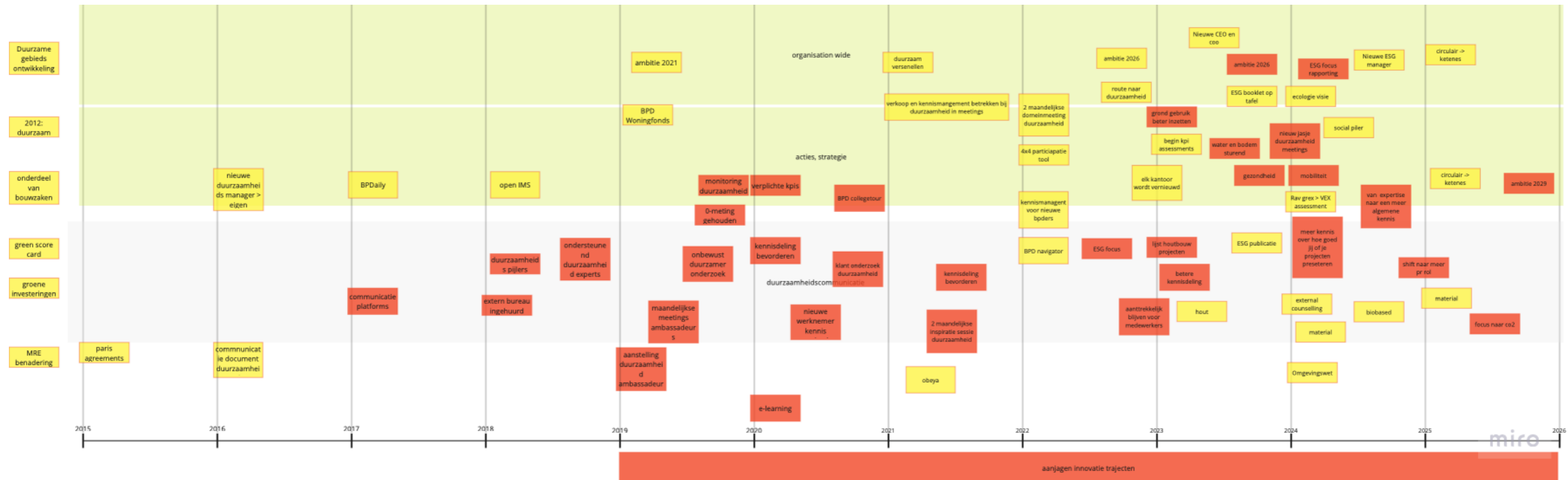


Figure 2: timeline of actions on different levels of the organisation (own image).

interview barrier	direct	indirect	overcome	interview driver:	direct	indirect	exploit
expensive materials		x	search alternatives	knowledge sharing regional offices	x		set up meetings, and workshops, external communication
net congestion		x	search for innovations/solutions	Intrinsic curiosity/motivation	x		incentivize change
easy solutions	x		long term thinking, no quick fixes	potential of employees	x		social pillar needs to expand
collaboration for innovation	x		more knowledge sharing on innovations	social themes	x		social pillar needs to expand
knowledge sharing	x		communications, workshops	communications of innovations and feedback	x		More feedback moments, or failed projects sessions
transparency	x		clear communication on ambitions and goals to achieve	feedback moments in process/ afterwards.	x		More feedback moments, or failed projects sessions
social program	x		trendsetting, change is needed to be shown	emerge colleagues, raise awareness	x		show feasible sustainability implications
isolation > islands of departments	x		more integration and knowledge sharing on how to work with colleagues	sustainable ambassadors	x	x	more proactive at the office and in projects
flexibility	x		not everything must be a hard sturdy agreement	guidelines	x		incentivize
no hard rules		x	set up goals and steer hard sometimes	tools to work with, handvatten	x		clear tools
partners		x	set ground rules and ambitions for partner selection	incentivise innovations	x	x	innovation fund BPD, investors agreements
sustainability not nr one	x		search for most efficient ways to not forget sustainability	hard steering	x		show minimums and the goals
municipalities own governances, or lack of		x	share knowledge or help them achieve that knowledge	aware of ambitions	x		sessions and new long term goals
money incentives(customers)		x	search for ways to make sustainability attractive for buyers	motivate people to find information or exper	x		Incentives fund for innovation per project (20% or higher)
public vs private		x	find balance in what is minimum for bpd and municipalities	bottom up > motivate, intrinsic or show	x		align interests and work in a proactive culture
front end initiatives	x		more ambition settings at the beginnings, and do not forget sustainability pilers.	motivate customers	x		emerge them, show facts and incentives for sustainable housing
changed profession		x	find ways to stay with thime and trends, knowledge creation	same docuemnts for policy to fill in	x		all departmens need to have a baselevel of filling in forms
age	x		share knowledge or help them achieve that knowledge	exploit strong pilers	x	x	use to catch up to the undefined pilers
clashing ambitions	x		find balance and set minimum for what must be achieved	eu taxes	x		use and set guidlines on how to avoid taxes
awareness	x		intrinsic motivation and more knowledge is needed	eu esg		x	comply or even better
decentralised ambitions	x		centralize partly, find balance in what leave for bottom up approach and motivation	esg management	x		find transparent and overarching vision to work out
communication, where to begin knowledges	x		set up ground meetings for certain subjects and trends, lunchmeetings etc.	focus on employees	x		social pillar work out
lack of knowledge materials	x		partners, go to events on material.	ancoring ambitions to set base	x		set base of knowledge and use that to innovate and scale
lack of long term vision	x		more set towards 2050	power of aq, data management tools	x		better fit for all employee usage in every area
long to short term translations	x		more set towards 2050	proactive sustainability	x		example projects from bpd
no evaluations/ feedback on projects	x		reserve timeslots for feedback				
sales: consumer is not are, biases exist	x		try to emerse them into sustainability, and incentives				
financial motivation for sustainability		x	incentives laid out				
customers miss the sustainable facts, not interested		x	give facts on sustainability, if it works in sales,				
more visible/tangible sustainability	x		proactively, set transpaarnat goals for long term				
common language in communications	x		mor integration of departments and employees to know workstyles				
missing base line knowledge to some extend	x		hard steering on this baseline				
pile of information -> neede	x		data management tools				
consequent commitments	x	x	hold on low motivation				
lack of proper integration	x		find common ground and align from there				

