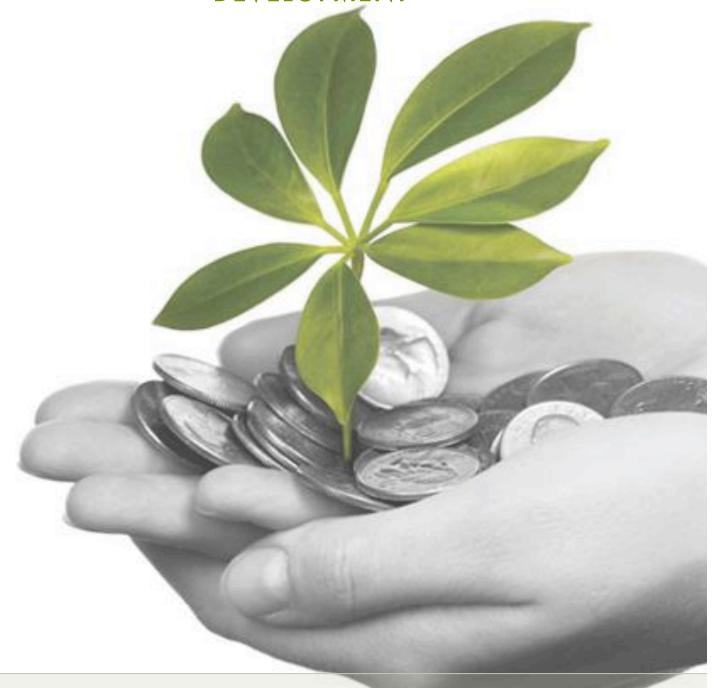
# PRIVATE DEVELOPERS' MOTIVATION FOR BREEAM COMMUNITIES

AND THE IMPLICATIONS FOR SUSTAINABLE URBAN DEVELOPMENT





## **AALBORG UNIVERSITY**

## STUDENT REPORT

Appendices: 14

Printed copies: 3

Project title:	Private developers' motivation for BREEAM Communities and the implications for sustainable urban development
Semester theme:	Master thesis
Study:	M.Sc. Urban Planning and Management, 4th Semester
Project period:	February 1st 2015 to June $3^{rd}$ 2015
Supervisor:	Matthew Cashmore
Author	
Eline Fredriksen	
Pages: 83	

#### **Abstract**

The negative effects of climate change and an unsustainable development have changed people's perception of the importance of sustainable development. In order to meet the challenges of the 21<sup>st</sup> century such as climate change and urbanisation, sustainable certification schemes have been developed to address social, economic and environmental sustainability. With the increased focus sustainable development has got in the media, this has provided a market for sustainable development and further sustainable certification schemes. With people demanding sustainable products, sustainability has become a megatrend for businesses. In light of this, the third party certification and assessment standard of BREEAM Communities has entered the Norwegian market, and a Norwegian translation of the scheme is underway. The scheme is an international standard for larger scale development projects.

With this development three private developers have been part of developing their project with this scheme, while the translation is being produced. This research project aims at getting a deeper understanding for private developers' motivation for developing their projects with BREEAM Communities. Further, the research project analyses and discusses private developers' motivation for BREEAM Communities, if there are issues in relation to their motivation for BREEAM Communities and the potential for the scheme to promote sustainable urban development in Norway.

Through conduction of three semi-structured interviews with the private developers of the pilot projects of BREEAM Communities and an online survey with private developers in Norway, an analysis has been made. From this analysis it is possible to see tendencies that private developer's major motivation for BREEAM Communities are linked to the marketing value the scheme can provide. The outcomes also show that the economic factor in relation to BREEAM Communities and sustainable development are seemingly governing in the planning process, in which may challenge BREEAM Communities' potential to promote sustainable urban development.

**Keywords:** BREEAM Communities, private developers, advantages, sustainable urban development, Norway

#### **Preface**

This project has been written during my last semester of the master program in Urban Planning and Management at Aalborg University. The project was written from the 1st of February 2015 till the 3rd of June 2015.

References in this research project are written as APA citation. A full reference list is available in the end of this research project.

In order to obtain the desired data for this project, three semi structured interviews were conducted with the project managers of Skien Brygge: Rune Breivik, the project manager of Marienlyst: Jon Kristian Lunke and the project manager of Flesland Business Park: Arild Bruvik. Data collection was also collected through an online survey with private developers in Norway. I would therefore like to thank all participants and interviewees for their contribution to this research project.

I also want to show my acknowledgment to Katharina Bramslev for helping me get in contact with private developers to answer my online survey.

Likewise I want to thank Endre Balchen, Kathrine Strøm and Jon Øyvind Reme for trailing the online survey questions before the survey was launched online.

At last, I would like to show my acknowledgement to my supervisor, Matthew Cashmore who has been a great support and supervised me during this semester.

Eline Fredriksen

## Table of content

1. Introduction	
1.1 Background to the research project:	9
1.2 Problem formulation and research questions	10
1.2.1 Research question one	
1.2.2 Research question two	
1.2.3 Research question three	11
1.3 Structure of this project	12
2. Methodology	14
2.1 Research design	
2.2 Qualitative case studies	
2.2.1 Case study	
2.3 Qualitative data	
2.3.1 Literary data	
2.3.2 Verbal data	
2.4 Quantitative data - online survey	
2.4.1 Sampling	
2.4.2 Size of the company	22
2.4.3 Survey questions	22
2.4.4 Analysis of the survey results	
2.5 Validity and reliability	
2.5.1 Validity	
2.5.2 Reliability	25
2.6 Ethical considerations	25
2.6.1 Anonymity	25
2.7 Reflection of the methodology approach	26
2.7.1 Used methods and data	
2.7.2 Case study as method - generalization	26
2.7.3 Literary data	26
2.7.4 Verbal data – semi- structured interviews	26
2.7.5 Online survey	27
2.7.6 Language	27
3. Literature review	20
3.1 Urban environmentalism – sustainable development	
3.1.1 Sustainable development in Norway	
3.2 Branding through sustainable development and sustainability	
3.2.1 Certification of sustainability	
3.2.2 Motivation for sustainable certification	
3.2.3 Economic growth and pilot/demonstration projects	
3.2.4 Values in Sustainable Development	
3.2.5 Limitation of sustainable certification	
3.3 Summary	

4. Overview of the survey results	45
4.1 Advantages of a sustainable certification	45
4.2 Decisive factors for choosing BREEAM Communities	48
4.3 Evaluation of criteria in BREEAM Communities	51
4.4 Willingness to do more than what is required by BREEAM Communities	52
4.5 Summary	53
5. Case study findings	56
5.1 The pilot projects of BREEAM Communities in Norway with private developers	56
5.1.1 Skien Brygge	56
5.1.2 Flesland Business Park	56
5.1.3 Marienlyst	57
5.2 The motivations for BREEAM Communities	57
5.2.1 Motivation for marketing value	57
5.2.2 Motivation to get easier saleable dwellings and achieve higher renting/selling prices	59
5.2.3. Importance of pre-empting legislative changes and getting a more predicable planning pr	ocess. 60
5.2.4 Summary	60
6. Discussion	62
6.1 Motivation for marketing value	
6.2 Motivation for higher selling/renting prices	
6.3 Motivation for a low cost/an economic benefit	
6.4 Motivation for being in advance with the legislative changes and getting a more predictable p	
process	65
6.5 Summary	66
7. Conclusion	68
8. Reflection	73
Reference list	75
List of figures	82
List of tables	82
List of graphs	83

# **INTRODUCTION**

This chapter will present the background of the research project. The chapter will also present the problem formulation and research questions



#### 1. Introduction

#### 1.1 Background to the research project:

Due to challenges that arose in the 20<sup>th</sup> century such as urbanization, and climate change, a number of assessment tools and certification schemes for sustainable development have been developed as a response in order to address these problems. With globalization, effects such as an increased international cooperation and competition have made it more important than ever for businesses to differentiate from their competitors. Companies are now competing not only with other companies nationally but internationally as well. People are getting more and more sustainable oriented due to the increased focus sustainable development has gotten in the media. This has provided a market for sustainable development. Furthermore it has provided a market for sustainable certification systems. Businesses are choosing sustainable development in order to corporate social responsibility and become attractive for their customers. Following this, today there exists a wide range of certification systems for sustainable larger scale development plans worldwide. Examples are BREEAM Communities (UK), LEED-ND (US), CASBEE-UD (Japan), Green Star Communities (Australia) and HQE (France) (Jensen, 2014).

The scheme of BREEAM Communities was developed in the UK in 2009, followed by an international version of the scheme, developed in 2012. Affected by the global tendencies, the interest of using international certification schemes for neighbourhoods supplementing the national building regulations, has reached Norway. Seeing a potential market for sustainable classified larger scale development plans, Norway has decided to take the usage of BREEAM Communities. Consequently the international version of BREEAM Communities is being translated to Norwegian conditions, making the scheme easier to use by developers. A Norwegian version of BREEAM Communities is planned to be finished the summer of 2015. Simultaneously with the work of the translation, there are three on-going projects of BREEAM Communities by private developers (Marienlyst, Flesland Business Park and Skien Brygge).

While waiting for the Norwegian version of BREEAM Communities to be finished, the developers are using the international version of the scheme. This requires translation of all the documentation to English in order to get a certification of the plan. Further the developers will have to pay an independent third party for reviewing the documentation. Sensing a higher total cost of the project, what the motivation behind such certification is can be questioned. Why are private developers interested in planning in a sustainable manner to get a certification of their plan and why are the developers of the three pilot projects of BREEAM Communities interested in being part of the pilot project even before the translation of BREEAM Communities is finished? Further I am concerned if private developers' motivation for maximum profit will have an influence of the scheme of BREEAM Communities to promote sustainable urban development in Norway.

#### 1.2 Problem formulation and research questions

With this background of the problem formulation, the problem formulation and research questions will be presented as well as elaborated on.

The problem formulation in which will be researched in this project is:

"What are the advantages and motivation for the private developers of the three first BREEAM Communities projects in Norway? And how might this affect the potential for this certification scheme to promote sustainable urban development in Norway?"

In order to answer the problem formulation the following research questions will be helpful in structuring the information provided and answering the problem formulation.

#### 1.2.1 Research question one

The first research question aims at get an understanding of the potential advantages that BREEAM Communities, and certification schemes more generally, can provide for private developers. In this matter the research question is part of creating the theoretical framework for this research project. The research question is as following:

"What are the potential advantages for private developers of using sustainability certification schemes in general, and BREEAM Communities in particular, for urban developments?"

Research question one will be answered through a literature review of relevant articles and documents about advantages of sustainable certification schemes and of BREEAM Communities.

#### 1.2.2 Research question two

Research question one will create a theoretical framework of this research project. For getting a further understanding of what private developers in Norway perceive being the most important advantages by a sustainable certified project and BREEAM Communities, the second research question will aim at investigate this.

The research question is as following:

"What do private developers in Norway perceive being the most important advantages of a sustainable certified project and BREEAM Communities?"

Research question two will be answered through an online survey conducted on private developers in Norway as well as through an analysis of semi structured interviews with the private developers of the three pilot projects of BREEAM Communities. These results will be compared to what the literature is claiming to be benefits of sustainable certification schemes and BREEAM Communities, gathered in research question one. In this matter I will investigate if some motivations are stronger than others in Norway. This will provide a deeper understanding of their motivation for using BREEAM Communities as a tool in planning.

#### 1.2.3 Research question three

With answers on research question one and two, providing a theoretical framework and analysis of what private developers in Norway perceive being the most important advantages for BREEAM Communities, research question three will create a more critical perspective of BREEAM Communities and the motivation behind. The research question will investigate if there are issues in relation to what private developers perceive being the most important advantages and motivation of using a sustainable certificated project and BREEAM Communities. The research question is as following:

"To what extent, and in what ways, might the motivations of private developers for using BREEAM Communities affect its potential to contribute to sustainable planning process in Norway?"

To answer this research question, data gathered throughout the analysis of the motivation and advantages for certification schemes and BREEAM Communities as well as the literature review will be used, discussing if private developers' motivations may affect BREEAM's potential to promote sustainable development.

In order to help me answer the problem formulation and the research questions I have used different data and methods. These will in the following chapter be presented and discussed.

#### 1.3 Structure of this project

The table below shows the structure of this report with a short presentation of the content of the chapters. (table 1.1)



**Table 1.1:** The structure of this report (own figure).

A description of the main content of each chapter is included on the cover of each chapter as well.

# **METHODOLOGY**

This chapter will present the methodological framework of this research project. The chapter will also present possible limitations with this research project.



### 2. Methodology

#### 2.1 Research design

The aim of this research project is to get a deeper understanding of what private developers in Norway perceive as being the most important advantages of a sustainable certified project and BREEAM Communities. Further I intend to investigate whether there are issues in connection to private developers' motivation for BREEAM Communities and the degree to which the scheme will promote sustainable urban development. (see figure 2.1).

In order to help me answering my concerns I have considered different types of methods and data and created a theoretical framework to help me reflect upon and answer the problem formulation. The study employs a triangulation, where I am looking at private developers' motivation for sustainable certification tools and BREEAM Communities in general from different viewpoints. In order to get a richer analysis, (Walliman, 2006), I am using a triangulation of methods involving both qualitative and quantitative data and research approaches. (Flyvbjerg, 2006)

By having multiple observers with various social characteristics, different perspectives can be obtained. Furthermore, multiple observers will also improve data reliability. (Walliman, 2006). With this framework approach, the methods chosen and data collected will contribute to answering the concerns raised in the problem formulation. The research design of this study is illustrated on figure 2.1.

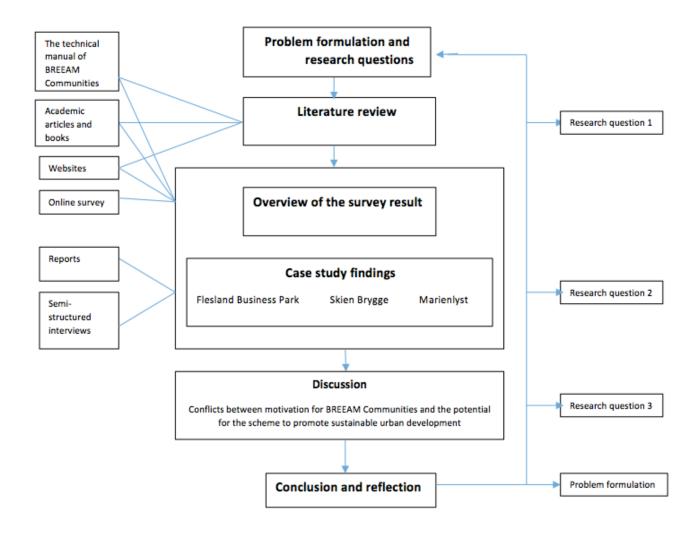


Figure 2.1: Research Design (own figure)

The main methods used in this study are illustrated on the left side of figure 2.1. On the right side, the illustration is showing where in the research project the different research questions will be answered.

#### 2.2 Qualitative case studies

This project uses a qualitative case research design with multiple case studies of three specific cases. The three cases investigated; the project Flesland Business Park, the project of Marienlyst and the project of Skien Brygge are the three first pilot projects of BREEAM Communities by private developers in Norway. Therefore these three were chosen as cases for this research project. All of these projects will be deeper explained in section 5.1.1, section 5.1.2 and section 5.1.3. Since BREEAM Communities was not implemented until two years ago research is limited to this period.

#### 2.2.1 Case study

The composition of the case studies has been designed with the target audience being academic audience. Consequently, my target audience has influenced and affected the structure of the thesis, where it has been necessary to create a theoretical framework through literature review and link these to the cross-case analysis.