Figure 3: Barriers and drivers involvement (own work)

f-Ambition Gr=77	f-Awareness Gr=76	f-behaviour Gr=19	f-boundaries job Gr=24	f-Challenges Gr=41	f-Change Gr=23	f-Commitment Gr=14	f-Communicate Gr=57	f-Impact Gr=27	f-Implementation Gr=23	f-information Gr=18	f-Intrinsic motivation Gr=35	f-Knowledge sharing Gr=44	f-Projects Gr=23	f-Responsibilities Gr=21	f-Sustainability Gr=42	f-top-down Gr=23
f-Ambassador Gr=14	f-Ambition Gr=77	f-Awareness Gr=76	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77	f-Awareness Gr=76	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77	f-Ambition Gr=77
f-Awareness Gr=76	f-behaviour Gr=19		f-Communicate Gr=57	f-Awareness Gr=76	f-Awareness Gr=76	f-Communicate Gr=57	f-Awareness Gr=76	f-Awareness Gr=76	f-Awareness Gr=76	f-Knowledge sharing Gr=44		f-Awareness Gr=76			f-Communicate Gr=57	
f-Challenges Gr=41	f-boundaries job Gr=24			f-Change Gr=23	f-Challenges Gr=41		f-boundaries job Gr=24	f-Impact Gr=27				f-Challenges Gr=41				
f-boundaries job Gr=24	f-Challenges Gr=41			f-Communicate Gr=57			f-Challenges Gr=41					f-Communicate Gr=57				
f-Change Gr=23	f-Change Gr=23			f-Knowledge sharing Gr=44			f-Commitment Gr=14					f-knowledge creation Gr=18				
f-Commitment Gr=14	f-Communicate Gr=57						f-Knowledge sharing Gr=44									
f-Communicate Gr=57	f-Implementation Gr=23						f-Sustainability Gr=42									
f-Impact Gr=27	f-Knowledge sharing Gr=44															
f-Implementation Gr=23																
f-Intrinsic motivation Gr=35																
f-knowledge creation Gr=18																
f-Knowledge sharing Gr=44																
f-Responsibilities Gr=21																
f-Sustainability Gr=42																
f-top-down Gr=23																

Figure 4 Codes for co occurrences

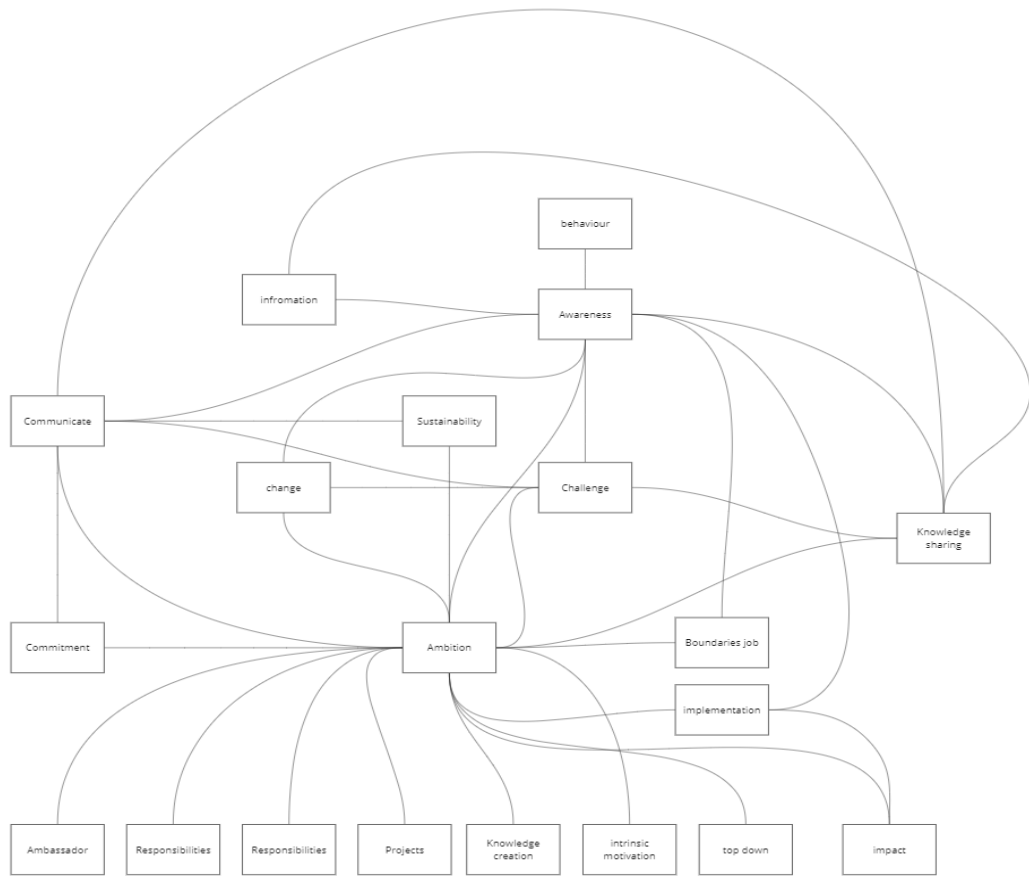


Figure 5: relation of codes (own work)

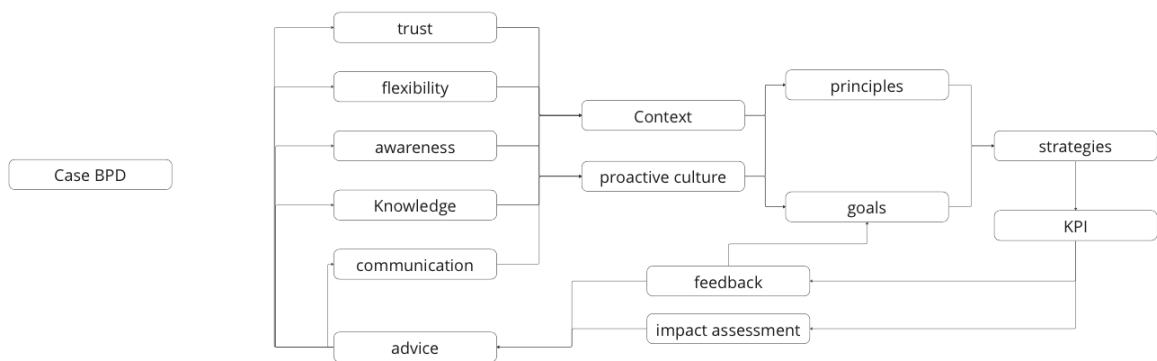


Figure 6: Findings documetns (own work)

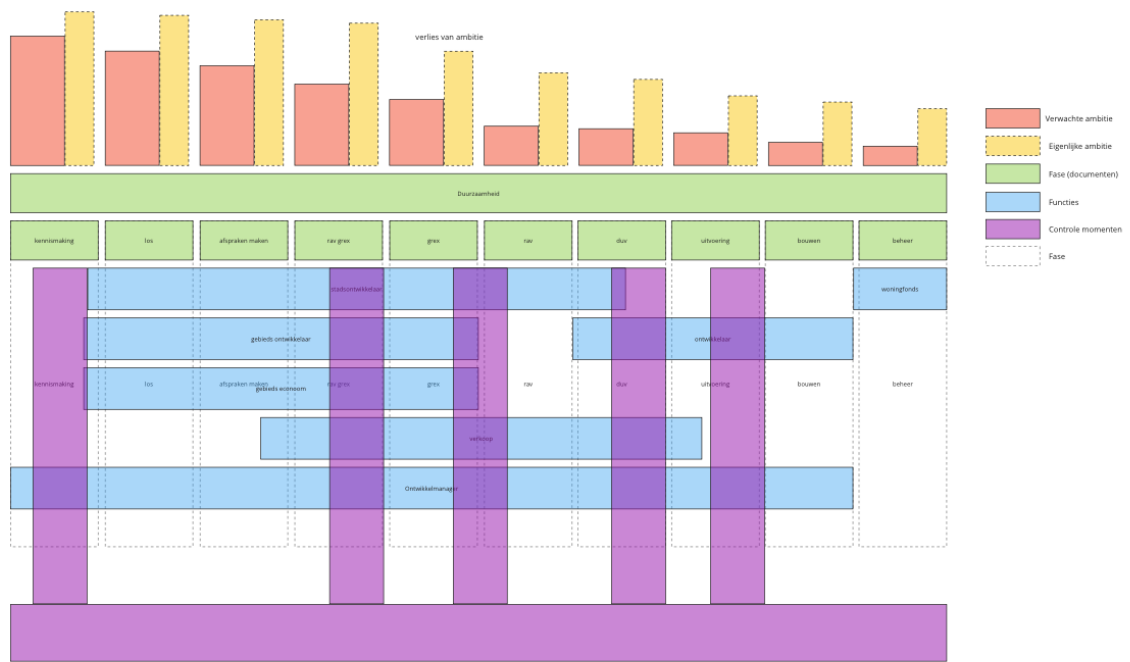


Figure 7: Ambition and phases (own work)

3th slag						
Communicatie en kennisdeling	Bewustwording en motivatie	Strategie en doelen	Implementatie en uitvoering	Organisatorisch	Duurzaamheid en innovatie	Projectmanagement
communicatie	awareness en meningvorming	ambitie om verder te kijken dan de lijst, wat kan er nog meer worden gehaald, buiten de kaders kleuren tbv het project	implementatie en integratie	cultuur en doelen	basis duurzaamheid	project gericht met hoger doel
communicatie document	bewust zijn van de keuzes en die kunnen uitdragen, hoeft niet van top	doelen stellen en uitvoeren	experimenteren	cultuur en houding collega's, prioriteiten	basis stellen duurzaamheid	vroeg in het proces
communicatie en samenwerking	bewustwording	doelen uitwerken	experimenten	organisatorisch inzetten op motivatie op alle niveaus	duurzame expressie	evaluaties
communicatie in voortraject	bewustwording communiceren	prioriteiten stellen	evaluatie: kan workshop zijn	verantwoordelijkheden toewijzen	opties voor duurzaam	goed te traceren
communicatie intern en extern	bewustwording en communicatie van de ontwikkelingen	prioriteiten stellen ambities	evaluaties	wergroepen opzetten op thema	ruimte voor innovatie	duidelijke terugkoppeling
communicatie van urgentie	impact en bewustwording	strategisch	risicobeperking	bureaucratisch proces		feedback op meerdere momenten
communicatiekansten	meer bewustzijn	marktonderzoek doen	proactief veranderen			
communiceer	urgentie en awareness	tijd voor veranderen systeem	proactief verhaal communiceren			
communiceer duidelijk	urgentie communiceren					
communiceer bewust in proces	motiveren					
communiceer kennis	motivatie vast houden					
communiceer verantwoordelijkheid delen	personal motivation and curiosity/awareness					
kennis delen						
kennis > implementeer						
kennisdelen en feedback loop belang						
interne samenwerking						
externe communicatie, samenwerken						
externe opdrachten, uitdragen values						
feedback en monitoring						
feedback terugkoppelen beter						
vindbaarheid communicatie						
iteration on the 3th slag						
1. Communicatie en kennisdeling	2. Bewustwording en motivatie	3. Strategie en doelen	4. Implementatie en uitvoering	5. Organisatorische aspecten	6. Duurzaamheid en innovatie	7. Projectmanagement
Communicatie (intern en extern)	Bewustwording creëren	Ambitie formuleren en uitdragen	Consequent handelen	Leiderschap (top-down vs. bottom-up)	Basis duurzaamheid vaststellen	Vroege betrokkenheid in projecten
Kennisdeling en -management	Urgentie communiceren	Doelen stellen en uitwerken	Experimenteren en leren	Verantwoordelijkheden toewijzen	Ruimte voor innovatie	Evaluaties uitvoeren
Transparantie	Motiveren van medewerkers	Prioriteiten bepalen	Stapsgewijze implementatie	Wergroepen opzetten	Buiten kaders denken	Risicobeperkingen
Feedback en monitoring	Ambassadeurs betrekken	Toekomstbestendig plannen	Flexibiliteit in uitvoering	Procedures optimaliseren	Sociale aspecten meenemen	Besluitvorming verbeteren
Samenwerking (intern en met partners)	Cultuurverandering uitdragen	Marktonderzoek en trendwatching	Proactief en reactief handelen	Integraal werken	Wetgeving volgen	Standaarden en kaders opstellen
Vindbaarheid van informatie						

Figure 7: Iteration on the interviews(own work)

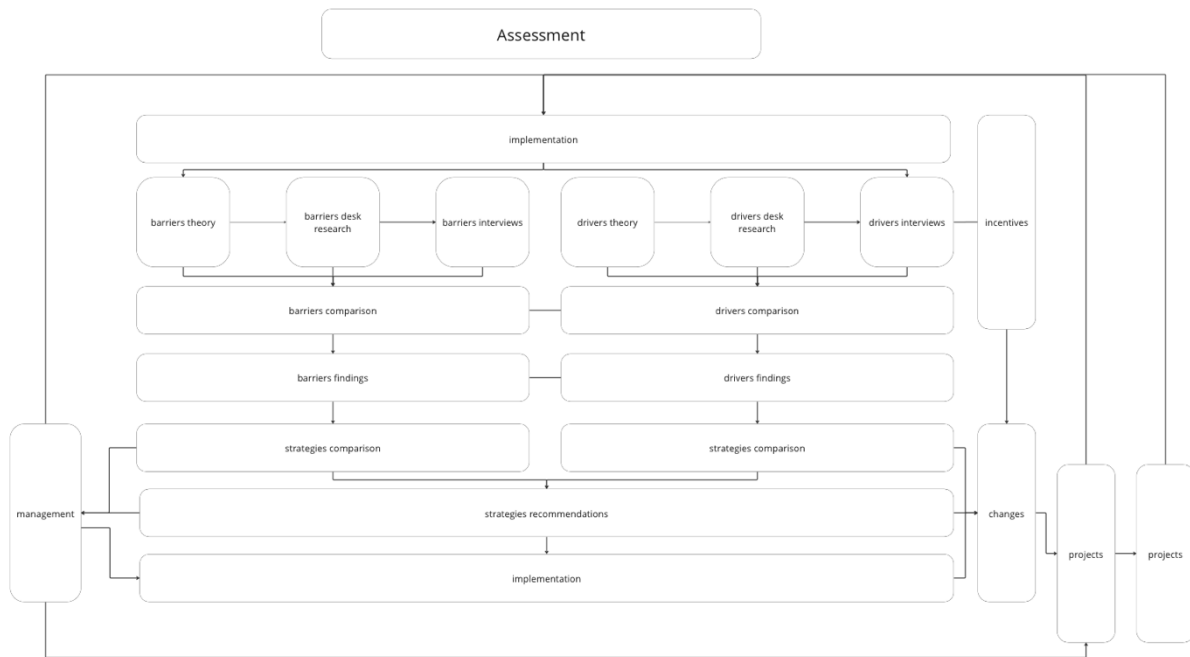


Figure 8: Assessments of barriers and drivers diverted into recommendations for strategy assessment.