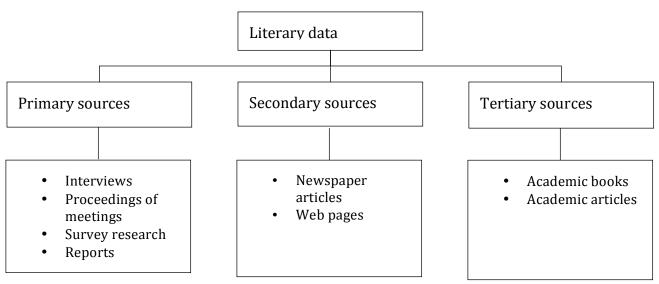
A case study can be analysed in different ways depending on the methods and data used in the study. Consequently the data and methods used will be influencing the final result of the study. It is therefore important in a case study to let the collected data be interpretable to the reader. The original data is therefore available in the appendix. Several outcomes can be analysed depending on how the data is interpreted. In this study I have used cross-case synthesis, where the findings from the three case studies have been compared to each other. Using cross-case synthesis in my analysis allows me to examine patterns in the findings from the three cases, which also strengthens the reliability of the study (Yin, 2009).

#### 2.3 Qualitative data

In this research project qualitative data in the form of literary and verbal data has been used. These methods will be further explained in the next sections.

#### 2.3.1 Literary data

Literary data is divided into three categories: primary sources, secondary sources and tertiary sources. This is illustrated in the figure 2.2. Primary sources are the original source and therefore often provide new information. The source is not providing any evaluations or interpretations of other documents and is therefore only providing one way of interpreting the knowledge. Primary sources used in this research project are in the form of interviews, proceedings of meetings, survey research, reports (the technical manual of BREEAM Communities and the BREEAM Communities' reports of the three pilot projects). Secondary sources are interpretations of primary sources. Secondary sources are therefore often composited of a discussion or commenting of primary sources. In this research project secondary sources are newspaper articles of BREEAM Communities and the pilot projects of BREEAM Communities as well as web pages. Tertiary sources are evaluation and interpretation of both primary and secondary sources. Tertiary literature being academic articles and academic books, have been used in this research project. These sources often provide an overview of the knowledge provided by the secondary sources.



**Figure 2.2:** An illustration of the literary data used in this research project

#### 2.3.1.1 Literature review

From the literary data used in this report, illustrated in figure 2.2, I conducted a literature review. A literature review is a reflection and summary of relevant literature to this study. In this project this is academic articles and books about urban environmentalism, sustainable development, branding through sustainable development and motivation for sustainable certification and outcomes. All of these take part in creating the theoretical framework of this research project. The theoretical framework provides knowledge of how and why sustainability has gotten an increased role and focus and why private developers find it motivating to develop in a sustainable manner through the certification scheme of BREEAM Communities. These sources are in the category of tertiary literature providing an overview of the knowledge.

#### 2.3.1.2 Document analysis

In this report document analysis has been used as a method. The documents used for this analysis are the reports of the pilot projects of BREEAM Communities as well as the technical manual of BREEAM Communities. All of the sources are the original sources. They are therefore under the category of primary sources as illustrated in figure 2.2. Using primary sources for this analysis made it possible to better understand the private developers' motivation for being part of the pilot program of BREEAM Communities, in which is the aim of this project.

#### 2.3.1.2.1 Introduction to the main documents used

The main documents analysed in this project will in the following sections be presented.

The main	Short description of the documents	Literary	
documents used		data	
The technical	The technical manual for BREEAM Communities is the manual	Primary	
manual of	describing how the scheme works and how to collect the credits in	source	
BREEAM	the planning process. The scheme describes what to do, at what time		
Communities	and who to involve in the planning process. The document is for		
	international use, and is the scheme used in Norway today before the		
	Norwegian version of BREEAM Communities is finished.		
The report from	This report was created from a workshop, summarizing a discussion	Primary	
the BREEAM	of the experiences using BREEAM Communities. The reports and	source	
Communities	inputs from these workshops were interesting and relevant to use in		
workshop for the	this research project.		
project of Flesland	The report of Flesland Business was used in order to get a broader		
Business Park.	perspective of the motivations and issues with BREEAM		
	Communities.		
	In this report, issues in relation to BREEAM Communities from the		
	planners' perspective were discussed. A SWOT analysis of BREEAM		
	Communities for the project was as well created in which made this		
	document relevant for an in-depth understanding of the planners'		
	motivation and thoughts of BREEAM Communities. This was useful to		
	get a more reflective view of the scheme.		
	The report is only available on COWI's portal, and are therefore		
	closed for public insight.		
The report from	A report on the planners' and developers' thoughts in relation to	Primary	
the BREEAM	BREEAM Communities was created for the project of Marienlyst	source	
Communities	during a workshop. This document shows the developers' ideas		
workshop for the	related to BREEAM Communities. This document was relevant for		
project of	this project as it provided a deeper understanding of the developers'		
Marienlyst.	motivation for BREEAM Communities, as well as showing what they		
	perceived being the disadvantages by the scheme. This knowledge		
	made it easier to understand the driving forces for being part of the		
	pilot program of BREEAM Communities. It also provided a more		
	critical view of the scheme.		
	The report is only available on COWI's portal, and are therefore		
	closed for public insight.		

Table 2.1: A description of the most relevant documents used in this research project

#### 2.3.2 Verbal data

In this research project verbal data has been used in the form of three semi-structured interviews with the project managers of the three pilot projects of BREEAM Communities. The conduction of these will be further explained in the following subsection.

#### 2.3.2.1 Semi-structured interviews

In order to get a deeper understanding of the private developers' motivation for getting a sustainable classified project and plan by the tool of BREEAM Communities, the method of semi-structured interviews was for this study. These interviews were conducted with the private developers of the three first BREEAM Communities projects in Norway; the project manager of Skien Brygge, the project manager of Marienlyst and the project manager of Flesland Business Park. The interviewees were selected based on their knowledge about the pilot projects and motivation for using BREEAM Communities and their position within the companies behind the developments, as illustrated in table 2.2. By having semi-structured interviews with the project manager, it helped me create a dialogue and ask follow-up questions. In this way unexpected information about the interviewees motivation potentially could be gathered. The interviewees will be further presented in the section 2.3.2.1.1.

Getting a deeper understanding of the private developers' motivation for BREEAM Communities will also make it possible to discuss issues in relation to their motivation for BREEAM Communities and the potential for the scheme of BREEAM Communities to promote sustainable urban development.

#### 2.3.2.1.1 Description of the interviews

Interviewee	Rune Breivik	Jon Kristian Lunke	Arild Bruvik
Private	ROM Eiendom	Ticon	Lindstow Eiendom
developer			
company			
BREEAM	Skien Brygge	Marienlyst	Flesland Business Park
Communities			
project			
Relevance to the	The project manager	The project manager	The Project manager of
project	of Skien Brygge	of Marienlyst	Flesland Business Park

Table 2.2: The interviewees

#### 2.3.2.1.2 Interview questions

The interviews were conducted through phone calls, where the interviewees were sent a description of the questions in advance. In this way the interviewees had the opportunity to reflect upon the questions and their answers before the interviews. I saw this as advantageous as the topics could, if necessary, be researched by the interviewees in advance. The interviews were based on nine questions. I divided the questions into themes were I started to ask questions about the interviewee and his background. This was done in order to make the interviewee more comfortable in answering the questions. By asking these questions I could

also get an idea if the interviewees background and experiences were linked to his motivation for sustainable urban development and BREEAM Communities.

I also asked questions about why the company found it important to plan for sustainable urban development, why they wanted to plan by the tool of BREEAM Communities and being part of the pilot program. Further I asked about what the company perceived being the most important advantages by a BREEAM Communities certification.. This information provided a deeper understanding of what private developers perceived being the most influential advantages and motivation for a BREEAM Communities certified project. By asking these questions it provided useful knowledge in order to answer research question two in this research project.

In order to get a more in depth understanding of the outcomes of the projects, I asked questions about what certification the project were aiming at getting. Further I asked how the private developers were evaluating the criteria in BREEAM Communities in order to reach the specific certification. I also asked questions about the outcome of the project and what tenants they were aiming at attracting through their projects. Further I asked the private developers about their ideas to the renting and selling prices for the dwellings. By asking these questions it provided more knowledge to get a more critical view of the motivation for BREEAM Communities and better understand if there were issues in relation to private developers motivation for BREEAM Communities and the potential for the scheme to promote sustainable urban development. This was used in order to answer research question three.

In the end of the interview I asked what the private developers perceived as being the advantages and challenges with BREEAM Communities. In this way it was easier to understand the major motivators for being part of the BREEAM Communities pilot program. Understanding the issues made it easier to get a more critical view of the scheme, contributing to answer research question three and inspiring further reflection.

Appendix A contains the interview questions.

On the 25<sup>th</sup> of May I sent two follow up question by email to the private developers. This was done in order to clarify some aspects while working with the analysis of private developers' motivation for sustainable certification schemes and BREEAM Communities.

In the first question I asked the developers if they had any experiences with BREEAM certificated buildings being easier to sell (higher demand) compared to buildings which did not have such a certification. This question was asked in order to better understand if there was connection between a motivation for achieving higher renting and selling prices and the demand for such buildings.

For the second question I asked the developers if they had any ideas whether or not it would be easier to sell dwellings within their BREEAM Communities certificated area. Also I asked if they would expect to gain higher selling and renting prices for these dwellings (eg. due to greater demand).

This question was asked in order to see if there was any aspiration for higher renting and selling prices for the project. This information was useful for the analysis of potential issues connected to private developers' motivation for BREEAM Communities and the schemes potential to promote sustainable urban development.

#### 2.4 Quantitative data - online survey

I wanted to get a broader understanding of what private developers perceived being the most important advantages by a sustainable certified project. By getting this information it provided a deeper understand of the motivation for using BREEAM Communities in planning. By having an online survey, the data could be compared to the literature of claimed advantages by sustainable certification schemes and BREEAM Communities. Thus getting an understanding for what private developers' in Norway perceived being the most important advantages by a sustainable certificated project and BREEAM Communities. This information was useful for answering research question two in this research project (see figure 2.1).

The survey was also useful in order to understand if there were issues with the scheme of BREEAM Communities, in which would provide useful information for answering research question three in this research project.

For the data collection I used the online survey Esurvey creator. By having an online survey it made it easier to analyse the data. It also made the process time efficient and consistent compared to personal surveys and emails. Due to the limitation of time for this project, I found this advantageous.

In order to avoid bias in the survey results, it is important that all respondents understand the questions in the right way. Imprecise and ambiguous questions may influence how a person responds to a question, as it can be perceived differently from person to person. In order to make sure that the questions were understood in the way they were aiming at, they were trialled on people with backgrounds in urban planning. This was beneficial because it helped make the planning terminology correct. Concretely, the questions were asked three people in the consulting firm COWI; Kathrine Strøm, Endre Balchen and Jon Øyvind Reme. Questions that were unclear or were understood or interpreted differently by the testers could in this way be changed.

#### 2.4.1 Sampling

The survey was sent in a "controlled" way, by emailing directly to private developers. This was done in order to avoid bias in the result, by preventing others than private developers answering the survey.

The email included a description of the aim of the research project. This email is attached in appendix B. The questions asked in the survey are attached in appendix C as well.

Emails were sent through an organization called BoBy (Bolig og byforeningen) to the 15 members that were private developers. In addition, I personally contacted six private developers by sending emails asking them if they would like to help me with the online survey.

Not only was it time consuming to get in touch with the private developers, it was also hard to find people interested in answering the survey. This challenged the data collection.

In total the response rate to the survey was 13 respondents. 23.1 % of the respondents (three) were bigger companies with more than 250 employees in the company. The same number of respondents was medium-sized companies with 50 to 250 employees. 53.8 % of the respondents (seven) were smaller companies with less than 50 employees. All respondents answered all questions, apart from question 2E. For this question one respondent did not answer.

#### 2.4.2 Size of the company

For the survey I decided to define the size of the company, and did so by looking at the numbers of employees in the company as illustrated in table 2.3.

Size of the company	Employees
Big	< 250
Medium	50- 250
Small	>50

**Table 2.3:** Definition of the size of the company (Europakommisjonen, 2006)

For member countries of the EU, the size of a company depends on the total annual income of the company, the balance of the company and the numbers of employees. I decided to exclude the two first factors in the online survey for two reasons: Firstly I was worried that these questions would have reduced the number of respondents. Some respondents may not know the answers to these two, and would have to look it up before answering. This could have resulted in a false answer or the possibility of respondents leaving the field blank. Secondly Norway does not have a definition for a small, medium and large business, due to the fact that Norway is not a member of the EU. (Nærings- og handelsdepartementet, 2012)

#### 2.4.3 Survey questions

I decided to ask six questions in total. These questions can be found in appendix C. From experience I have seen how people may not finish a survey if it takes too much time and is too long. The questions were for that reason carefully chosen and the layout was also designed in order to make the survey look shorter. For instance, for question two and three, I arranged the answers horizontal to minimize scrolling.

I started with asking a question about the size of the company. By asking such a question I could get an idea if there were any links in private developers' motivation for sustainable certification and the size of the company. Bigger companies may have more international competitors; consequently there might be a greater motivation for international sustainable certification schemes such as BREEAM Communities.

In the second question I asked how important private developers perceived the claimed advantages for sustainable certified projects, listed in the literature review in table 3.3. For this question they were asked to evaluate the advantages with the evaluation criteria listed in figure 2.3.

This information was useful to see if there was a mismatch with the literature and what private developers in Norway perceived being the most important advantages.

For the third question I asked what private developers perceived being the deciding factors and motivators for using BREEAM Communities in planning. The factors included are all issues that have been discussed as being both benefits and issues of the scheme. By including both factors it was easier to get an understanding on how private developers in Norway perceived the different advantages.

The two last questions asked in the survey were aiming at better understanding potential issues with private developers' motivation for BREEAM Communities and the potential for the scheme to promote sustainable urban development. These results were used as supplementing data for the analysis of the same question in a Norwegian scale. Subsequently the answers were used as supplementing data for the analysis and discussion in research question three, as illustrated in figure 2.1.

Since the criteria in BREEAM Communities have different number of credits measuring sustainability, I was interested in asking how the private developers evaluated these criterias. I was interested in getting a deeper understanding of the importance and role of economy in such an evaluation. In this matter I asked the private developers if the criteria that would be less expensive in relation to marketing value and less time consuming would be higher evaluated than the total quality of the project.

The last question I asked private developers was if there were circumstances in which they would consider going beyond the minimum requirements to gain BREEAM Communities certification. For this question I was interested to see if private developers would be willing to do more than what is required in BREEAM Communities and what gives credits through the scheme. I was also interested understanding if private developers would be willing to do things to increase the quality and sustainability of the final project, even though it was not covered by the scheme. This information was useful for the discussions in research question three.

#### 2.4.4 Analysis of the survey results

When evaluating the importance of the different advantages of sustainable certification schemes and BREEAM Communities (question two and three) I have used the weighting list as illustrated in figure 2.3.

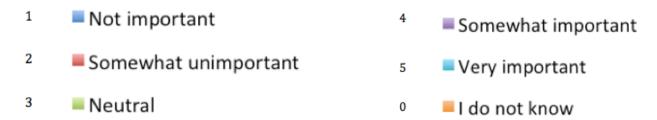


Figure 2.3: The evaluation factors with weighting

The respondents answering 'I do not know' were not included in the analysis, since the respondents did not know how he/she would evaluate the advantage.

Likewise I decided not to include the people answering 'I do not know' in the analysis of the data and in the presentation of the graphics for question number six. This decision was made due to the idea that the respondents with this answer do not know how he/she would have acted in such a situation. This answer is therefore difficult to interpret.

The results to all questions in the online survey are available in appendix D.

#### 2.5 Validity and reliability

Validity and reliability is important to include in a study in order to make the study and hypothesis more easily acceptable to the community, thus providing scientific considerations. The relationship between validity and reliability in a study is illustrated in figure 2.4. The validity of a study is divided into two categories: external validity and internal validity. The internal validity is about the structure of the study whereas the external validity is about how the results are examined.

In a study with high reliability a different researcher can do the same experiment under the same conditions and get the same results as in the original study.



Figure 2.4: Illustration of the connection between reliability and validity in a study. (Columbia CNMTL, N.D.)

The next sections will present the validity and reliability of this research project.

#### 2.5.1 Validity

In this research project I have used construct validity where multiple case studies have been used. Methods such as semi-structured interviews and an online survey have been employed as main data collection sources. By using different sources and combining them, it has been possible to create a more comprehensive picture of the motivation for private developers using sustainable certification schemes as tools in planning.

The internal validity of the study is composed by an online survey as well as three case studies. How these were structured are described under section 2.3.2.1: Semi-structured interview and section 2.5: Online survey. This enhances the internal validity of the study.

The research project has used three case studies, which strengthens the external validity of the study. Having more than one case study, and comparing the findings of three studies strengthens the degree of generalization. Thus it can be used to describe the more general motivation among private developers for using sustainable certification schemes. The findings from the multiple case studies have in this way been linked and compared to the theoretical framework and the online survey.

There are limitations with the external validity of this study. The study has a small sample, and one can therefore not be sure that the view is general. The study only shows a proportion of developers view. It might be that the proportion of people investigated in this research project accidentally is a group that is more involved in sustainable development. For my study I was

more interested in the internal validity. I wanted to get in depth results of the three cases investigated. Generalization of the findings should therefore be made with care based on the literature review used, research from this survey and the three cases investigated.

#### 2.5.2 Reliability

By investigating private developers motivation for sustainable certification schemes using a literature review, an online survey and three case studies, the degree in which the findings can be generalized is strengthened. Using different methods and data also strengthens the reliability of the study, providing more sources and data. Thus the information and data collected one place can be compared to the others, making it possible to compare the findings and data. In this way the findings of the study will become more robust and provide a higher degree of generalization (Yin, 2009).

One should however be careful generalizing the results of this study. The study is based on private developers in Norway's motivation for sustainable certification schemes and BREEAM Communities. One can therefore not conclude that all private developers will have the same motivation. When studying human behaviour, one should be careful to draw conclusions. Thus that all private developers are having the same motivations to sustainable development.

The study also shows that there are differences in the motivations for sustainable certification of private developers in Norway. There are some factors for sustainable certification that are perceived differently by the private developers. Also some of these factors are differing from the literature review. One should therefore be careful with generalization.

#### 2.6 Ethical considerations

In social research, ethical considerations should be taken into account since the study shows personal ideas. A lack of ethical consideration might lead to possible illegal actions. It might leak confidential business information or possibly show a company or business in a bad light. Social research can affect the participants legally and economically as well as affect the person's income and career. All of the participants made voluntary contributions to this research project. In this matter people were informed about what they were about to participate in. For the interviews I contacted the interviewee in advance and asked if I could interview them for this project. For the survey I contacted private developers by phone calls and emails, and asked them if they would like to help me with a survey (Neuman, 2010).

#### 2.6.1 Anonymity

Anonymity includes that the persons identity will not be revealed. For the survey all respondents are anonymous. The statistics are only used in order to show the results. I also considered making the respondents in the interviews anonymous. The three projects that were examined are the first three BREEAM Communities projects with private developers in Norway. For that reason it was problematic to determine how the interviewees could be kept anonymous. I therefore asked the respondents in advance for accept to record the interviews. (Neuman, 2010).

For personal quotes and meanings I have decided not to mention the developers names or the project they are involved in to ensure that unwanted information is spread out to the public.

#### 2.7 Reflection of the methodology approach

This section will reflect upon the methodology approaches used in this research project and present the limitations of this research project.

#### 2.7.1 Used methods and data

The methods and data that I have chosen to use may have an influence on the final outcome and results. Likewise, using other methods and data the outcome might have been different. I am also aware that working with specific cases I might get engaged in them, which might influence how the information gets analysed and communicated.

#### 2.7.2 Case study as method - generalization

By looking at human behaviour, there are issues in relation to generalization of the findings. Thus the motivation for sustainable certification schemes and BREEAM Communities may vary depending on the respondent's personal experiences, interests and ideas. The private developers' interests for sustainable development will depend on several factors. For example on how they are socially influenced by their surroundings and on the environment they are live and work in. Consequently if a company has sustainable visions, this may affect the respondents' personal motivation and interest for sustainable development. Therefore the motivation for BREEAM Communities may vary depending on who is answering, their knowledge and how they have been influenced by their surroundings. This is important to be aware of for a possible generalization of the study.

#### 2.7.3 Literary data

By using texts and documents it is important to keep in mind that these will be influenced by the time and the context in which they were written. For the primary sources, these may only show one perspective of the knowledge. In this way the information used is based on other people's findings and how they understood the knowledge. The time the texts are being read and the context in which they are read will also influence how they are interpreted. Knowing that the information will only show one person's idea of the knowledge, different sources and information has been employed in this study. By doing so, a weakness in one source can be reduced by a strength in another source, thus providing less bias to the study. This also strengthens the validity of the study.

#### 2.7.4 Verbal data – semi- structured interviews

The verbal data and information collected through the semi-structured interviews will depend on the time and context in which they were conducted. Since all the three case studies in this project are in the starting phase of the project, the knowledge of BREEAM Communities is also more limited. If the interviews were conducted later in the process, when the developers had more experiences with the scheme, the outcomes of the interviews may have been different. Thus their perception of the advantages and disadvantages by the scheme might have been different. For the generalization of the study and also the level of reliability, this issue is important to be aware of. Also the context of the interviews may have an influence on the

result. The interviews were conducted through phone call. By having a personal interview, it would have been possible to read the interviewees body language and also provide a greater relationship with the interviewees. This could have been useful for the analysis of the motivation for BREEAM Communities. However due to time limitations, this was not done. Being engaged in the interviews, the analysis of this study will be part of and affected by my understanding of the cases. If another person interpreted the results another outcome could

understanding of the cases. If another person interpreted the results another outcome could have been provided, depending on the person's knowledge and understanding of the information (Tobin and Fraser, n.d.).

#### 2.7.5 Online survey

As already mentioned in section 2.5.1, the survey was sent in a controlled ways to private developers. However, by launching the survey online I cannot guarantee that only private developers will respond. In order to avoid other than private actors to respond, I specified this in the introduction of the survey. However this can still be a bias in the results that is important to be aware of.

Another limitation by having an online survey is that the respond rates may be low. The online survey is voluntary and one can therefore not force people to answer it (Walliman, 2006).

By having an online survey it is important to keep in mind potential disadvantages with the method. When using online surveys the respondents cannot express themselves in the same way as they can through an interview. Neither do the respondents have the same possibility to come up with new unexpected information, which can be provided in an interview. In order to open up space for the respondents to express themselves and avoid biases in the results, a space for comments was included for each question in the survey. By doing so, the respondents could write if they had other answers or ideas to the questions. In addition they could comment on different ways to understand the questions asked.

#### 2.7.6 Language

The language in the interviews and in the survey was Norwegian. Therefore, when writing this research project, the information gathered had to be translated to English. In the work of translating meaningful information might have been lost or changed. In order to reduce the possibility of this happening I investigated the translations I was unsure of with others. in order to ensure that the information was translated and understood correctly.

This chapter has presented and reflected upon the applied methods and data for this research project. The following chapter will present the theoretical framework of this research project, which will, together with the overview of the survey results be used to answer research question one in this project.

## LITERATURE REVIEW

This chapter presents the theoretical framework behind this research project. It examines the viewpoints of different authors on how and why sustainability has gotten an increased role in future urban development and provided a market for sustainable certification schemes such as BREEAM Communities. It discusses why developers are motivated to use sustainable certification schemes for urban development and possible benefits by doing so. The chapter is aiming at answering research question one in this research project as illustrated in figure 2.1. Further the chapter discusses if there are issues connected to the motivation of developers for sustainable certification and the sustainable outcomes of the project. Finally the chapter discusses possible limitation of sustainable certification schemes and why developers might hesitate in using sustainable certification schemes in urban planning. This will provide useful information for the discussion chapter later in this research project.



#### 3. Literature review

#### 3.1 Urban environmentalism - sustainable development

Urban environmentalism has developed due to an increased awareness communicated through the media. This is a result of climate change and conferences being held about the subject communicating the importance of sustainable development (Brand & Thomas, 2005). With this development stressing the importance of environmental awareness spreading sustainability discourses, people's view and awareness of sustainable development has increased rapidly.

With this, development sustainability has become a more relevant issue in the urban development policy (Jensen ,2014). Following this sustainable development has become a sign for good policy and practice (Brand and Thomas, 2005).

The Brundtland Report describes sustainable development as a development that "(...) meets the needs of current generations without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 45) Sustainability as a term is linked to the ecology, and with sustainable development, it is linked to the society (Aspinall, Sertyesilisik, Sourani, & Tunstall, 2012). Moreover, sustainable development implies a fair share between the rich and the poor in society as well as limitations concerning environmental resources. With more than 50 % of the world's population living in cities it will have a considerable environmental impact on urban dwellers (Jensen, 2014).

Sustainable development is usually divided into three aspects; the economic, social and environmental. Thus sustainable development implies a balance between those (Sikdar, 2003), as illustrated on figure 3.1.



**Figure 3.1:** The balance between the aspects in a sustainable development. Own figure. Adapted from: (Rodriguez, Roman, Sturhahn, & Terry, 2002)

#### 3.1.1 Sustainable development in Norway

It is expected that Norway will experience a great population growth the next years with the most extensive growth rate in Europe. In 2012 there were five million people living in Norway, and in 2030 this number is expected to reach 6 million (Statistics Norway, 2014). Simultaneously with the increased urbanization there is more pressure from politicians wanting to develop in a sustainable manner in order to meet the sustainable goals and challenges (Jensen, 2014). In the program 2013-2016 of "the Nordic working group on green growth: sustainable regions" the main topic was how urban planning can contribute to sustainable development. In this way addressing challenges such as climate change, demographic transformation and social inclusion (Jensen, 2014). In line with this development, the Norwegian government is putting pressure on sustainable development in order to reach their sustainable goals.

The European Union has also decided that all new buildings that will be built after 2020 will have to produce as much energy as they are consuming. As a consequence, an increased amount of buildings are being developed with the help of sustainable certification standards. (Brun, 2015) Planning in a sustainable manner and being in advance of this development, sustainability can be used in order to get legitimization of plans. Thus giving a higher chance for implementation of the plan.

The government in Norway is also putting a lot of pressure on international cooperation in order to reach the ambitions and goals set for sustainable development in Norway (Utenriksdepartementet, 2002).

#### 3.2 Branding through sustainable development and sustainability

The market has developed in line with the public's interests. With the increased focus on the importance of sustainability in the media, a market for sustainable development has developed. As a consequence companies are able to and more willing to offer sustainable products (Lehner and Vaux Halliday). Sustainability has been characterized being the new business megatrend (Lubin, 2010). Studies show the market trends towards a demand on sustainable development (Warren-Myers, 2012). Companies are using "sustainability" in order to show corporate social and global responsibility (Hall, 2012). By integrating sustainability into the company's branding strategy and promoting it, this can be used as a competitive advantage and a marketing tool.

Caroll (1979) is stating that sustainable development is "the economic, legal, ethical and discretionary duty of companies towards society" (Caroll, 1979, p. XX). Companies are in this way identifying their values in sustainable development and using this as a part of their storytelling communicating their values to their customers. This is part of creating a stronger brand (Boje and Massoud, 2014).

#### 3.2.1 Certification of sustainability

A third party certification where an independent body confers the right to label and advertise the production or product as "sustainable" has evolved during the last 20 years (Hall, 2012). With the increased environmental and social awareness and importance of sustainable development this has affected the production industry. It is shifting towards a production that

is more sustainable and has given a market for sustainable certification (Hall, 2012). Nordic countries like Norway are facing a development of neoliberal tendencies from the US. The free market of more competition between the actors together with the pressure in the construction industry to become more sustainable, this has provided a market for environmental assessment methods. In this way it is possible to show and brand the sustainability of a process or a product (Aspinall et al., 2012).

An assessment 'method' or 'scheme' is often used in order to describe a sort of technique that has assessment as the main function. It is often accompanied by a verification of a third-party before the rating or label is given. Environmental assessments methods aim to quantify sustainability where one will have the possibility to get a scoring and earn credits based on a set of criteria (Aspinall et al., 2012). The final product will be a "label" becoming the symbol communicated to the costumers. It has been shown as technologically and economically feasible within some markets to take the usage of sustainable certification (Hall, 2012).

A certification scheme can be used as a tool to better visualize, prioritize and maximize sustainable issues for developers and municipalities. Investors can use the certification scheme as a tool to ensure that the area will get a certain standard of sustainability providing a more attractive result for future investments. The certification system involves various stakeholders in which can be used in the communication and advertising process of the certification (Jensen, 2014).

During the last years a wide range of international building assessment tools have been developed. BREEAM Communities (UK), LEED-ND (US), CASBEE-UD (Japan), Green Star Communities (Australia), HQE (France) are some of these. Figure 3.2 illustrates the extent of international rating tools. The figure illustrates the origin of the assessment tool. Most of these have to be externally verified by a third party (Jensen, 2014).

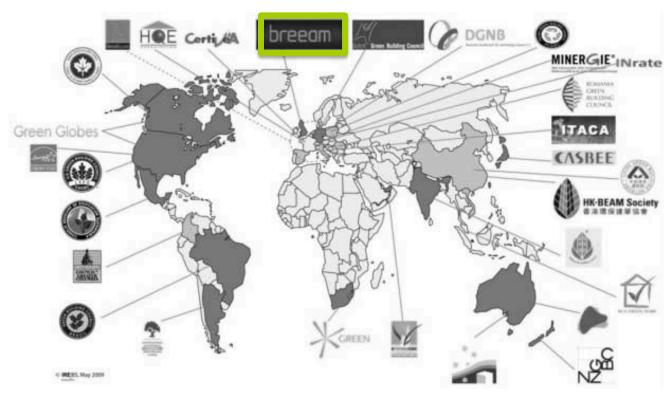


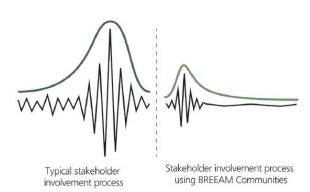
Figure 3.2 Illustration of international rating tools. (Reed, Bilos, Wilkinson, & Schulte, 2009)

#### 3.2.1.1 The assessment tool of BREEAM Communities

BRE Global Limited, the independent third party approval of BREEAM internationally, describes BREEAM as being "the world's leading environmental assessment method for buildings and now communities [and] sets the standard for best practice in sustainable design and has become the de-facto measure used to describe a building's environmental performance" (BRE Global, 2014a). In the UK there was little attempt to assess environmental considerations within the building sector showing an overall performance related to sustainable goals before the release of BREEAM (Aspinall et al., 2012).

With BREEAM Communities a developer can collect credits under a set of categories related to the sustainable level of the planning and building processes. The categories and credits are set out in a technical manual. These credits will in the end give a final score of pass, good, excellent or outstanding as illustrated in table 3.1 (Aspinall et al., 2012). A third party of a certification, BRE Global, will become a neutral body that will verify the process and then give the certification (Hall, 2012).

BREEAM Communities aims at strengthening the stakeholder management and improving the communication between the actors. This can contribute in making the planning process more predictable with less chance of delays later in the process as illustrated on figure 3.3.



**Figure 3.3:** The planning process in BREEAM Communities: The graph on the left side is showing typical stakeholder involvement, with poor stakeholder involvement in the beginning of the process. This can result in delays and additional work later in the planning process. The graph on the right side is showing the concept of BREEAM with focus on stakeholder involvement in the beginning of the process. It is claimed that this will be contributing in the need for rework and is also improving the efficiency in the process.(BRE Global, 2014a)

The cost of getting a certification for a project has been shown to give a somewhat higher price than by not planning with BREEAM. The process requires more documentation than an ordinary planning process as well as a review of the process by a third party (Holmes and Hudson, 2002).

BREEAM Communities certification	% Score
Outstanding	≥ 85
Excellent	≥ 70
Good	≥ 55
Pass	≥ 45
Unclassified	< 30

Table 3.1 BREEAM Communities certification. (BRE Global, 2014b)

The assessment tool is divided into three steps with five categories: Governance, Social and Economic wellbeing, Resources and energy, Land use and ecology and Transport and movement. These categories are then divided into assessment issues divided under the steps as illustrated in table 3.2.