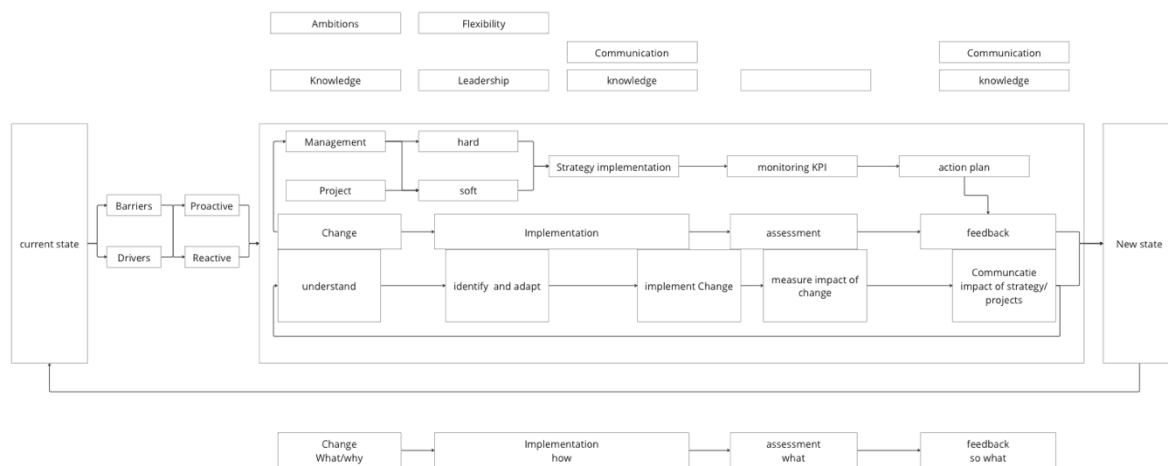


Figure 9: Combining change strategies and Assessment tool forming

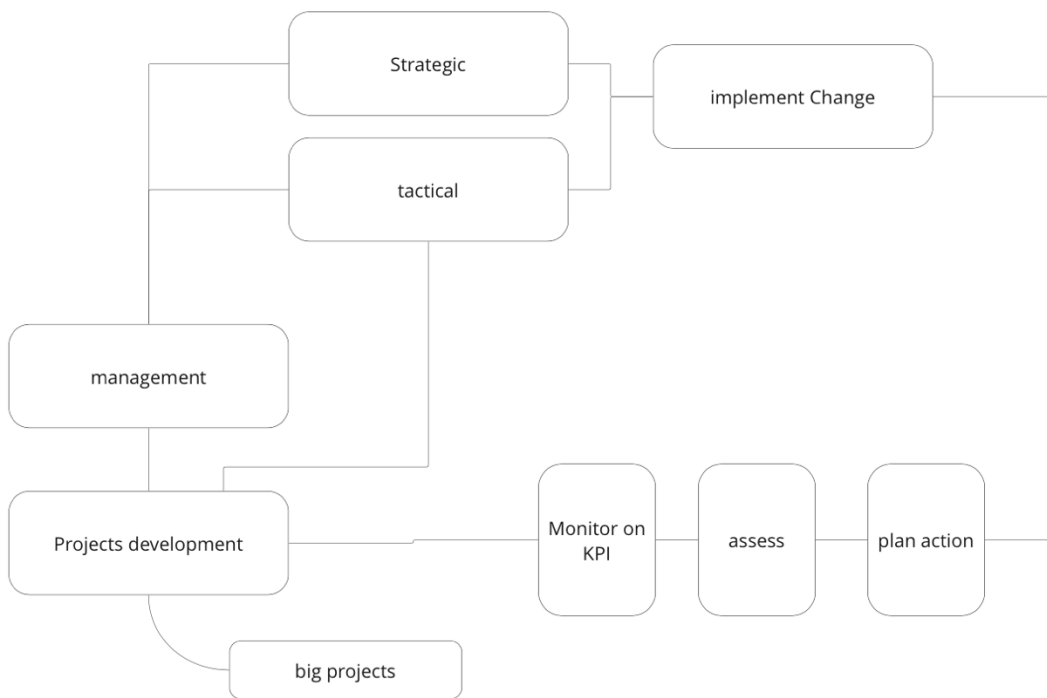


Figure 10: Ideal form of assessment and implementation around projects and management (own work)

Appendix 2

Interview question (Dutch)

Persoonlijk

1. Kunt u mij vertellen wat u precies doet bij BPD en wat je interesseert in deze rol + in het algemeen over duurzaamheid

2. Hoe zou u de integratie van duurzaamheid in BPD omschrijven

Hoe definieert u duurzaamheid en de integratie daarvan binnen BPD

3. Hoe beïnvloeden de nieuwe ambities u bij BPD? (Kan je voorbeelden noemen uit projecten)

4. Wat is volgens jou de rol van de ontwikkelaar binnen 2030 en wat zou je daar ten opzichte van de ambities van 26 en 21 aan toevoegen?

Barrières en drijfveren

1. Hoe zou je bepaalde obstakels omschrijven die BPD heeft (op weg naar net zero)?

2. Wat zou je omschrijven als drijfveren voor deze ambities, (opgesteld in ambitie 26^e)

3. Hoe zou je de afgelopen jaren in Barriers en drivers kunnen uitdrukken, kan je dat definiëren

Evt. vervolg vraag over project

4. Wat is volgens u de duurzame impact van duurzame stedelijke ontwikkeling?

5. Wat is uw mening over duurzaamheid en hoe ziet u veranderingen op basis daarvan?

6. Wat zijn stimulansen voor meer integratie van duurzaamheidsstrategieën?

Invloed, beheer en projecten

1. Wat is de betrokkenheid van het management bij BPD op het gebied van duurzaamheid en het bevorderen van een gezonde omgeving?

2. Hoe zou u de duurzame ambassadeurs omschrijven en is het ontwikkeld?

3. Wat vindt u van de implementatie van de duurzaamheidsambities in de praktijk?

4. Welke feedback kanalen zijn er voor projecten (terugkijkbijeenkomsten, kwartaalbijeenkomsten, inspiratiesessies) en hoe zou je de communicatie omschrijven?

5. *Wat voor invloed heeft de feedback die jij geeft op de strategieën die worden ingezet vanuit het management?*
6. *Hoe omschrijf je de ruimte tussen management en de projectteams wat toch altijd tussen visie en praktijk blijft en hoe probeert BPD dit in te vullen. Evt. kennisoverdracht,*

Ambities

1. *Welke trends zie je van invloed zijn op de ambities*
2. *Wat zou je veranderen in de organisatie?*
3. *Welke pijler is volgens jou de pijler die het meest onderbelicht is * Harde of zachte aanpak?*
4. *Is de ambitiestructuur eenvoudig te implementeren*
5. *Wat zijn de prestaties van je project ten opzichte van de gestelde KPI's?*
6. *Waarom zouden er KPI's gemonitord worden wanneer er geen duidelijke norm is?*
7. *wat is uw persoonlijke mening over de snelheid hoe nieuwe veranderingen worden opgepakt.*

Projecten – (door de vragen mengen als indien ontwikkelaars enzovoort)

Hoe is het gegaan met project naam invullen

Hoe zijn hier de ambities opgesteld

Waar liepen jullie tegen aan of waar ging het uitstekend

‘mijn de ambities, opgesteld ook daadwerkelijk gehouden?

Wat heeft ertoe geleid dat er een verandering i plaats moest vinden

Summaries of informal meetings

Informal meeting 1

Gain knowledge about sustainability is important to focus on a begin point for this research interestingly, sustainability is a support function where all regional offices can ask guidance and more. Sustainability has been developed in the past years to give direction to the challenges that are ahead.

Statements and goals were set out and formulated into KPI's to see whether processes can be assessed and monitored in a structural manner. Setting ambitions are important to be set in an early stage of the process.

Informal meeting 2

Ambassadors working as developer are important as they are the eyes for management in particularly the sustainable aspects of projects. To address it, Obeya meetings for projects will have a sustainable moment as well. Hard work is not everything and more has to be done before new regulations are the new norm, knowledge, willingness and curiosity are important factors that help in develop and stay in contact with innovations in and outside of the organisation. But has to come from their intrinsic motivation and overall view of the context of projects.

Informal meeting 3

Communication is primarily for participation and sharing articles of progress and new trends at bpd to rolled out and about the chances. Sustainability is a part of that but does not primarily fill the tasks for communicative goals, before every project or during, communication sets the bar for participation goals and has guidelines in how to guide the processes and how to discover what is needed and what is asked for.

Summaries of interviewees

Interviewee 1

The interview discusses the impact of changes in methods and technology on management and implementation, the need for sustainability and persistence, and the importance of innovation and flexibility. Sustainable developments such as CO2 reduction, circular concepts and the integration of engineering and nature are discussed. Increasing awareness and creating interest in sustainability are crucial, emphasizing intrinsic motivation and finding a balance between ambitious goals and realistic plans. Important aspects include transparency, fairness, knowledge sharing and participation to make progress in sustainable projects. Achieving sustainability requires a collective effort from all stakeholders involved, focusing more on the social sustainability.

Interviewee 2

The interviewee talks about sustainability at BPD, focusing on social aspects and barriers to integration. It calls for greater attention to human aspects, cooperation and the creation of sustainable habitats. BPD focuses on sustainability, innovation and community-building. There is discussion about internal communication, management involvement, and the importance of leadership in social sustainability. The impact of choices on sustainability is highlighted, as well as cooperation and awareness-raising. Possible involvement in workshops and facilitation manual will be discussed.

Interviewee 3

In interviewee is engaged in positioning the organisations processes and projects areas. Sustainability plays an important role but is not always decisive for consumers. The speaker emphasizes the importance of iterating the basis and a convincing story that matches the needs of the target audience and its future. New ambitions and challenges in the field of sustainability and project development are discussed and found difficult to incorporate towards consumers, The role of communication and employee involvement in sustainability decisions are important to consider as well. Implementing sustainability goals requires a mix of hard and soft management and synergy between different functions within a company.

Interviewee 4

The interviewee stresses the importance of making early agreements and frameworks in area development, with a focus on sustainability and ESG strategies. Specific projects and initiatives aimed at sustainable development, with attention to social interaction and environmental impact are discussed. The implementation of sustainability in organisations and the challenges to realise it are discussed, along with the growing pressure from financiers and society on sustainability. Local initiatives and individual actions play a role in promoting sustainability. Balancing financial costs and sustainability remains a challenge, as does integrating sustainability into everyday life and work, noting that there are lots of factors influencing the projects.

Interviewee 5

The interview discusses the impact of changes in methods and technology on management and implementation, the need for sustainability and persistence, and the importance of innovation and flexibility. This flexibility is needed as innovations come and go and a goal to work towards is most important. Sustainable developments such as CO2 reduction, circular concepts and the integration of engineering and nature are discussed. Increasing awareness and creating interest in sustainability are crucial, emphasizing intrinsic motivation and finding a balance between ambitious goals and realistic plans. Important aspects include transparency, fairness, knowledge sharing and participation to make progress in sustainable projects.

Interviewee 6

The interview discusses the role of sustainability in city developments where struggles and drivers ask for more flexibility. Sustainable goals and more collaboration help the organisation further in the organisational operations, it should focus on the energy transition and material use. Feedback and evaluating could be better integrated and used within BPD. There is an importance furthermore with a disciplined approach to reach our sustainable goals and with that, the emphasis should be more on how to achieve sustainability and implement it better inside the area developments. Here the focus is on innovation as well as collaboration. A new approach in how sustainability positions itself more proactively will help in a better implementation of team efforts for sustainability through knowledge sharing.

Interviewee 7

Interview discusses the role and changes relating to sustainability within a company, definitions and ambitions of sustainability, increased engagement of managers and employees, obstacles to sustainable construction, customer needs, regulation, intrinsic motivation, sustainability at regional level, management involvement, decision-making, feedback and evaluation of sustainable projects, improvement in sustainability policies within BPD, and the future of durability and awareness-raising. Here the need for coaching and repeating the story helps in disciplined projects and feedback.

Interviewee 8

Interviewee committed to sustainability by causing minimal damage to nature and adding value. Flexibility and anticipation of future needs are crucial in area development. BPD measures hard KPIs and soft aspects and evaluates them on the basis of resident experiences. Collaboration between developers, managers and policymakers can be improved for better transfer of information and ambitions. The company focuses on sustainability, transparency and innovation, keeping an eye on trends and outcomes.

Appendix 3

1. Communicatie en kennisdeling	
Vragen opstellen, proactief en handig zijn	De vragen moeten wel gevraagd worden en gedeelde interesse in wat je collega's doen. Verder is het ook een kwestie van de juiste vragen stellen, want ja bent ook zo bij het juiste bureau in 1-3 belletjes
Terughoudende communicatie	De vraag doen we voldoende en is het alleen de uitstraling die je geeft, die iets wat terughoudend is, dien we dan recht aan ons werk
Communiqueer	Niet pushen, dan komt er hard verweer
Communiqueer	Weten wie je moet bellen, data is er al
	Standaard plek op de agenda
	Maandelijks worden de statistieken gedeeld, score t.o.v. 2023
	Verschil tussen draagvlak in de organisatie door duidelijke nadruk en de daadwerkelijke uitvoering ervan in de projecten
	Zelf eisen stellen aan het beleid
	Ambities te technisch voor ons. Commerciële kant kan er minder mee, het verkoopt minder omdat het duurder is vaak.
Communicatiedocument	Begin duurzaamheid
Communicatie en samenwerking	Gezamenlijk en landelijk oppakken om stuk kennisontwikkeling op te pakken, niet alleen intern maar ook met bouwpartners kijken wat er kan, voornamelijk ook met marktonderzoek combineren
Communicatie in voortraject	Gebeurt veel maar kennis en inspiratie is nog niet bij iedereen in de organisatie, dat moet ook niet want niet iedereen heeft er even veel belang bij, zolang de basis maar hetzelfde is. Vanaf de voorkant al bepalend zijn
Communicatie intern en extern	Als er geen antwoord is voor je vragen dan is de vraagstelling ervoor op het gebied verkeerd gesteld en moet er eerder al antwoord voor gezocht
Communicatie van urgentie	Noodzaak om eisen en doelen te stellen en die te monitoren en te laten weten aan de rest van de
Communicatie kansen	Vertegenwoordig extern en intern ook de ambities en de kpis duidelijk
Communiqueer tekortkom	Missing link gevonden, omdat het vaak te laat ambities werden besproken, terwijl het aan het begin aan de voorkant al redelijk gecommuniceerd moet worden
Communiqueer duidelijk	Communicatie > ambitie duidelijk maken Mag ruzie komen om je ambities duidelijk te maken, zolang het maar goed is neergezet
Communiqueer bewust in proces	Bewustzijn creëren door het constant delen van de progressie
Communiqueer kennis	SharePoint for documenten zodat ontwikkelaars de e
Communiqueer verantwoordelijkheid	Communicatie verantwoordelijkheid, opleggen geeft ander soort drijfveer dan van Bottom up je eigen maken van de verandering implementatie. Mensen die het zelf gaan opzoeken en uitzoeken uit eigen motivatie en dan de voorbeelden delen.
Delen	Delen en onder de aandacht brengen d.m.v. film
	Publiceren van de duurzaamheid doelen en performance
	Successen delen en gebruiken in volgende projecten
Kennis delen	Bestanden en handvatten en kennisdocumenten delen via platform waar alle collega's bij kunnen,
Kennis > implementeer	Alleen delen van kennis documenten en vindbaarheid is niet alles, via andere