Categories	Weighting
Governance	9.3 %
Social and economic wellbeing	42.7 %
Resource and energy	21.6 %
Land use and ecology	12.6 %
Transport and movement	13.8 %

Table 3.2: Categories and weightings (BRE Global, 2014b)

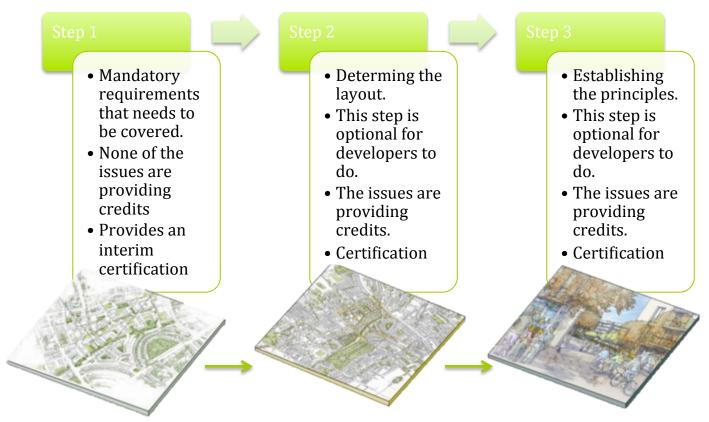


Figure 3.4: The steps in BREEAM Communities. (BRE Global, 2014b)

BREEAM Communities is divided into three steps as illustrated in figure 3.4. The first step is addressing the mandatory requirements developers need to cover in order to get an interim certification. The mandatory requirements in step one do not provide any credits. Thus if a developer wants to gain a certification of the project (see table 3.1), issues in step two and three needs to be covered. Step two and three in BREEAM Communities are optional for developers. In these steps the issues that will be target provide a different number of credits. An example is available in appendix E. Thus developers can choose which issues to target, depending on which score they are aiming at achieving. (BRE Global, 2014b) An illustration of the different assessment issues is available in appendix F.

BREEAM Communities aims at meeting and addressing the global challenges such as population growth, elderly population, changed size of the household, biodiversity, climate change, public health issues and water pollution as well as peak oil (BRE Global, 2014a). BREEAM Communities claims that the assessment tool will be beneficial for developers for the following reasons:

#### Advantages by BREEAM Communities

It differentiate the development of the project

It may reduce cost expenses

It provides a certification that can be used as marketing tool.

It is structured and user friendly

It is an international standard (the visibility of the scheme)

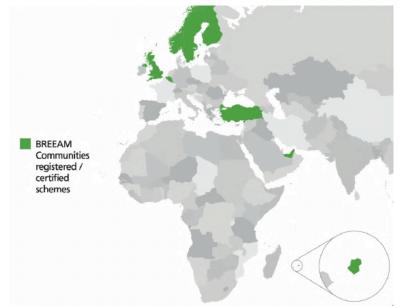
It can make the planning process more predictable (BRE Global, 2013)

Table 3.3: Advantages by BREEAM Communities

The main driving forces behind the assessment tool of BREEAM is the demand of a 'brand recognition', a desire of an international standard, a demonstration of sustainability goals, possibility to reduce energy costs, improve the productivity, possibly making higher rental incomes, making the buildings more attractive, a more predictable planning process, improve the image and so by investors, authorities and consumers as well as the motivation of the owner of BREEAM to expand the system to be adaptable other places . (Aspinall, Sertyesilisik, Sourani, & Tunstall, 2012).

Already in the developing phase of BREEAM, the assessment tool was aiming to reach an international presence. It was reported already in 1997 that "BREEAM type schemes have now been developed in other countries and regions, such as Hong Kong and Canada [and that] BREEAM versions are also being developed in Denmark, Norway, Australia, New Zealand and USA. (Doggart & Baldwin, 1997, p.83) BREEAM is primarily present in Europe, but aims to reaching international levels. In 2012 Breeam was utilised by 34 countries with a total of 2898 projects that were labelled under BREEAM from the Green Book Live Database (From 2008 till 2012). 681 of these were located outside of the UK. Breeam together with the assessment tool of LEED, have become the forerunner as the most internationally recognised certification scheme for sustainable buildings (Doggart & Baldwin, 1997).

As a result of active promotion and an increased demand of sustainable certification, BREEAM is expanding and has increased considerably. Nine projects have been certified by BREEAM Communities, and 18 projects are registered as undergoing assessment (See figure 3.5) (BRE Global, 2014a)



**Figure 3.5:** The map is illustrating the international uptake of BREEAM Communities. (BRE Global, 2014a)

One of the main drivers of BREEAM's worldwide development is related to the need of a common international standard. In this way the projects can be comparable to each other. Such a project can thus be used as a branding value and a good example for the company or business.

Companies have also used BREEAM in order to follow up on their sustainability requirements. By using an international standard it has been easier for them to get an international recognition.

BREEAM also uses other types of communication forms in order to reach global recognition such as Twitter, LinkedIn, YouTube and Facebook (Hall, 2012).

#### 3.2.2 Motivation for sustainable certification

Claimed benefits from normative research of sustainability helping financially, socially and environmentally have encouraged stakeholders to embrace sustainability. This research is communicating how sustainability "should" be value affective for stakeholders (Warren-Myers, 2012).

Benefits and key market drivers for sustainable development by developers are presented in table 3.4.

#### Market drivers for sustainable development

Achieve higher rent/sale prices

Reduce cost

Show global responsibility

Higher net revenue return

Be in advance on the legislative changes

Reduced operating expenditure

Foster/promote innovation

Better reputation for own business

**Tenant attraction (interested in sustainability)** 

Competitiveness

Achieve an increased marketing value

**Efficient planning process** 

More predictable planning process

Table 3.4: Market forces and motivation for sustainable development.

Achieve higher rent/sale prices: World Green Building Council (2013) is arguing that green buildings can more easily get a higher sale or renting price and more effortlessly attract tenants. Research by Kimmet (2006) has documented that occupiers are willing to pay more for sustainability, which makes it possible to increase the rent or housing prices for buildings developed in a sustainable manner. Miller et al. (2008) identified that certified projects increased the renting prices, reduced the occupancy and increased the value.

Eichholtz et al. (2010), Miller et al. (2008), Pivo and Fisher (2009) and Fuerst and Mcallister (2008a) did also find positive impact of sustainability in relation to higher rent prices and higher value. Eichholtz et al (2010) and Pivo and Fisher (2009) identified that the market values were affected as well as the net income of certified buildings. (Warren-Myers, 2012) Sustainable development can in this way provide financial benefits as an improvement of the business, and real estate prices (State of Green, 2012).

**Reduce cost:** the Ministry of Environment and Sustainability is claiming that quality is profitable in the long run. The expenses connected to poor planning have been visible in the way thing have to be re-planned and areas where people are not interested in living. (Kommunal- og regionaldepartementet and Miljøverndepartementet, 2013) Stafford and Hartman (2013) are claiming that sustainable solutions will reduce the cost and provide energy savings. Buildings developed in a sustainable manner may be more robust and better cope with

the climate change and challenges in which will reduce the level of insurance needed (World Green Building Council, 2013). Following these arguments developers can save money with sustainable certification schemes. It has been shown that green buildings have resulted in a reduced energy and water consumption provides lower maintain costs. This can further result in a payback period in the long run (World Green Building Council, 2013). A case-by-case study analysis has also been developed showing the financial benefits of sustainable development where the findings have been generalized to be used in global markets and in practice (Warren-Myers, 2012).

Show global responsibility: Sustainability initiatives can provide positive effects for a company's brand. It provides sustainability associations, which are often linked to values like responsibility as well as environmental and social stewardship and morality (Stafford and Hartman (2013). Stafford and Hartman (2013) are also claiming that sustainable development can provide benefits as status and prestige for the developer. Bansal and Roth (2000) identified that companies implemented sustainable and environmental initiatives in order to show global- and ecological responsibility. In the action plan for sustainable urban development it was claimed that new projects should be developed as pilot projects. By this they would show architectural and urban qualities through implementing sustainable solutions covering social, economic and environmental aspects. In this matter design competitions are seen as a useful tool to stimulate new innovation as well as being a good tool of advertising the new development. This can be beneficial for the developer, nationally and even internationally, becoming a branding tool. Such competitions do often have many participants consequently huge public attention (Kommunalregionaldepartementet getting og and Miljøverndepartementet, 2013). In a report made by the "Kommunal and Regionaldepartementet" and the "Miljødepartementet" about future sustainable development it is discussed that projects doing more in relation to sustainable development than what is required through the legislations, should be awarded (Kommunal- og regionaldepartementet and Miljøverndepartementet, 2013). Thus it can be seen as a motivation for developers for sustainable development.

**Higher net revenue return:** Russo and Fouts (1997) identified that companies with high environmental focus did get higher profitability, and according to Stafford and Hartman (2013) higher consumer value.

Be in advance on the legislative changes: Green buildings will be in line with the regulation requirements that are getting stricter (World Green Building Council, 2013). Bansal and Roth (2000) identified that companies implemented sustainable and environmental initiatives for legitimation purposes. Businesses tend to be supportive to certification programs in matters where the certification rules are a bit better than what is required in practice. (Hall, 2012) The enhanced level of public participation included in the planning process of some sustainable certification programs has also been one motivation for developers. Thus this can contribute in getting a plan trough more easily where there are a lot of interests to include in the planning process. (BRE Global, 2014a)

In a situation where the rest of Europe is experiencing economical challenges, Norway has the opportunity to generate alternative development strategies and new innovation due to their economical situation (Kommunal- og regionaldepartementet and Miljøverndepartementet, 2013). Pilot projects have developed sustainable solutions that after a while can be standardized (Kommunal- og regionaldepartementet and Miljøverndepartementet, 2013). In this way developers can be in advance on the legislative changes becoming a good example on practice.

**Reduced operating expenditure:** There is also identified a reduced operating expenditure related to sustainable development and in some cases sustainable development made justifications to the capitalisation rates (World Green Building Council, 2013). Boyd (2006) identified a reduced cost of using environmentally efficient buildings, which made the total income of the business higher. This was because they did not have to pay as much for electricity, heating and similar costs. Boyd (2006) did as well identify that sustainable buildings lasted for longer and had a lower maintain cost. This made the capital expenditure and operating lower in which increased the total income for the business.

**Foster/promote innovation:** Porter & Linde (1995) is arguing that companies with environmental practices are more likely to foster innovation in which can improve the competitive advantage.

**Better reputation for own business:** Research has shown that companies that have sustainable visions often get positive associations. People are more willing to use the company or purchase from them, invest in or work for them as well as getting a better stakeholder relationship (Sen et al., 2006). Christmann (2004) is arguing that pressure from external stakeholders can affect the environmental policy decision, especially in multinational companies. Corporate social responsibility has become common for enterprises (Hsu & Cheng, 2012) providing positive associations and outcomes. Recognition and public image is one quite distinctive motivation for developers who seek to certify sustainability (Hsu & Cheng, 2012).

**Competitiveness:** Bansal and Roth (2000) identified that companies' implemented sustainable and environmental initiatives for competitive advantages. By this they were in advance and becoming different and special though being "better" than their competitors. From nongovernmental organizations the main pressure and motivation for sustainable certification has been the market demand. These are often companies or businesses that want to show environmental and social objectives and goals. This is in order to gain economic advantage, demonstrate environmental responsibility, boost their brand or reputation and to feasibly get ahead of the trend of development and the regulatory curve (Hall, 2012).

#### Achieve an increased marketing value

Sustainable certificated projects can give a positive reputation for a company showing that the company has global responsibility and is interested in quality. Thus these factors all together may be used as a marketing tool for the company, which has been shown to be a great

motivator for developers. By getting a certificate, this can also contribute in getting an increased press interest in the project (Hsu & Cheng, 2012).

#### **Efficient planning process**

It has been claimed by developers that by using sustainable certification schemes can contribute in making the planning process more effective. Some certification schemes require active involvement and communication with stakeholders. This contributes in clarifying issues in the starting phase of the project. Further this has contributed in easier getting acceptance of the plans. Consequently the planning process is shorter. This has also resulted in a more cost effective planning process (BRE Global, 2013)

#### More predictable planning process

It has been claimed that some certification schemes may be contributing in making the planning process more predictable. Thus it can reduce the timeframe and cost for the project. (BRE Global, 2013)

#### 3.2.3 Economic growth and pilot/demonstration projects

Pilot projects can, according to Kotler (2000) achieve greater knowledge of the market, and build collaborative relationships as well as a better reputation. (Kotler, 2000) According to Kotler (2000) pilot projects can be used in order to get more knowledge about the market demand as well as it can be part of influencing it. Kotler (2000) is further claiming that a pilot project or demonstration project can help creating accept of new innovation by customers. Future economic development will take place in the cities in which are driven by innovation (Florida, 2002). Kotler (2000) is arguing that a successful project will have its foundation in good cooperation and inclusion. An open and creative cooperation between the business sector, public authorities and the researchers, where economical and financial conditions are included in the beginning of the process, will reduce the risk of the project. Good cooperation, building collaborative relations between the different actors throughout the whole planning process may result in a good marketing tool for a company. By advertising the demonstration project this can provide a good reputation with economic growth following. This can give positive economic spill over effects for the project. Kotler (2000) is arguing that a way to get success is to show the product that will be developed and advertise the new project for the potential customers.

#### 3.2.4 Values in Sustainable Development

Developers depend on making money on their development plans. However developers do have values as well; they want to deliver what the market is demanding as well as doing what they perceive as a competitive advantage. There is an increasing tendency in companies requiring that environmental sustainability has to have a return on the investment, if companies want to include this aspect in their development plans. In this matter cost neutrality is not sufficient for the company for sustainable development (Blaeser and Whiting, 2012; Hillon, 2014) and the environmental and social elements tend to get a lower priority (Hillon, 2014). Consequentiality social and environmental concerns tend to be least prioritized if these

do not provide any economical profits for the company. The goal for a company is to increase the total shareholder returns (TRS) as quickly as possible and thus not enhance the social ecology for humanity. Therefore the financial aspect in sustainability will always get the highest priority (Hillon, 2014).

In order to enhance the total shareholder returns (TSR),, environmental concerns are often setaside due to the extra cost, in which is often not paid back economically for the company. According to Daly (1999), the economy is the total system, whereas the environment is the subsystem, where economical resources can be allocated (Daly, 1999; Hillon, 2014). In order to succeed on sustainable development, human interest must therefore be met.

If a company reduces environmental harm, this can become a benefit for the company with an enhanced public image. Environmental performance even though it is 'green washing' tends to improve people's perception of the company. (Cho et al., 2012) A company that is espousing social and environmental values often tend to improve its financial performance. (Eccles et al., 2012)

Developers will do what is the most economical beneficial for them and follow what will provide the highest economic benefit. Motivation for sustainable development by private developers is mainly linked to the idea of economic profit and branding. With the market demand for sustainable buildings, and people willing to pay more for living in sustainable buildings, this allows the developers to raise the renting and selling prices for the buildings. Fuerst and McAllister (2008a, b) identified that the higher rating of the certification<sup>1</sup> the higher the renting prices and the higher the transaction prices. (Fuerst and McAllister, 2008a,b). As a consequence, these buildings will be available for those who can afford living there and are willing to pay the extra cost.

In planning matter economical concerns operate within a short timeframe. In comparison to social and environmental concerns, these will operate in a longer time horizon (Hillon, 2014).

#### 3.2.5 Limitation of sustainable certification

There are still issues in relation to documentation of cost benefits related to sustainable certification vs. non-certification. One will have to compare one certified and one non certified building or development in almost the same area, as the location is quite price dependent. In this matter it is hard to draw any conclusions on sustainability and value (Warren-Myers, 2012). There is not much information in relation to quantitative case studies of cost benefits of sustainability, which challenges the choice of sustainable development, as people tend to "want to be sure" that sustainability is cost-beneficial (Warren-Myers, 2012). Hall (2012) is claiming that there is a limited evidence of the impact on economic, environmental and public welfare outcomes of certification programs. A development of more strategic knowledge will be useful and necessary. This, in order to make the valuation profession to develop a better relationship between market value and sustainability in the real estate market. Warren-Myers (2012) is moreover stating that "Although there is a developing body of anecdotal evidence and investigations into sustainability trends on prices, rents, and market value, this research is yet to provide irrefutable evidence of a relationship between sustainability and market value in any

\_

<sup>&</sup>lt;sup>1</sup> The research was done with the assessment tool of LEED.

given commercial property market." (Warren-Myers, 2012, p. 138). Most of the research done related to sustainable certification is related to buildings. In this matter one should know that by developing communities these are a bit more complex (World Green Building Council, 2013).