Kennisdelen en feedback loop belang	Belang voor transparantie en kennis van het gebied. En belang van het invullen van duurzaamheid voor feedback en goedkeuring
Interne samenwerking	Elke functie/ departement heeft zijn eigen kennis die gedeeld moet worden,
Externe communicatie, samenwerken	Meer naar buiten communiceren dat bpd het ook doet Communicatie extern, duidelijk welke rol duurzaamheid meeneemt, hoe informatie de organisatie in komt en wordt ondersteund Intercollegiaal doorgeven informatie en partijen om mee samen te werken
Externe opdrachten, uitdragen values	Motivatie bij het uitdragen is nodig Tenders en uitdagingen zorgen voor meer actie
Feedback en monitoring	Uitvoeren en naleven van de monitoring en strategie is het tweede na het toepassen en of er wat met de feedback gedaan wordt, moet eerlijk over gecommuniceerd worden Het is meer dan boxjes aftikken, vooral als ze in elkaar vloeien
Feedback terugkoppelen beter	Niet alles hoeft teruggekoppeld te worden, de belangrijke dingen op de punten moeten wel gezien worden
Vindbaarheid communicatie	
Communiceer en gebruik het systeem	Laat de ambities en standaarden die nu worden gehanteerd voor je werken, niet de andere kant op.
Expertise deling	Kennisdelen en expertise delen met bedrijven waar gezamenlijk een doel kan worden gesteld Belang van samen optrekken kennis deling en vergaring en goede ervaringen
Kennismanagement	Openstaan voor veranderingen, gaat lastiger naarmate je ouder wordt maar je eigen kennis is ook je obstakel in dit geval.
Behoud kennis	Kennis en ervaring van projectteams behouden en verder brengen.
Juiste terugkoppeling	Gebeurt veel maar kennis en inspiratie is nog niet bij iedereen in de organisatie, dat moet ook niet want niet iedereen heeft er even veel belang bij, zolang de basis maar hetzelfde is.
Samenwerking en kennisoverdracht met markt	Ambitie om het samen te doen, samen kennis op doen
Stapje terug, verankeren van kennis en communicatie	Genoeg ambities, hoe ga je het verankeren en goed communiceren naar elkaar en hoe zorg je dat alles erin zit, kom met een gezamenlijk plan hiervoor ook
Meer bottom up graag, en externe communicatie	Extern profileren is niet de grootste sterkte ne ambitie volgens mij, voornamelijk directieleden pakken dit op.
Communiceer bewust in proces	Bewustzijn creëren door het constant delen van de progressie
Ambassadeurs: betrek en communiceer ambities	Bewust van de rol en communicerende verbindende rol. Ambitie om iedereen te betrekken, ook heb je geen ambities
Externe communicatie	Meer naar buiten communiceren dat bpd het ook doet
Externe communicatie, samenwerken	Communicatie extern, duidelijk welke rol duurzaamheid meeneemt, hoe informatie de organisatie in komt en wordt ondersteund
Externe communicatie, samenwerken	Intercollegiaal doorgeven informatie en partijen om mee samen te werken
Externe opdrachten, uitdragen values	Tenders en uitdagingen zorgen voor meer actie
Samenwerkingen partners communicatie	Uitvragen standaardiseren voor duurzaamheid zodat dezelfde ambitie en juiste vragen gesteld worden. Niet te veel willekeur
Samenwerken	Bewust samen werken om informatie en experimenten aan te gaan, kansen om integraal beter te communiceren en verschillende dingen te proberen
Samenwerken	Meer samenwerking en werk distributie voor duurzaamheid
Samenwerken	Innovatieplan mrt bepaalde partijen samenwerken voor de 20%
Samenwerken en opschaling principes	Samenwerkingsstrategieën omdat met iedereen samengewerkt moet worden, kan je niet altijd even ambitieus zijn, strategie opschaling kan wel, innovatie is risicovol

Samenwerking en kennisoverdracht met markt	Ambitie om het samen te doen, samen kennis op doen
Samenwerking sturen kpi	Nieuwbouw heeft een minimumniveau aan duurzaamheid wettelijk erboven, richting partners sturen is soms lastig, wie kies je voor de uitvoering van de kpis ook als bouwer en adviseur, gemak of moeilijk
Samenwerken en keuzes maken	Snappen dat niet alles voorop kan lopen maar dat er minimaal wel naar de nieuwe ambities gewerkt moet worden met de partners en leveranciers, want nu bedrijf breed zijn er nog niet. Voorlopig projecten moeten meer worden en hoger worden ingezet. Op een grotere schaal.
Communicatie en meenemen in projecten	Meer live projecten in de organisatie of die van jezelf kunnen tracken en vooral op duurzame toepassingen.
2. Bewustwording en motivatie	
Awareness en meningsvorming	Iedereen heeft een mening en is in principe
Bewust zijn van de keuzes en die kunnen uitdragen, hoeft niet van top down te komen	Top down werkt niet helemaal, juiste uitleg is wel nodig anders worden de eisen te tegenstrijdig en kunnen wij niet uitleggen wat het doet en kan dat makkelijk geschrapt worden. Ook het verschil met een paar jaar geleden toen voor het eerst nul op de meter een ding werd, is nu voorzien maar die kennis moet ergens komen en de consument die moet daar ook mee bezig zijn anders verkoopt het niet
Bewustwording	Bewust van a tot z wat je impact is op een gebied en voor duurzaamheid
Bewustwording communiceren	Veel grote opgaves waarbij het algemene bewustzijn en ervaring nog moet gaan groeien
Bewustwording en communicatie van de ontwikkelingen	Duurzaamheid wordt veel aangeplakt en overall ingeplakt en dat is normaal zolang je het ook goed blijft integreren en blijft door ontwikkelen
Impact en bewustwording	Impact is naast de producten die je levert ook de cultuur en je eigen gedrag in de organisatie
Meer bewustzijn	Duurzaam denken meer brengen en hoe kan jij ervan leren
Urgentie en awareness	Positie in organisatie
Urgentie communiceren	Noodzaak om eisen en doelen te stellen en die te monitoren en te laten weten aan de rest van de
Pressie en awareness/ urgency	Positie in organisatie
Motivatie vasthouden	Contradicties, bottom up bijzonder maken maar die> uiteindelijk in de prijs reactie vindt het te risicovol > rug recht houden
personal motivation and curiosity/awareness	Je moet eerst de keuzes zelf maken en doorhebben
Bewust en expert	Inhoud eigen maken en zorgen dat er een helpdesk is die deze inhoud in huis heeft om het daar vandaan te halen
Bewustwording en communicatie van ambities	Kwartaal en jaarlijkse monitoring, brengen naar de regio's en daar dan over praten
Meegaan met de tijd	Werk verandert continue en komt zoveel meer bij, leuk houden ook door mee te gaan, open staan voor veranderingen
Coaching en bewustwording en urgentie door cijfers maandelijks	Live monitoring wel belangrijk, alleen niet per individu alleen als projecten en de totalen, verliezen zijn minder, voldoende bewustwording door maandelijks op d feiten gedrukt worden
Overtuigen en bewustwording	Meenemen van consument in duurzaamheid en ambities voor de woningen
Responsibilities en ambitie, bewustwording en experimenteren	Niet verantwoordelijkheid afschuiven maar veel beter de ambitie laten zien en uitvoeren op een bepaald gebied en echt experimenteren naar echte implementatie
Top down, bewustwording, communicatie	Positie in de organisatie gebruiken om aandacht te vragen voor dergelijke zaken
Urgentie en consequent sturen	Consequent zijn in harde sturingen, realistisch blijven maar wel in trend met de ambities dus wel terugsturen wat die niet haalt
Motiveer	Gebruik het verschil in meerwaarde creëren voor de mensen en speel daarop in. Vanuit elke collega gezien Verrast door de motivatie Eigen drijfveer is het belangrijkste, stimuleren van duurzaam gedrag> beter meenemen van organisatie op deze punten
Functie afhankelijk	Belang van de functie in hoeverre en waar duurzaamheid in moet worden gezet
Functie afhankelijk	Weinig te maken met duurzaamheid, maar wel veel ervan doorkrijgen, zitten in de teams
Functie specifiek belang en taken verdelen	Intrinsieke motivatie aanwakkeren door bepaalde taken bij bepaalde functies te leggen waar het belangrijkste is
Weinig kruisbestuiving	Te weinig meegenomen en gecommuniceerd
Wetgeving volgen	Belang van meegaan met Europese wetgeving omdat dat de basis gaat worden
Zelfstandigheid nodig	Zelfstandig werk uitvoeren
Zoeken van de gaten	Eigen motivatie en de gaten zien