Seeing sustainable certification from investors' perspective, another issue is the economic factors of certification schemes. There is an extra cost in relation to the certification process with an extra fee to pay a third party assessor and the extra cost for a certification diploma (Bergström, 2011.).Furthermore, knowing that the commitment of sustainable certification is voluntary and often not rewarded with a clear competitive advantage or economic benefit, it has been questioned whether the market forces are strong enough to make it economical beneficial (Hall, 2012). The costs might be the major reason for developers hesitating to plan by sustainable certification. This occurs especially where the market does not compensate the costs.

Becoming a new phenomenon the certification program requires more effort and time in order to use. It also requires more documentation and paper work compared to a standard planning process. The processes and the language in relation to sustainable certification might as well be a hinder for why developers are hesitating in developing their projects by sustainable certification schemes. The language is often English, which requires more effort when the development project is not located in an English speaking country.

Theories about market value and sustainability are about to be proven. Until this investors are hesitating to investing in sustainability, due to poor research about potential advantages by using the schemes. (Warren-Myers, 2012)

#### 3.3 Summary

This chapter has shown how the increased focus sustainability has got in the media have changed people's perception of the importance of sustainable development. This has given a market for sustainable certification schemes such as BREEAM Communities. Developers are in this way using the certification schemes in order to show global responsibility and using sustainability as a branding tool for the company. This provides economic growth and prosperity. With sustainable development and a certification of the plan this can have a positive impact for a company providing benefits such as competitive advantages, show global responsibility and branding opportunities. With sustainable certification and motivation from developers getting economic growth it can be discussable if this might influence the sustainable outcomes. Since the concept of sustainable certification is relatively new, developers hesitate to use it due to lack of knowledge about the process and possible outcomes.

This chapter has thus provided knowledge of what the literature is saying about benefits and advantages by BREEAM Communities and sustainable certification schemes. In order to get a deeper understanding for what private developers in Norway perceive being the most important advantages by BREEAM Communities and sustainable certification schemes, chapter four and five will aim at answering this. This information will be used to answer research question two in this research project. The next chapter will use the information in this chapter

about the potential benefits of sustainable certification schemes and BREEAM Communities and compare this to the survey results, in which will be presented.

# OVERVIEW OF THE SURVEY RESULTS

This chapter aims at getting a deeper understanding of what private developers in Norway perceive as being the most important advantages and major motivators for BREEAM Communities. For this an online survey of private developers was conducted. This chapter will analyse their perception of the advantages of sustainable certification, in comparison to what the literature claims are the benefits. The chapter will further discuss their major motivations for choosing BREEAM Communities.

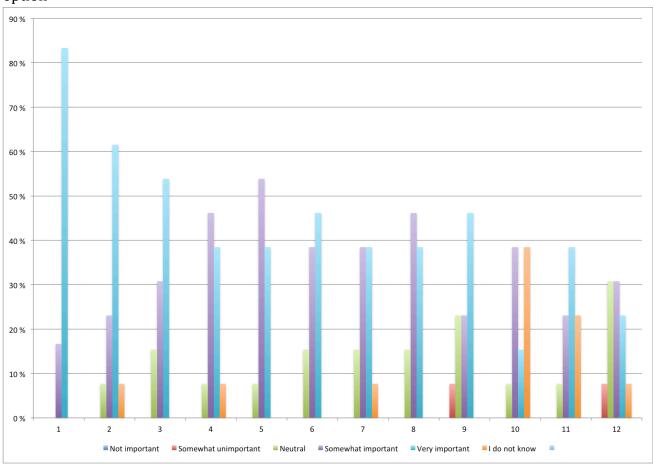
As discussed in the literature review, BREEAM Communities provides a different number of credits measuring sustainability. Thus this chapter will also discuss how private developers would evaluate these criteria in BREEAM Communities, and further whether the criteria in BREEAM Communities will be governing factors in the planning process.



### 4. Overview of the survey results

#### 4.1 Advantages of a sustainable certification

I asked private developers in Norway about what they perceived to be the most important advantages for sustainable certified projects. The respondents were asked to evaluate how important they perceived advantages presented in the literature review from table 3.4, when deciding to seek certification. The results are illustrated in the bar chart in graph 4.1. The bar chart shows the percentage of respondents for each option (1-12) and the evaluation of each option. The columns with number from 1-12 are illustrating the claimed advantages for a sustainable certificated project that has been discussed in the literature review (see section 3.2.2). These options can be found in table 4.1. The colours for each column illustrate the level of importance private developers perceive in the different advantages. The meaning of each colour is illustrated below the graph. Table 4.1 shows the percentage of the evaluation for each option



**Graph 4.1:** Evaluation of advantages of sustainable certification. The bar chart shows the percentage of respondents for each option (1-12). (Total number of respondents: 13).

Adva	antage	Not important	Somewhat unimportant	Neutral	Somewhat important	Very important	I do not know
1.	Achieve an increased marketing value				16,67%	83,33%	
2.	Better reputation for your own business			7,69%	23,08%	61,54%	7,69%
3.	Competitiveness			15,38%	30,77 %	53,85%	
4.	Show global responsibility			7,69%	46,15%	38,46%	7,69%
5.	Achieve higher rental/sales prices for the business offices and halls			7,69%	53,85%	38,46%	
6.	Attracting tenants (interested in sustainability)			15,38%	38,46%	46,15%	
7.	Reduced operating expenditure			15,38%	38,46%	38,46%	7,69%
8.	Efficient planning process			15,38%	46,15%	38,46%	
9.	Reduce cost		7,69%	23,08%	23,08%	46,15%	
10.	Achieve higher rental/sales prices for dwellings			7,69%	38,46%	15,38%	38,46%
11.	Foster/promote innovation			7,69%	23,08%	38,46%	23,08%
12.	Being in advance on the legislative changes		7,69%	30,77%	30,77%	23,08%	7,69%

Table 4.1: Advantages by a sustainable classified project

From the result of what private developers perceive being the most important factors for a sustainable certified projects, there are advantages that got a high appreciation such as 'getting

an increased marketing value', 'better reputation for own business', 'competitiveness' and 'show global responsibility'. These values are under the category of non-monetary use value. (Sustainable Building Alliance, 2014). The economic benefits of such advantages are therefore difficult to calculate, which makes them more risky compared to advantages that are possible to calculate exact advantages by numbers. However, these advantages received the highest rating from private developers. Based on these results, it might indicate that the global tendencies, with increased competition between the private actors have had an influence on private developers in Norway when deciding whether to go for a sustainable classified project. This also implies that a marketing value in relation to a decision of a sustainable development might be the most important advantage for private developers.

From the literature review it has been discussed that the advantage of monetary value such as reduce cost and getting higher renting/selling prices were important factors and motivators for private developers in their decision on whether to plan for a sustainable certified project. From the results in the online survey these advantages were not evaluated as being the most important factors, this partly shows a mismatch with the literature. The market will be depending on the expected monetary benefit by sustainable certified buildings. (Sustainable Building Alliance, 2014). With these results, there are indications that private developers in Norway do not perceive the market for sustainable certified buildings in Norway as big. In order to get a higher renting price on dwellings, tenants do also need to accept paying a higher price for these buildings. It is thus hard to predict if the potential tenants will be willing to pay this extra cost for a sustainable certified building. This will depend on whether the tenant feels that he/she gets an advantage or benefit (economical) by choosing a sustainable certified building. (Sustainable Building Alliance, 2014).

The survey results also show that private developers do not perceive the advantage of getting higher renting prices on dwellings as being a very important advantage. developers evaluate getting higher renting/sale prices for business offices and halls as being a more important advantage than getting higher renting/sales prices for dwellings, may be connected to the market demand. These findings may also reflect the type of development the private developers are involved in. It might also be that private developers see a bigger market for companies than for private individuals wanting a sustainable classified location. There are also indications for sustainable certified projects being easier to sell to businesses, than to private individuals. (Personal comment from one of the interviewees) Companies may be more willing to pay an additional cost in order to get a sustainable classified location. Their ambitions may be similar or identical to the private developers responsible for the sustainable certified project, and thus supporting the evaluation of 'attracting tenants interested in sustainability'. Both the private developers responsible for the sustainable certified development and the companies that will be located in the buildings may use the certification for branding purposes and enhance their image and reputation. In this matter there might be a higher chance of selling these to businesses than to private individuals. Furthermore, with an increased demand from businesses, the chance and possibility of raising the price of these buildings is greater. This may be one reason why private developers find this advantage more important.

The advantage of being in advance with the legislative changes did not get as high priority as the other advantages of sustainable certification scheme. These results reveal a mismatch with the literature. A marketing tool for several sustainable certification systems is to advertise that by using the system it may contribute to becoming in advance with the legislative changes. What should be noted is that the Norwegian planning system has strict guidelines for sustainable development, which have to be followed in order to get permission to build. In this matter, private developers may not see the need for doing more, when the Norwegian law already has strict guidelines for what needs to be done. (BREEAM Communities rapport - Flesland Business Park, 2015) . Also it might be that this advantage is relatively lower ranked because it is competitiveness that is the key attraction.

For the case of BREEAM Communities, the scheme is being branded as a tool in order to be in advance of the legislative changes and thus make the planning process more predictable. What is interesting with these results is that the private developers seemingly evaluate this advantage lower. This makes BREEAM Communities' branding strategy less striking, at least for the private developers answering the online survey.

The survey results also show that the idea of using a sustainable certified project as a way to foster or promote innovation is seemingly not the main goal for private developers. This too is a mismatch with the literature. Seeing the evaluation of getting an increased marketing value getting the highest score, such factors may be higher evaluated in such a decision. There might be that private developers may not see an economical benefit of promote new innovation by a sustainable classified project. This is not surprising given their focus on economics as shown by the results.

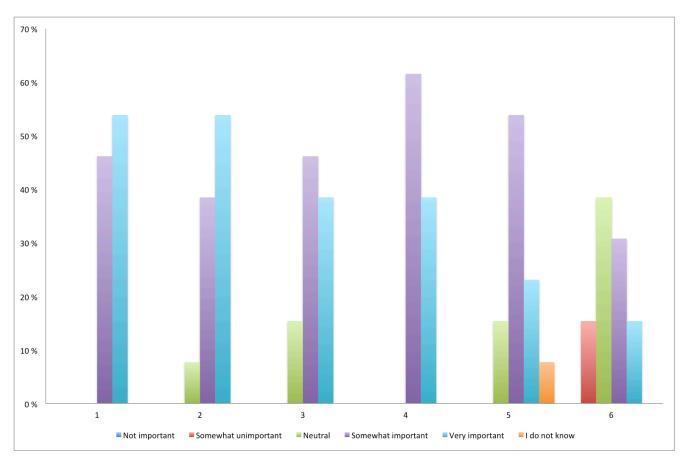
One respondent commented that he perceived the idea of getting a better quality of the final product to be a very important advantage for a sustainable classified project. The quality of the project might also be linked to the business' marketing value.

#### 4.2 Decisive factors for choosing BREEAM Communities

In the online survey, I asked private developers about how decisive certain factors were when deciding whether or not to use BREEAM Communities in planning. In this matter the private developers were asked to evaluate how important they perceived different factors claimed to be advantages of BREEAM Communities listed in table 3.3 in the literature review.

In this matter private developers were asked to evaluate the factors from not important to very important, as illustrated in figure 2.3

The results are presented in graph 4. The columns illustrate the factors which are further explained in table 4.3. The different colours of the columns show the level of importance. A description of the meaning of the colours is illustrated below the graph.



**Graph 4.2:** Decisive factors for choosing BREEAM Communities.

Fac	ctors	Not important	Somewhat unimportant	Neutral	Somewhat important	Very important	I do not know
1.	That the tool is structured				46,25 %	53,85 %	
2.	The visibility of the scheme			7,69 %	38,46 %	53,85%	
3.	Predictability in the planning process			15,38 %	46,15%	38,46%	
4.	The cost				61,54%	38,46%	
5.	The certification			15,38%	53,85%	20,08%	7,69%
6.	That the tool is similar to ordinary planning procedure		15,38%	38,46%	30,77 %	15,38%	

**Table 4.2.** Decisive factors for choosing BREEAM Communities.

The survey results show that the decisive factors and main motivators for choosing to use BREEAM Communities in planning, are linked to the cost benefit and marketing value of the scheme. The factors 'the tool is structured' and that the scheme 'provides predictability in the planning process' as well as 'the cost' related to the scheme of BREEAM Communities are seemingly the most decisive factors for private developers in their choice of whether or not to use BREEAM Communities. All of these factors are linked to the project's estimated cost. This illustrates that it is highly important for the private developers that the project will be economically beneficial if using BREEAM Communities.

Furthermore, the factor of marketing value, which got the highest evaluation as an advantage of a sustainable classified project, also got the second highest rating (i.e. in terms of the visibility of the standard). The marketing value will be very important when deciding whether or not to use BREEAM Communities.

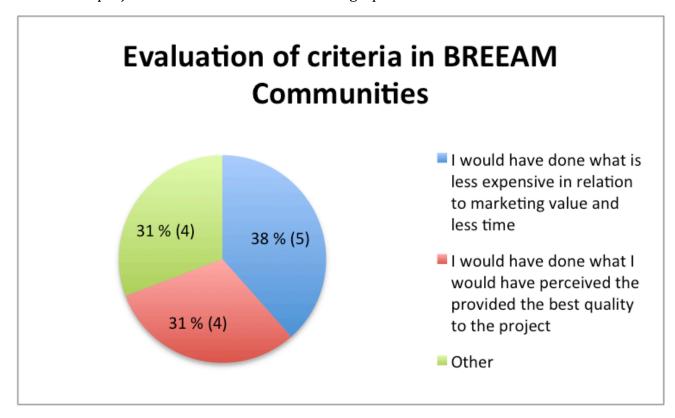
It is interesting that private developers perceive this factor to be so important. BREEAM Communities is a new tool in Norway, consequently few people know about the scheme. Thus the advertising, which can provide a higher demand for the projects, has had little or no influence. One of the private developers in the survey noted the fact that he had never heard about the concept of BREEAM Communities before.

When choosing BREEAM Communities, private developers do not perceive the fact 'that the tool is similar to ordinary planning procedure' being a decisive factor. In this matter the private developers may be more open to do things that differ from normal planning procedures if it provides potential spill over effects for the developers.

In the literature, it is claimed that an advantage by BREEAM Communities is that it can contribute in making the planning process more efficient and thus more cost effective. The online survey shows that there are shared opinions in relation to a reduction in the total cost being an advantage by BREEAM Communities. One of the developers in the survey wrote that from his own experience, BREEAM were more expensive than ordinary practice. Another respondent commented that he felt BREEAM was more detailed and intricate than common planning procedure and practice. In this way it can be discussed whether the efficiency, claimed to be a benefit, truly exists.

#### 4.3 Evaluation of criteria in BREEAM Communities

As presented in the literature review, BREEAM Communities provides a different number of credits depending on the assessment criteria that will be covered by the private developers. An example of assessment criteria and how to achieve the credits are available in appendix E. In order to get a certification of the project the developer can decide which criteria to cover. Some of the criteria in BREEAM Communities are easier and less expensive to cover than others. For this reason I was interested in investigating how private developers would evaluate these criterias in BREEAM Communities. In that matter, I asked private developers whether they would prefer doing what would be less expensive in relation to marketing value and also less time consuming, or if they would prefer doing what they perceived to provide the best quality to the project (in relation to sustainable development), even though it could lead to a higher cost for the project. The results are illustrated in graph 4.3.