3. Strategie en doelen	
Ambitie om verder te kijken dan de lijst, wat kan er nog meer worden gehaald, buiten de kaders kleuren t.b.v. het project	Te weinig bezig en te weinig gestuurd op zaken dat buiten de scope van functies vallen, meer bezig zijn met de criteria ook echt omarmen en naar beneden brengen of anders om. Wordt er ook daadwerkelijk gekeken naar de uitwerking en de uitrollende cijfers? Moet meer zijn dan het alleen afvinken maar dus ook het erbuiten kijken wat er geïmplementeerd kan worden
Doelen stellen en uitvoeren	Doelen stellen met de visie en een hoofddoel, aan de hand van het doel en de visie schrijf je een strategie die dan uitgevoerd kan worden\
Doelen uitwerken	Altijd een doel maar niet opgestuurd> ambitie maar geen uitwerking
Prioriteiten stellen	Aanwakkeren van motivatie om eerder in het proces te laten zien wat de ambities zijn en daar meer op sturen, is nog geen prioriteit
Prioriteiten stellen ambities	Ambities halen is well belangrijk als het wordt uitgedragen dat er ook op wordt gecontroleerd en in overleg evt. nog kan worden gekeken
Strategisch	Ambitie om duurzaamheid steeds de stip op de horizon te verleggen.
Marktonderzoek doen	Marktonderzoek doen, consequent dezelfde vragen stellen voor kennisontwikkeling en motivatie van keuzes en feedback daarop
Tijd voor veranderen systeem	Tegenstanders, hebben tijd nodig en communiceer hoe het systeem voor degenen voor hem kan werken.
Prioriteiten	Duurzaamheid is niet het eerste waar ontwikkeling mee begint, dat komt erbij want eerst wordt gekeken naar de aankomende jaren van de consument
Strategie	Bedrijfsvoering strategie > energie en cultuur en gezondheid
Strategie	Co2 verlagen strategie, duurzaam denken en doen introduceren
Doelen en verantwoording	Vanuit intrinsieke motivatie moet het de organisatie in gaan, of het nu proces of project gerelateerd is, het is onze verantwoordelijkheid om voor de lange termijn bezig te zijn. Benut ook andere drijfveren als het doel hetzelfde is.
Ambitie om verder te kijken dan de lijst, wat kan er nog meer worden gehaald, buiten de kaders kleuren t.b.v. het project	Te weinig bezig en te weinig gestuurd op zaken dat buiten de scope van functies vallen, meer bezig zijn met de criteria ook echt omarmen en naar beneden brengen of anders om. Wordt er ook daadwerkelijk gekeken naar de uitwerking en de uitrollende cijfers? Moet meer zijn dan het alleen afvinken maar dus ook het erbuiten kijken wat er geïmplementeerd kan worden
Early convinging	Aan de voorkant kunnen ambities verandering brengen, kennis delen is niet altijd gewenst dus dan moet je dat wel kunnen motiveren
Risicobeperking	Risico inperking om niet volledig op ene bepaalde strategie te gaan
Cultuur en doelen	Doelen stellen dat uitwerken voor de eetcultuur
4. Implementatie en uitvoering	
Thema's vatpakken en delen	Thema's vastpakken en verdelen per regio en niks houdt mensen tegen om dat thema in een speciaal project te doen, maar het gebeurt weinig
Implementatie en integratie	Gebruik van integratie d.m.v. ambassadeurs
Experimenteren	Openstaan voor innovatie, projecten aanwijzen voor experimenten moet wel echt meer gebeuren en communiceren
Experimenteren/ mark bewijzend	Moet bewezen zijn voordat het grootschalig wordt opgepakt, overtuig ook de rest voor het uitdragen
Experimenten	Alleen wanneer er ruimte is bezig zijn met het experimenteren, financieel zwaar maar dan wordt er wel (minder) geïnnoveerd. Dus je hoeft het niet te pushen.
Evaluatie: kan workshop zijn	Terugkijken en terug redeneren ho een plan daadwerkelijk is opgebouwd > analyse >
Evaluaties	Parel projecten te zien de potentie in die projecten begint bij collega's zelf tijd vrijmaken voor het bespreken van de kpis Beter te zoeken naar de terugkoppeling
Risicobeperking	Risico inperking om niet volledig op ene bepaalde strategie te gaan
Proactief veranderen	Klaar staan voor veranderingen en er al proactief mee bezig zijn
Proactief verhaal communiceren	Mensen aansporen en het bewaren van het verhaal van ambities en beter het nieuws
Belangen behartigen en uitdragen vs implementatie	Afweging van belangen,
Implementatie	Betere integratie van strategie in werkzaamheden