**Graph 4.3:** Evaluation of criteria in BREEAM Communities

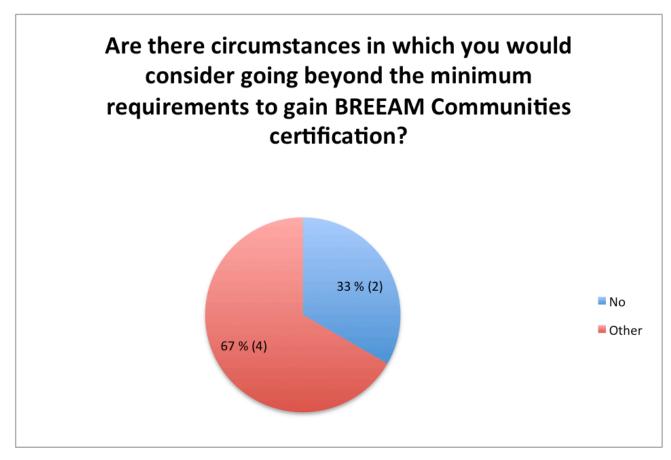
Looking at the results of this question, they indicate that the majority of the respondents (38 % - five respondents) would choose a planning process resulting in a lower cost in relation to marketing value and less time. However, the results are quite balanced between the two response alternatives. The questions could, however, have a clearer distinction, if illustrated with examples. The response indicates that the private developers would be interested in a mix between the two alternatives. By this showing willingness to accept a somewhat higher cost to the project if this would provide a better final result. This was also commented in the survey for the option 'other'. The four comments under the option 'other' were linked to the likeliness of a mix between the two alternatives. One of the private developers comments that an investment

in "enduring values" that increases the value in the transaction market and/or the rental market thus can provide an increased weight. Another private developer claims that the project has to be economically sustainable. Further he explains that without the economy, it will not be possible to think about other options that can provide a better quality project. The third respondent addresses the need for a third alternative with a balance or mix between alternative one and two. The last respondent writes: "We build and operate our buildings in terms of optimization with respect to the economy, quality as well as environmental considerations". (Personal comment from one of the respondents in the online survey)

With these responses, it can be concluded that the idea of a good quality to the final product is of high importance to the respondents. This could be based on the idea that bad quality to the final product may lead to negative publicity and reputation for the company, as discussed in the literature review.

#### 4.4 Willingness to do more than what is required by BREEAM Communities.

I wanted to investigate if private developers would be willing to do more than the requirements in BREEAM Communities to gain a certification. With a desire to investigate this claim further, I asked private developers if there were circumstances in which they would have considered going beyond the minimum requirements to gain BREEAM Communities certification. Graph 4.4 presents the results. The presentation does not include the respondents who answered, "I don't know". The numbers in bracket are the number of respondents to each alternative. The people answering alternative 'others' all left a comment in the online survey.



**Graph 4.4:** Evaluation of whether the private developers would be willing to do more than the requirements in BREEAM, in order to gain a certification

The results for this question show that none of the respondents in the online survey answered that they would be willing to do more than the minimum requirements to gain BREEAM Communities certification. Further, the claim that BREEAM Communities can be guiding to the planning process seems partly true. This fact can become a weakness of the scheme. If there are issues within an area that in normal planning procedure would have been done, but is not providing points through the certification scheme of BREEAM Communities it can be questioned if the tick box system in BREEAM Communities will control the planning process. This can become a problem, knowing that the scheme is new. Furthermore, possible issues could be missed and thus excluded as criteria in BREEAM Communities, due to the translation of BREEAM Communities to match Norwegian conditions. Consequently, developers using the scheme may not cover the issues that do not provide credits through BREEAM Communities.

Furthermore, 33% of the respondents (two) answered that they would not be willing to do more than the minimum requirements in BREEAM Communities to gain certification, supporting the previous claim.

If the question had an example the private developers could relate to it could have been easier for them to answer, as one of the respondents also commented. The three other responses were related to a wish for a potential economic benefit by doing more than the requirements in BREEAM Communities. One of the private developers would have considered going beyond the minimum requirements to gain BREEAM Communities certification, provided that it would have improved the project economically and further resulted in an increased marketing value. The second respondent wrote that actions providing good profitability or increased action are important. Consequently, in such situations, more than the requirements in BREEAM Communities would have been considered. The last one of the respondents who made a comment mentioned that he/she would be willing to do more than the requirements provided that it would lead to an increased quality of the overall project. With these results there are indications that the marketing value with BREEAM Communities is the highest evaluated advantage, at least by those who participated in this online survey.

#### 4.5 Summary

The online survey has shown that private developers in Norway evaluate marketing values ('increased marketing value', 'better reputation for own business', competitiveness and 'show global responsibility') as being the most important advantages of a sustainable classified project. Advantages that are possible to calculate exact economic benefits from ('reduce cost' and 'higher selling prices on dwellings') got a lower evaluation of importance. These results show a mismatch to the literature.

Private developers in Norway perceive 'the tool is structured' as well as 'the visibility of the arrangement' as being the deciding factors for choosing BREEAM Communities certification scheme.

The economical factor is seemingly highly valued by the private developers in Norway. The majority of the respondents (38 % - five respondents) would choose a planning process resulting in a lower cost in relation to marketing value and less time.

The survey results also show that BREEAM Communities may be guiding the planning process. Further it might be a problem that if a factor does not provide credit in BREEAM Communities it will not be done.

This chapter has provided some knowledge of what private developers in Norway perceive being the most important advantages for sustainable certification schemes and BREEAM Communities. However, in order to provide a more in depth understanding of their motivation for using BREEAM Communities in planning, the next chapter will analyse the motivation of the private developers in the three pilot projects of BREEAM Communities in Norway. Thus chapter four and five will aim at answering research question two in this research project.

## **CASE STUDY FINDINGS**

The chapter analyses the private developers' motivation for BREEAM Communities using three case studies.



#### 5. Case study findings

The online survey has provided knowledge about what private developers in Norway perceive being the most important advantages by a sustainable certified project and BREEAM Communities. This chapter aims at getting a deeper understanding of this by investigating the motivation of private developers that are actually working with the certification scheme as the first three in Norway

The theoretical framework of BREEAM Communities created in the literature review in connection to the analysis of the survey results, in the previous chapter, will be used in this chapter. This will be done while analysing the motivation of private developers for joining the pilot program of BREEAM Communities. The analysis will be compared to what the literature claims to be important drivers for sustainable certification of BREEAM Communities as well as what private developers in Norway perceive as the most important factors and motivators for sustainable certification and BREEAM Communities. With this information, research question two will be answered.

The chapter is divided into two sections. The first part of the chapter presents a succinct overview of the three pilot projects of BREEAM Communities. The second part of the chapter analyses the private developers' motivation for joining the pilot program of BREEAM Communities.

#### 5.1 The pilot projects of BREEAM Communities in Norway with private developers

The projects of Marienlyst, Skien Brygge and Flesland Business Park are the three first pilot projects in Norway with private developers. A brief description of these projects will be presented in the following subsections.

#### 5.1.1 Skien Brygge

Rom Eiendom is the developer of the BREEAM Communities project of Skien Brygge. The company has high environmental ambitions and felt that BREEAM Communities reflected these values. Skien Brygge will become a residential area in the city centre of Skien. The project is aiming to be the first BREEAM Communities certified project in Norway, and is using the international version of BREEAM Communities for the certification of the project. (Breivik, 2015)

#### 5.1.2 Flesland Business Park

Lindstow Eiendom is the developer of the BREEAM Communities pilot project of Flesland Business Park. The project will have a location close to the airport in Bergen. The vision for the project is to create an attractive and innovative business district of international scale, which will become a business engine on both local and regional scale. (BREEAM Communities rapport

- Flesland Business Park, 2015) Lindstow has ambitions for the project to become flexible and adaptable to the market developments (Bruvik, 2015)

#### 5.1.3 Marienlyst

TICON Eiendom AS is the developer of the BREEAM Communities project of Marienlyst. The project will become a residential area in Drammen. TICON Eiendom is developing and operating properties in the city of Drammen. The company is working both with residential-and commercial- property management and development, with the major focus on property development. (BREEAM Communities rapport - Marienlyst Utvikling, 2015) They have a market-oriented and ambitious focus on sustainable development, and want to use the Marienlyst project to demonstrate these ambitions. (Lunke, 2015)

#### 5.2 The motivations for BREEAM Communities

The concept of accreditation is well established. However as discussed in the literature review, the scheme of BREEAM Communities is a new scheme. In that matter, there is little research about the advantages and potential spill over effects a certification may provide. Moreover it is difficult to predict if a BREEAM Communities project will provide in higher renting/selling prices. This chapter will therefore provide an analysis of the private developers' motivation for becoming pilot projects of BREEAM Communities. The private developers' motivation will be compared to the survey results in the previous chapter as well as the theoretical framework created in the literature review.

The motivators that will be discussed and analysed in this section are listed in table 5.1.

Motivators
Motivation for marketing value
Competiveness
More saleable dwellings and for a higher selling/renting price
Be in advance of legislative changes and more predictable planning process

**Table 5.1** The motivations for BREEAM Communities from the private developers of the three first pilot projects of BREEAM Communities in Norway.

#### 5.2.1 Motivation for marketing value

The advantages related to an enhanced marketing value of a sustainable certified project, got the highest evaluation from the private developers answering the online survey. The three private developers joining the pilot program of BREEAM Communities all have sustainable ambitions; for all of them the marketing value of BREEAM Communities was the major motivator for joining the pilot program of BREEAM Communities.

One of the interviewees said that "The marketing value has been the most important factor in the decision of choosing BREEAM Communities" (personal comment from one of the interviewees)

Acknowledging that the projects will become the first in this genre, the chance of publications through media is high. This is seemingly one of the major motivations for the private developers joining the pilot program. Publications of the projects can be used as a marketing tool for the companies and provide a positive spill over effect. Publications can spread discourses of the global environmental awareness and responsibility the company is showing. This may change people's perception and feeling about the company, giving positive associations when seeing or hearing the name of the company. One of the private developers says in the interview that they have already experienced that the project has been branded through external conferences. This shows that even though the projects are in a starting phase, they have experienced an increased attention. It might be that this marketing advantage is not as strong once the scheme is more established. Thus being the first may be a great motivator and advantage for the companies.

There is also a shared opinion by the developers that they all hope that the BREEAM Communities project can contribute to strengthening the company's reputation and image, thus creating a more solid brand. One of the projects is also using the British manual of BREEAM Communities, which has led to increased costs of the project due to additional translation work. The documentation for the project has to be translated to English and then be sent to BREEAM Communities in England for review in which will also be an additional cost for the project. (BRE Global, 2015)

One of the developers communicates how he aspires for the project to become a frontrunner in sustainable urban development in Norway. Also he brings in the fact that a BREEAM Communities project may be a good way to reflect the company's ambitions and thus be contributing in creating a better image. (Mæle & Burheim, 2014).

For one of the projects there are ambitions to get the second highest rating of BREEAM Communities (excellent). With such a certification, there are expectations that the project will be visible and thus provide a positive reputation of the company. Another of the interviewee also hopes that the branding by having a BREEAM Communities project, can provide a positive effect to the company. He is saying that such a project "(...)can be contributing in creating a better reputation and image" (personal comment from one of the interviewees)

One of the BREEAM Communities projects wants to promote the landscape of the region. By doing so, there are aspirations that this will make the project more attractive internationally and attract greater international attention. It has been decided that for this project all of the buildings within the area will have a BREEAM NOR certification of 'very good' for these buildings. (see Figure 3.1). This decision has been made in order to communicate the company's ambitions. This shows the importance of the marketing value of BREEAM Communities.

One private developer considers BREEAM Communities to be a competitive advantage for the company. He is saying in the interview that "by using BREEAM Communities, the company is communicating to their customers their holistic perspective on the environment and environmental problems." (personal comment from one of the interviewees). Being a pilot project

of BREEAM Communities and thus becoming one of the first projects with such a stamp, the companies will stand out from the crowd, gaining a competitive advantage.

As already discussed in the literature review; with the effects of globalization, the importance of showing global awareness and with the increasing competition from international companies it is even more important to stand out. BREEAM Communities is, as already mentioned, an international standard. In this way the projects and the certification can be comparable, even across the borders. BREEAM Communities can thus be used as a competitive advantage, which is seemingly a great motivator for the developers.

One of the private developers hopes that the BREEAM Communities project will provide a quality stamp for the project. If so, it can be used as a marketing tool showing a good image of the company. In this matter the company is most interested in the commercial benefits of BREEAM Communities. Since the Norwegian translation and adaption of BREEAM Communities is not yet finished, it has been difficult for the company to predict potential advantages and spill over effects the scheme may provide. The interviewee is therefore arguing that"(...) Consequently the marketing aspect has become the driving force and motivator for being part of the pilot program." (personal quote from one of the interviews)

#### 5.2.2 Motivation to get easier saleable dwellings and achieve higher renting/selling prices

The private developers answering the online survey evaluated the advantage of 'getting higher renting prices for business halls and offices' highly. Thus this factor got higher ranked than the advantage of getting higher renting/selling prices on dwellings.

One of the private developers is saying in the interview that he has seen how there in other countries is a higher demand for sustainable classified buildings, which have made them more sellable and at a higher price. He is therefore expecting that this trend will reach Norway at one point as well. However the idea that a BREEAM Communities project could be contributing in getting higher renting and selling prices has not been a motivation for the company to be part of the pilot program of BREEAM Communities. Two of the interviewees neither expect that there will be a measurable effect on sales rates nor pricing of the dwellings.

One of the private developers is also saying that they have seen how the real estate industry demand buildings that have some form of environmental certification. Also he brings in the fact that an increasing number of international investors have bought commercial properties in Norway. The interviewee is therefore expecting that this tendency will continue to increase. They nevertheless consider it being an advantage to be in advance of this development and trend, even though they can not be certain what will happen If it does there are aspirations that the selling and renting prices will increase.

# 5.2.3. Importance of pre-empting legislative changes and getting a more predicable planning process

From the online survey, the 'being in advance with the legislative changes' was perceived as one of the least important advantages of sustainability certifications. Simultaneously, the private developers did not perceive this factor as being the most important motivator for a sustainable classified project. In contrast, all the private developers of the pilot projects perceived this, as a great motivator for developing the project with BREEAM Communities. Especially, as the laws in connection to sustainable development are getting increasingly stricter in Norway.

Sustainability has become an important factor in the building industry and must therefore be taken into account in the planning process, in order to get a building permit. Therefore, there are aspirations that BREEAM Communities will help establish a simpler and less time consuming process to get an accept of the plan. The idea that BREEAM Communities can make the planning process more predictable is their major marketing value and has seemingly affected the private developers' perception of the evidence. With no other projects in Norway developed by the scheme, there exist no proof that BREEAM may contribute to a more predictable planning. All thee private developers perceived the fact that BREEAM Communities may contribute in a more predictable planning process, as being a very important motivator for joining the pilot program of BREEAM Communities. These results are giving indications that BREEAM's marketing program might have affected the private developers perception of the scheme.

#### 5.2.4 Summary

This analysis has shown that there is a tendency that both private developers in general and the private developers for the three first pilot projects have the same major motivations and perceptions of the most important advantages for seeking a sustainable certification. This motivation is the marketing perspective of a sustainable certification tool and BREEAM Communities. The marketing advantage is also strongly linked to being first or first batch of BREEAM Communities accredited developments. It might be that the marketing advantages are not as strong once the scheme is more established.

The idea to use BREEAM Communities in order to make the planning process more predictable is a great motivator for the private developers of the three pilot projects of BREEAM Communities. This is in accordance with what the BREEAM Communities promotes as a great advantage

Since BREEAM Communities is a new tool in Norway, the private developers of the pilot projects are unsure whether it will attract a greater number of costumers and whether they will be willing to pay more for these buildings. There is also poor research and knowledge about the benefits and spill over effects for such a project. Therefore, they cannot control whether there will be any positive effects that oughtweigh the extra costs of a BREEAM Communities certification.

### **DISCUSSION**

Chapter four and five have provided knowledge of what private developers in Norway perceive being the most important advantages and motivation for sustainable certification schemes and BREEAM Communities. With this knowledge, chapter six will discuss if there are potential issues with the private developers motivation and the potential for BREEAM Communities to promote sustainable urban development.



#### 6. Discussion

#### 6.1 Motivation for marketing value

The analysis has shown that there are several motivations for private developers to use sustainable certification schemes and BREEAM Communities in planning. These are the marketing values that create a better reputation for the business, competitiveness and the chance to show global responsibility. For the private developers answering the online survey, 'the potential marketing value of BREEAM Communities' was one of the most important factors. The analysis also indicates that being a part of the pilot program of BREEAM Communities is expected to provide free marketing value. This might have been one reason for why the private developers made a decision to be part of the program.

Seeing the importance of the marketing value of BREEAM Communities, it can be discussed whether this motivation may have an influence on the sustainable dimension of the scheme.

From the results of the research, the majority of the respondents would choose to do what provides the highest marketing value for the least economic expenses. However BREEAM Communities have strict guidelines of what needs to be done in order to cover the requirements. There are also mandatory requirements that need to be covered in order for to gain an interim certificate. Also all documentation will have to be reviewed by a third party, securing that the requirements in the technical manual of BREEAM Communities is covered. Hence, even though the marketing value is perceived as being the most important with BREEAM Communities, developers will not gain credits if the requirements are not covered. Therefore BREEAM Communities will secure the sustainable dimension of the plan.

It should be noted as well that to use BREEAM Communities is a choice for developers. By having a choice and not forcing developers to plan for sustainable development there may become more motivating to plan for sustainable development. This was also communicated by one of the developers during one of the BREEAM Communities workshops. The more criteria that are covered through BREEAM Communities, the higher the certification and sustainable level of the project.



**Figure 6.1:** Certification of BREEAM Communities. It may become motivating for developers to cover more credits for sustainable development knowing that they will gain a higher certification. (BAM - Building a sustainable future, 2013)

#### 6.2 Motivation for higher selling/renting prices

Chapter four and five have shown that private developers highly evaluated the advantage of getting higher renting prices on business offices and halls. This advantage was higher evaluated than the advantage of getting higher renting/selling prices on dwellings. It has been shown in the interviews with the private developers of the pilot projects that one motivation is the hope to attract international companies to their sustainable certified project. This motivation may be linked to the type of developments the private developers are being involved in. It may also be that this motivation is linked to the possibility or idea of getting higher renting prices.

Sensing the motivation rather to attract companies than private individuals to the sustainable certified projects, it can be questioned if this motivation will have an influence on the social sustainable dimension of the plan. If the plan aims to create a business area, the area will thus not be open for other groups within the population.

Other sustainable certified projects have been criticized for this reason; that the project aims at attracting a specific group within the population. - A group that is willing to pay the extra price for living/renting in a sustainable certified building. The sustainable housing exposition of BO01 in Malmö is one example. The project was aiming at being a good example of sustainable urban development. However the project has been criticized for aiming to only attract people with high income. The prices of the dwellings are higher than the average housing prices in Malmö. (DAC & CITES, 2014) If the projects will only be for a specific group within the population, or only for companies, it can be questioned if such a plan will lead to social segregation.

BREEAM Communities are providing the most credits under the category of 'social and economic wellbeing' as illustrated in table 3.2. Thus one of the criteria (SE07) under step two where developers have the possibility to collect credits, require that the development should "(..) minimize social inequalities and foster a socially inclusive community by ensuring appropriate housing provision within the development." (BRE Global, 2014b)This category provides two credits in total. Thus even though there is a motivation for attracting companies for the development, BREEAM Communities is encouraging developers to plan for social inclusion. By planning for a business district, the project will have issues in covering this category. Thus it might be hard for the project to gain a maximum score of BREEAM Communities

BREEAM Communities provides credits and a certification of the plan, not the finalized project. BREEAM Communities does not give any credits connected to the final renting/selling prices of the dwellings. Hence if the price of these buildings become higher than the average housing prices, the sustainable dwellings will be for those who can afford paying the extra cost Therefore even if the developers have covered the requirement of SE07 and planned for a socially inclusive community, this does not mean that the prices of the dwellings will be the same as for dwellings not planned by BREEAM Communities.

#### 6.3 Motivation for a low cost/an economic benefit

The advantages of a making the planning process more efficient as well as reducing the cost of the project got a high evaluation from the private developers. This indicates that this factor is relevant for the private developers when deciding to do a sustainable certified project. Both of these factors are linked to a lower total cost of the project.

As already mentioned, BREEAM Communities provides a different number of credits depending on the criteria. In this way private developers have the chance to choose which criteria to cover to gain a BREEAM Communities certification. The survey showed that the majority of the private developers responding (38 % - five respondents), would choose a planning process that takes less time and has a lower cost, but does not lower the marketing value. Consequently there might be an issue that the credits that require less effort and the least money will be covered, while the credits that require more effort and are more costly will be ignored. Knowing that the economical factor is such an important one, it is natural that the credits perceived as "easy" and "cheap" will be the first priority. In order to ensure the sustainable aspect of BREEAM Communities this issue is something that should be reviewed. The idea of a forced score harvesting instead of assessing what is best to do could easily become the direction of BREEAM Communities.

Further there is also a question whether developers will be willing to do more than what is required in BREEAM Communities, seeing the importance of the economical factor. If there are factors not providing any credits by BREEAM Communities it can be asked whether these will be addressed. From the online survey it can be viewed that none of the respondents would be willing to do more than the minimum requirements in BREEAM Communities to gain a BREEAM Communities certification. The private developers of the pilot project of BREEAM Communities have also acknowledged the issue of BREEAM Communities being a 'tick box' scheme and thus the scheme may become a strict rule for how to make the development. As a consequence, issues that do not provide any BREEAM Communities credits these may not be addressed. In this way it may have an influence on the sustainable dimension of the project and result in a weaker quality of the final project (Wilding, 2013).

The creative dimension of the planning process may also be affected by "the tick box system" in BREEAM Communities where the developers will be guided by the requirements. If a developer has a good idea and the idea is not a criterion in BREEAM, there might be a chance that these ideas will not be used (Wilding, 2013).

The private developers of the pilot projects of BREEAM Communities are highlighting that the total quality of the project will become the most important factor, regardless of whether they use BREEAM Communities. The overall quality of the project will then be considered against the cost. The reviews will therefore be based on an environmental choice and not be guided by what will give points through BREEAM Communities. If they do not thinking of the overall quality of the project, the marketing value may not be as high. Consequently it may result in a

bad reputation of the company if they focus too much in BREEAM Communities and forget the big picture.

# 6.4 Motivation for being in advance with the legislative changes and getting a more predictable planning process

The private developers of the pilot projects of BREEAM Communities perceive being in advance with the legislative changes and getting a more predictable planning process as a great motivator for using BREEAM Communities. Since the international scheme of BREEAM Communities is adapted to English conditions and the English planning system, there are issues in relation to the legislation. The international version of BREEAM Communities is not adapted to the Norwegian law system, which makes the scheme more challenging to use in Norway. Developers will therefore have to ensure that they are covering the Norwegian laws when using the scheme. This will require a double work process, affecting the timeframe and cost of the project, which is not in line with private developers motivations for the scheme. Also when the scheme is not adapted to Norwegian conditions, it is quite demanding for developers to reach for a maximum score of BREEAM Communities, since several of the credits are not relevant in Norway such as securing enough water to the area. (personal comment during one of the BREEAM Communities workshops) This may challenge the full potential for BREEAM Communities to promote sustainable urban development in Norway.

As previously noted, the scheme is most relevant for industrial areas, as there are a lot of in England. There are fewer corresponding areas in Norway, which makes some of the requirements in the technical manual less relevant for Norway. One example is for instance the credits for cleaning an industrial ground. In Norway most of the land is undeveloped, and a need for clearing the ground of industrial waste before building would be irrelevant. However by not covering this requirement, a project may loose potential BREEAM Communities credits, which will have an affect on the final certification of the project.

One of the private developers that is using the British manual of BREEAM Communities have experienced that work done at one stage, often had to be changed in order to satisfy the requirements in BREEAM Communities. These documents will have to be reviewed by a third party in which will give the certification of the project. Further, the motivation for making the planning process more predictable may be challenged. Overloaded by documentation work the planning process might also be more time consuming.

One of the interviewees of the BREEAM Communities pilot projects claims that the major issues and challenges with BREEAM Communities are based on the fact that the concept is new and different actors will have to be followed up and taught about the concept. The scheme of BREEAM Communities requires support in order to be beneficial. Further, BREEAM Communities may lead to more bureaucracy.

There is on-going work of developing a Norwegian version of BREEAM Communities, as already discussed. The aim of this is to better adapt the scheme to Norwegian conditions and the Norwegian law system. Thus when the version is finished, the scheme will make it easier for

developers to make sure that the requirements in the manual are in line with the Norwegian legislation. Thus the criticized 'tick-box system' may become a structured tool for developers to make sure that they are covering all requirements in the Norwegian laws as well as enhancing the sustainable dimension of the plan.

#### 6.5 Summary

This analysis has discussed possible conflicting issues in relation to private developers' motivation for BREEAM Communities and the scheme's full potential to promote sustainable urban development in Norway.

The research has shown that private developers are motivated to get a high marketing value and a low cost for the project. Also there is seemingly an issue that private developers may be more interested in covering the credits in BREEAM Communities in which will provide the most credits for the lowest cost and less effort. However mandatory requirements in BREEAM Communities that has to be covered by the private developers in order to get an interim certification ensures that the sustainable dimension of the plan is covered. Even though private developers motivation is linked to a low cost, the measures they take to get credits have to be reviewed by a third party. This ensures that the plan is developed in a sustainable manner because they cannot claim to have credits without the third party confirming that the mandatory requirements are fulfilled.

Private developers are seemingly also motivated in getting higher renting/selling prices on their projects. BREEAM Communities is not setting any requirements of the final selling/renting prices on the dwellings. Therefore there might be conflicts connected to the social sustainable dimension of the development in the way that the development will only be for those who can afford paying the extra price for such a building.

Another issue that has been discussed is private developers' motivation to get a more predictable planning process. Since the scheme of BREEAM Communities is not adapted to Norwegian conditions yet, the scheme is not in line with the Norwegian legislation. This may result in double proceedings for the developers, in which may challenge the predictability of the planning process. Since the scheme is not yet adapted to Norwegian conditions, the potential for the scheme to cover issues relevant in Norway is therefore weaker. Consequently, this may have an effect on BREEAM Communities full potential to promote sustainable urban development in Norway.

# **CONCLUSION**

This chapter will sum up the findings in this study.



#### 7. Conclusion

This research project has discussed the advantages for and motivation of private developers in Norway for sustainable certification schemes and BREEAM Communities. Further this research project has discussed potential issues in relation to private developers' motivation for BREEAM Communities and the potential for the scheme to promote sustainable urban development.

This research project has aimed at answering the following problem formulation:

"What are the advantages and motivation for the private developers of the three first BREEAM Communities projects in Norway? And how might this affect the potential for this certification scheme to promote sustainable urban development in Norway? "

In order to answer this, three research questions were formulated and answered through this project. The first research question: "What are the potential advantages for private developers of using sustainability certification schemes in general, and BREEAM Communities in particular, for urban developments?" was answered through a literature review of academic articles of BREEAM Communities and sustainable certification schemes. This information provided knowledge of the potential advantages by sustainable certification schemes and BREEAM Communities. For a sustainable certificated project the advantages were:

#### Advantages by sustainable certification schemes

Achieve higher rent/sale prices

**Reduce cost** 

Show global responsibility

Higher net revenue return

Be in advance on the legislative changes

Reduced operating expenditure

Foster/promote innovation

Better reputation for own business

**Tenant attraction (interested in sustainability)** 

Competitiveness

Achieve an increased marketing value

**Efficient planning process** 

These advantages will also apply for the certification scheme of BREEAM Communities, since it is a sustainable certification scheme. In addition five other advantages is claimed to be potential advantages by BREEAM Communities in particular. These are listed bellow:

#### **Advantages by BREEAM Communities**

It differentiate the development of the project

It may reduce cost expenses

It provides a certification that can be used as a marketing tool.

It is structured and user-friendly

It is an international standard (the visibility of the scheme)

It can make the planning process more predictable

The second research question was: "What do private developers in Norway perceive being the most important advantages by a sustainable certified project and BREEAM Communities?".

This question aimed at getting a deeper understanding of what private developers in Norway perceived being the most important advantages for sustainable certification schemes and BREEAM Communities. Further on how their motivations may differ from the claimed advantages from the literature. This knowledge was provided through an online survey conducted with private developers in Norway as well as through a conduction of semi-structured interviews with the project managers of the three first pilot projects of BREEAM Communities in Norway.

The conduction of an online survey with private developers in Norway helped to get an understanding of what private developers in general perceived to be the most important advantages.. Whereas the interviews conducted with the private developers of the three pilot projects of BREEAM Communities provided a more in depth understanding of their motivation for BREEAM Communities.

From the results it can be seen that private developers perceive the advantages connected to an increased marketing value being the most important. In this matter it seems like the idea of using a certification of sustainability, as a marketing tool is most important. To get a better reputation and be more attractive to customers is highly valuated.. Also for the pilot projects of BREEAM Communities it is seemingly a great motivator in being the first BREEAM Communities project with private developers in Norway. In this way the companies are getting an advantage of free marketing by being part of the pilot program of BREEAM Communities.

From the research it can be seen that private developers perceive the advantage of attracting tenants to their sustainable certified projects being very important. Also the advantage of getting higher renting/selling prices on business offices and halls got a high evaluation of importance by the private developers.

The third research question was "To what extent, and in what ways, might the motivations of private developers for using BREEAM Communities affect its potential to contribute to sustainable planning process in Norway?".

To answer this research question data collected from the previous question was used. The research has shown that the marketing value in relation to BREEAM Communities is the highest evaluated motivator for using the scheme. Also the research done in this project has shown that private developers are motivated getting an economical benefit by using the scheme of BREEAM Communities. Thus the research from this report has shown that it might be an issue that private developers may be more interested in covering the factors in BREEAM Communities that are least costly for the project. This may take the focus away from the sustainability aspect; witch is the most important and the point of BREEAM. This research has also identified an issue when it comes to the planning aspect. BREEAM Communities may guide the planning process, and thus if there are factors that will not provide any credits through BREEAM Communities these may not be covered. As a consequence this may affect the total sustainable dimension as well as the quality of the plan.

Nevertheless BREEAM Communities is setting rigorous standards in order to achieve environmental and social gains. Private developers need to cover the mandatory requirements in order to gain an interim certification of the plan. Even though private developers' motivation is linked to a low cost, the plan needs to be reviewed by a third party in order to be able to gain the credits and final certification. Consequently BREEAM Communities ensures that the plan is to be developed in a sustainable manner. Thus even though the results from this research have shown that the majority of private developers would do what would provide the highest marketing value for the lowest price, the requirements in BREEAM Communities will have to be covered in order for the developers to gain the credits.

Seeing how the developers are interested in the marketing value of the scheme, there should as well be motivation to do more, and thus get a higher certification of the plan. This will as well enhance the sustainable level of the plan.

This research project has shown that there are several motivations among the private developers for using sustainable certification schemes and BREEAM Communities. However, marketing values are considered the main driving forces as it was evaluated the highest in this research. It will therefore be exciting to see what will happen when the Norwegian version of BREEAM Communities is finished.. Will the translation make it easy for the developers to take the measures that require the lowest costs for the highest marketing value? Or will it ensure that the sustainable dimension is covered despite the developers wish for the easiest solutions? If the translation is well adapted, such issues should be minimized. It is important that credits in BREEAM Communities should not come in the way of private developers' creativity nor supersede other factors that will be important to include in the planning process. With a very strict credit system this could become a problem that is important to keep in mind.

It will also be necessary to review the credits and minimize the possibility that some credits will be easier and less expensive to achieve.