Stapsgewijs in gebruik nemen strategie vergt ook stapsgewijze implementatie in front practical standards and conditions Proactief en reactief zijn	Duurzaamheidsteam is vrij om wat te bedenken maar zodra het is goedgekeurd, worden de projecten ook verdiept m Met elkaar afspreken wat de praktische toevoeging wordt en daar dan standaardisatie proactief brengen, aan de voorkant bepalen Projecten aanwijzen en een structuur opwerpen waaraan wij dan een project aan kunnen hangen voor een leuk experiment, dan meer samenwerking en sturing met duurzaamheid. Proactief in duurzaamheid maar reactief in de projecten
5. Organisatorische aspecten	
Organisatorisch	ambitie van higher up vs bottom Ambitie om cultuur te doorbreken met visie en strategie Nog te veel top down in optiek, mag wat meer lijntjes zijn en meer verbinding tussen de verschillende lagen, cross bestuiving, haalbaarheid mag op meerder manieren worden beantwoord. Beter op je plek betekent beter beslissingen Ambitie waar je zelf de impact kan maken Ambities moeten geen haalbare doelen zijn maar meer om de beweging gaan ernaartoe Focus op verandering Grootte bpd is ook een obstakel maar ook een kracht, leveranciers moeten weten wat ze van ons aankunnen. Verschil tussen ondergrens en innovatief bezig zijn. Eerder in het proces me bezig zijn creëert ook betere bewustzijn Missing links vinden en wegwerken Trend aan de voorkant, mensen meenemen met deze trends en ook met kennismanagement beter de processen kan delen en in kaart brengen Verantwoordelijkheid om duurzaam te bouwen en toekomstbestendig. Niet de enige eis dus er is een nuance in elk project
Cultuur en doelen	Doelen stellen dat uitwerken voor de eetcultuur
Cultuur en houding collega's, prioriteiten	Motivatie hangt af van de collega zijn houding en interesses. Anderen bevinden het niet belangrijk en hebben andere prios
Organisatorisch inzetten op motivatie op alle niveaus	BPD naar een duurzame organisatie brengen op verschillende niveaus
Verantwoordelijkheden toewijzen	
Werkgroepen opzetten op thema	Werkgroepen voor elke pijler en die integreren in duurzaamheid, het is ook hoe je het neerzet in de verkoop en of je het tegen de organisatie kan uitzetten
Bureaucratisch proces	Veel niveaus om af te gaan.
Organisatorisch, kennis related keuzes maken	Mensen met kennis mogen beslissing nemen en verder delen over besluit.
Organisatorisch en motivatie van ambassadeurs	Ambitie is er al d.m.v. het aanklaarten door ambassadeurs > meer motiveren hoeft niet helemaal bij deze groep.
Organisatorisch en project gerelateerd, Uitdragen cultuurverandering	Gemak vs ambities, niet alleen met consument maar ook binnen organisatie Uitdragen > communicatie
Trust building	trust is important to learn with partners along the way
Responsible for sustainability	Verantwoordelijkheid om mensen beter duurzaamheids ambities in hun systematiek te laten integreren
Verantwoordelijkheid	Kennis delen is verantwoordelijkheid naar collega's en dan kan je ook natuurlijk vergelijken met jezelf
Responsible for sustainability	Verantwoordelijkheid om mensen beter duurzaamheid ambities in hun systematiek te laten integreren
Weinig kruisbestuiving	Te weinig meegenomen en gecommuniceerd
Wetgeving volgen	Belang van meegaan met Europese wetgeving omdat dat de basis gaat worden
Zelfstandigheid nodig	Zelfstandig werk uitvoeren
Zoeken van de gaten	Eigen motivatie en de gaten zien
6. Duurzaamheid en innovatie	
Basis duurzaamheid	De basis verzorgen van duurzaamheid en dat laten motiveren voor het beter integreren van stappen in je project, dit kan planmatig maar ook procesmatig
Basis stellen duurzaamheid	Dezelfde taal en de taal aanleren en dat motiveren is belangrijk

Duurzame expressie	Nadrukkelijk duurzaam
Opties voor duurzaam	Alternatieven bieden
Ruimte voor innovatie	Ruimte creëren voor onderzoek en innovatie, maak de ambities uitvoerbaar
In basis goed	Duurzaamheid op globale praktische manier maar niet op detail niveau hier
Partner selectie en basiskennis en niveau	Basis communiceren naar partners maar, subjectief mag maar moet wel realistisch zijn in hoe je die basis kan bereiken en met welke partners
Standaard, basisniveau	Ondergrens stellen, specifiek per project aan het bekijken
Wetgeving volgen	Belang van meegaan met Europese wetgeving omdat dat de basis gaat worden
Basis	Gelijke basis is belangrijk, de motivatie daarboven gaat van de collega's zelf, maar ook deel duurzaamheid uiteindelijk
Basis stellen	Vinkjes zetten is een ding, het extra stapje is de volgende en dan is het niet minimaal of maximaal
Basis stellen	Minimale eisen aan duurzaamheid stellen
Flexibiliteit in toekomst bestendig bouwen	Flexibiliteit en aanpasbaarheid in de strategie inbouwen voor de toekomst
Focus	Voor uit kijkend, meer focus richting sociale duurzaamheid
Focus verleggen naar sociaal	Sociale pijler onderbelicht van duurzaamheid
Focus verleggen als dingen al staan	Woningen zijn al zo vaak ontworpen dat het niet bijzonder meer is, meer tijd voor participatie en duurzaamheid en contact met toekomstige bewoners
7. Projectmanagement	
Projectmanagement	Ambitie is voor de toekomstige koper en van nu de juiste plek te creëren, wat is er belangrijk aan
Project gericht met hoger doel	Impact op bestaande omgeving minimaliseren
Projectgericht	Als er geen antwoord is voor je vragen dan is de vraagstelling ervoor op het gebied verkeerdt gesteld en moet er eerder al antwoord voor gezocht
Vroeg in het proces	Beter te zoeken naar de terugkoppeling
Evaluaties	Parel projecten te zien de potentie in die projecten begint bij collega's zelf tijd vrijmaken voor het bespreken van de kpis Traceren info digitaal
Goed te traceren	
Duidelijke terugkoppeling	Feedback op projecten communiceren na 15 jaar terugkijken
Feedback op meerdere momenten	Ambitie is om woongeluk met mensen die in de gebieden passen, daar draagt duurzaamheid aan mee
Project early involvement of strategy communication	Vanaf de voorkant al bepalend zijn
Eisen stellen	Harde eisen aan ambities halen Wordt er voldoende aandacht besteed aan het echt Paris roef krijgen van de organisatie en waar de focus nu ligt, is dat de juiste? Drastische veranderingen zijn wel nodig
Focus en informatie terugkoppelen	Beleid volgen en proberen impact te verminderen
Gehoorzaam	Parel projecten te zien de potentie in die projecten begint bij collega's zelf tijd vrijmaken voor het bespreken van de kpis
Gelijk experimenteren en de take aways meenemen voor de kpis	Impact handelen in gemeentes vanwege milieu impact en schaarste
Gemeentes aansturen	Niet alles hoeft teruggekoppeld te worden, de belangrijke dingen op de punten moeten wel gezien worden
Juiste terugkoppeling	Meeste impact
Transparantie en duidelijk	Elke week doorzetten, begrijpen elkaar nog steeds niet op elk vlak maar staat toch vast in de bedrijfsvoering dus dat heeft tijd nodig dus een goede documentatie is nodig
Transparantie goede documentatie, tijd nodig	Co2 taks en esg regelgeving
Responsabiliteit and future impact	

Table 1 Categorisation of interview quotes distilled from interviews (own work).