The chance that the credits in BREEAM Communities will control the planning process may be reduced. In this way the sustainable dimension of BREEAM Communities will be enhanced. The motivations for a high marketing value at a low cost and the problem of BREEAM Communities being too guiding in the planning process could decrease the sustainable dimension of the scheme. If these factors are kept in mind the chances may increase BREEAM Communities potential to promote sustainable urban development in Norway.

## **REFLECTION**

This chapter will reflect upon the methods used in this study. Also this chapter will reflect on what this project may mean for future research.



### 8. Reflection

#### Limitations

The focus of this project was to investigate private developers' motivation for sustainable certification schemes and BREEAM Communities. This could have been done in a variety of ways. However there were some limitations in this research project that have to be taken into account. One of these is the timeframe of this research project. By having a short time frame in which to conduct the research, the methods had to be chosen carefully. If I had more time for this project, more interviews with other actors could have been provided which could have strengthened the reliability of the study. Interviews with other planners within the BREEAM Communities projects could have been conducted. It could as well have been interesting to have an interview with the people responsible for the translation of BREEAM Communities and ask questions about why the scheme is being translated to Norwegian conditions and why there is a market for BREEAM Communities in Norway. This could have provided more knowledge about the motivations for BREEAM Communities and what private developers perceive being the potential advantages. Further it could also be contributing in better understanding potential issues with the motivations and the potential for the scheme to promote sustainable urban development in Norway. It could also have been interesting to have interviews with planners that had used BREEAM Communities such as the private developers of the BREEAM Communities project of Masthusen. In this way I could have investigated the outcomes of a BREEAM Communities project. For further analysis I would recommend investigate this. Also more time could have provided a higher respond rate to the online survey in which could have provided more reliability to the study.

Another limitation to this study was the access to information. Since sustainable certification tools and BREEAM Communities are relatively new tools, there is limited literature about motivation and outcomes of them. This has made the data collection demanding. Another issue is that the cases investigated in this project are not finished yet. Consequently there is limited information about the cases. Since the developers do not have much experience with the scheme, there were also questions that were hard for them to answer in the interviews, Likewise there were issues that they so far did not know about such as which certification of BREEAM Communities to reach for.

#### Recommendations

Further studies could be to investigate benefits by a BREEAM Communities planned project compared to a project not planned by BREEAM Communities. This could be done when the projects are finished. It could also be interesting to investigate private developers' motivation for BREEAM Communities after the projects are finished, and if these are the same. Also when the scheme is more established in Norway it could be interesting to investigate if the motivation for the marketing value is the same.

## **REFERENCE LIST**



### Reference list

Aspinal, S, Sertyesilisik, B., Sourani, A. and Tunstall, A. (2012) How Accurately Does Breeam Measure Sustainability?. *Creative Education*, **3**, 1-8 Retrieved on 25.05.15 from SciRes: http://www.SciRP.org/journal/ce

Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. Academy of Management Journal, 43(4), 717–736.

BAM - Building a sustainable future. (2013). BAM - Building a sustainable future. Retrieved on 14.04.15 from LEEDS Arena: http://sustainability.bam.co.uk/case-studies/2013-08-13-leeds-arena

Bergström, G. (2011). City districts can receive environmental certification. Sustainability. Journal from the Swedish research council formas. Retrieved on 05.06.15 from http://sustainability.formas.se/en/Issues/Issue-4-November-2011/Content/Articles/City-districts-can-receive-environmental-certification/

Blaeser, J. and Whiting, G. (2012). Environmental Sustainability Benchmark Study: Leaders Find 'Green' ROI. Retrieved on 18.05. 15 from http://www.americanshipper.com?Main/Report.aspx.

Boyd, T. (2006). "Can we assess the worth of environmental and social characteristics in investment property?", Proceedings of the Pacific Rim Real Estate Society Conference, Auckland, New Zealand, PRRES.

Brand, P., & Thomas, M. J. (2005). Urban environmentalism Global Change and the Mediation of Local Conflict. New York, USA: Routledge.

BRE Global. (2013). Retrieved on 06.05.15 from http://www.breeam.org/filelibrary/BREEAM%20Communities/BREEAM\_Communities\_An\_in troduction\_for\_international\_use\_(KN5260).pdf

BRE Global. (2014a). The case for BREEAM Communities. Retrieved on 06.05.15 from

http://www.breeam.org/filelibrary/BREEAM%20Communities/The-case-for-BREEAM-Communities.pdf

BRE Global. (2014b). Breeam Communities - Technical Manual SD202 -1.0:2012. England: BRE Global. Retrieved on 01.05.15 from http://www.breeam.org/bre\_PrintOutput/BREEAM\_Communities\_0\_1.pdf

BRE Global. (2015). Frequently asked questions. Retrieved on 13.05.15 from http://www.breeam.org/page.jsp?id=27#BREEAM12

Breivik, R. (26.03.15). Interview concerning BREEAM Communities. (E. Fredriksen, Interviewer)

Brun, T. A. (05.02.15). Miljøsertifisering raskt spart inn. ESTATE NYHETER, Retrieved on 04.03.15 from http://www.estatenyheter.no/15-nyhter/4104-miljosertifisering-raskt-spart-inn

Bruvik, A. (25.03.15). Interview concerning BREEAM Communities. (E. Fredriksen, Interviewer)

Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance. The Academy of Management Review, 4(4), 497–505.

Christmann, P. (2004). Multinational companies and the natural environment: Determinants of global environmental policy standardization. Academy of Management Journal, 47(5), 747–.

Cho, C. H., R. P. Guidry, A. M. Hageman, and D. M Patten. (2012). DO Actions Speak Louder Than Words? An Empirical Investigation of Corporate Environmental Reputation. (Report) Accounting, Organizations and Society 37 (1), 14-.

Columbia CNMTL. (n.d.). Columbia center for new media teaching and learning. Validity and Reliability. Retrieved on 20.04.15 from http://ccnmtl.columbia.edu/projects/qmss/measurement/validity\_and\_reliability.html

DAC & CITES. (21.01.14). Dac and cities. Malmö: Bo01 - an ecological city of tomorrow. Copenhagen, Denmark. Retrieved on 02.05.15 from http://www.dac.dk/en/dac-cities/sustainable-cities/all-cases/master-plan/malmo-bo01---an-ecological-city-of-tomorrow/

Daly, H. E. (1999). Ecological Economics and the Ecology of Economics: Essays in Criticism. Chelteham: Edward Elgar.

David M. Boje & Jacob A. Massoud. (2014). Determing environmental values. Storytelling at BP,Values in Sustainable Development, Routledge studies in sustainable development.

Doggart, J. & Baldwin, D. R. (1997). BREEAM International: Regional Similarities and Differences of an International Strategy for Environmental Assessment of Buildings. Buildings and the Environment. Paris, June 9-12, 1997.

Eccles, R. G., I. Ioannou & G. Serafeim. (09.05.12). The impact of a Corporate Culture of Sustainability on Corporate Behaviour and Performance. WorkingPaper 12-035. Retrieved on 18.05.15 from https://www.triodos.nl/downloads/private-banking/impact-corporate-culture-of-sustainability.pdf

Eichholtz, P., Eichholtz, N., & Kok, K. M. (2010). Doing Well by Doing Good? Green Office Buildings. The American economic review, 100(5),2492-2509.doi:10.1257/aer.100.5.2492

Europakommisjonen. (2006). Den nye SMV-definisjonen, Brukerveiledning og modellerklæring. n.d.: Publikasjonskontoret. Retrieved on 04.04.15 from

http://www.forskningsradet.no/servlet/Satellite?blobcol=urldata&blobheader=application%2 Fpdf&blobheadername1=Content-

Disposition % 3A&blobheader value 1 = + attachment % 3B + filename % 3D% 22 smeuser guideno.pdf % 22&blobkey = id&blobtable = MungoBlobs&blobwhere = 1274505971663&ssbinary = true

Florida, R. (2002). The Rise Of The Creative Class: And How It's Transforming Work, Leisure, Community And Everyday Life. New York: BasicBooks.

Flyvbjerg, B. (2006). "Five Misunderstandings About Case-Study Research," Qualitative Inquiry. 2006, 12(2). 219-245. DOI: 10.1177/1077800405284363.

Fuerst, F. and Mcallister, P. (2008a). "Green noise or green value? Measuring the price effects of environmental certification in commercial buildings", School of Real Estate and Planning Working papers, Henley Business School, University of Reading, Reading, MA.

Fuerst, F. and Mcallister, P. (2008b). "Pricing sustainability: an empirical investigation of the value impacts of green building certification", working paper from the Proceedings of the American Real Estate Society Conference, April, Florida, ARES

Hall, B. (2012). Sustainability Certification: Is it the Right thing to Do? MyPrintResource.com

Hillon, E. (2014). "Values and strategies for the environment and sustainable development" in *Values in Sustainable Development*. Edited by Jack Appleton. Routledge Studies in Sustainable Development. USA.

HOLMES, J. and HUDSON, G., (2002). The Application of BREEAM in corporate real estate: A Case Study in the Design of a City Centre Office Development. Journal of Corporate Real Estate. Vol 5 Iss:1, pp 66-77

Hussein, A., Najib, S., & Bashar, Z. (2011). Report of the arab forum for environment and development. Retrieved on 14.05.15 from http://www.afedonline.org/Report2011/main2011.html (PICTURE)

Hsu, J.-L., & Cheng, M.-C. (2012). What prompts small and mediumenterprises to engage in corporate social responsibility? A study from Taiwan. Corporate Social Responsibility and Environmental Management, 19(5), 288–305. DOI: 10.1002/csr.276

Jensen, J. O (2014). Sustainability certification of neighbourhoods: Experience from DGNB New Urban Districts in Denmark. Nordregio News. 1:7-11

Kimmet, P. (2006), "Theoretical foundations for integrating sustainability in property investment appraisal", Proceedings from the Pacific Rim Real Estate Society Conference, Auckland, New Zealand, PRRES. Retrieved on 05.04.15 from http://www.prres.net/papers/kimmet\_integrating\_sustainability\_property\_investment\_appraisal.pdf

Kotler, P. (2000). Kotler om markedsføring - Hvordan du skaper, vinner og dominerer markeder (Kotler on marketing-How to create, win and dominate markets). (A. lillebø, translator.) Oslo, Norge: Egmont Hjemmets bokforlag.

Kommunal- og regionaldepartementet and Miljøverndepartementet. (2013). Faglig råd for bærekraftig byutvikling. Kommunal- og regionaldepartementet and Miljøverndepartementet. (Report). Retrieved on 04.03.15 from

https://www.regjeringen.no/globalassets/upload/krd/plan/mvd\_final\_121213\_web.pdf

Lehner, M. and Vaux Halliday, S. (2014). Branding sustainability: Opportunity and risk behind a brand-based approach to sustainable markets. Ephemera, 2014, Vol14(1),pp13-34

Lubin, D. A, (2010). The sustainability imperative. (The Big Idea). Harvard Business Review,88 (5), 42–.

Lunke, J. K. (24.03.15). Interview concerning BREEAM Communities. (E. Fredriksen, Interviewer)

Neuman, W. L. (2010). Social Research Methods: Qualitative and Quantitative Approaches, (7/Edition.). USA: Pearson.

Nærings- og handelsdepartementet. (2012). Små bedrifter – store verdier. Oslo: Nærings- og handelsdepartementet. (Report) Retrieved on 03.04.15 from https://www.regjeringen.no/nb/dokumenter/sma-bedrifter---store-verdier/id676379/

Norwegian green building council in cooperation with COWI AS. (2015). BREEAM Communities report - Flesland Business Park. Working paper. Norway: Norwegian Green Building Council. (Access through a company's portal-closed for public insight).

Norwegian Green Building Council in cooperation with COWI AS. (2015). BREEAM Communities report - Marienlyst Utvikling. Working paper. Norway: Norwegian Green Building Council. (Access through a company's portal-closed for public insight).

Miller, N., Spivey, J. and Florence, A. (2008b), "Does green pay off?", Journal of Real Estate Portfolio Management: 2008, Vol. 14 No. 4, pp. 385-400.

Mæle, C., & Burheim, K. (15.01.14). ROM Eiendom. "Åpent møte-Skien Brygge" (Meeting notes) Retrieved on 15.04.15 from http://www.romeiendom.no/Aktuelt/Apent-mote-Skien-Brygge

Pivo, G. and Fisher, J.D. (2009). "Investment returns from responsible property investments: energy efficient, transit-orientated and urban regeneration office properties in the US from 1998-2008", working paper, Responsible Property Investing Center, Boston College and University of Arizona Benecki Center for Real Estate Studies, Indian University, Boston, MA.

Porter, M. E., & Van der Linde, C. (1995). Green and competitive: Ending the stalemate. Harvard Business Review, 87(9), 120–134.

Reed, R., Bilos, A., Wilkinson, S., & Schulte, K.-W. (2009). International Comparison of Sustainable Rating Tools. The Journal of Sustainable Real Estate,

Rodriguez, S. I., Roman, M. S., Sturhahn, S. C., & Terry, E. H. (2002). Sustainability Assessment and Reporting for the University of Michigan's Ann Arbor. Michigan: University of Michigan.

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. Academy of Management Journal, 40(3), 534–559.

Sen, S., Bhattacharya, C. B., & Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships: A field experiment. Journal of the Academy of Marketing Science, 34(2), 158–166.

Siktdar, S. K. (2003). Sustainable Development and Sustainability Metrics. AIChE Journal, 49(8), p. 1928-1932.

Stafford, E. R., & Hartman, C. L. (2013). Promoting the value of sustainably minded purchase behaviours. Marketing News, 47(1), 28–33

Statistics Norway. (2014). Statistics Norway. "*Befolkningsframskrivinger*, 2014-2100" Retrieved on 27.05.15 from http://www.ssb.no/befolkning/statistikker/folkfram/aar/2014-06-17

Tobin, K. & Fraser, B. (n.d.). Analyzing Verbal Data: Principles, Methods and Problems. Retrieved on 23.03.15 from http://academic.brooklyn.cuny.edu/education/jlemke/papers/handbook.htm

Utenriksdepartementet. (2002). Regjeringen.no. "*Nasjonal strategi for bærekraftig utvikling*". Retrieved on 26.02.15 from https://www.regjeringen.no/nb/dokumenter/nasjonal-strategi-for-barekraftig-utvikl-2/id448574/

Walliman, N. (2006). Social Research Methods. London, England: SAGE Publications Ltd. Doi: http://dx.doi.org.zorac.aub.aau.dk/10.4135/9781849209939

Warren-Myers, G. (2012). The value of sustainability in real estate: a review from a valuation perspective. *Journal of property investment and finance*,30(2), 115-144. *Doi:10.1108/14635781211206887* 

Wilding, M. (2013). What score do you give Breeam: architects are growing frustrated with the system for certifying green buildings – but big chances are on the way. *Building design, 6-.* 

World Commission on Environment and Development (1987). *Our Common Future.* Oxford: Oxford University Press.

World Green Building Council. (2013). World Green Building Council. The business case of green building- A Review of the Costs and Benefits for Developers, Investors and Occupants: Retrieved on 19.02.15 from http://www.worldgbc.org/activities/business-case/

Yin, R.K. (2009). Case Study Research: Design and Methods. Thousand Oaks: Sage Publications, Inc.

# List of figures

<b>Figure 0.1:</b> Front page and chapter covers, own figure adapter from (Hussein, Najib, & B 2011)	
Figure 2.1: Research design (own figure)	15
<b>Figure 2.2:</b> An illustration of the literary data used in this research project	17
Figure 2.3: The valuation factors with weighting.	23
<b>Figure 2.4:</b> Illustration of the connection between reliability and validity in a study (Col CNMTL, N.D.)	
<b>Figure 3.1</b> : The balance between the aspects in a sustainable development. Own Adapted from: (Rodriguez, Roman, Sturhahn, & Terry, 2002)	_
Figure 3.2: Illustration of international rating tools. (Reed, Bilos, Wilkinson, & Schulte, 20	09).32
Figure 3.3 The planning process in BREEAM Communities (BRE Global, 2014a)	33
Figure 3.4: The steps in BREEAM Communities. (BRE Global, 2014b)	34
<b>Figure 3.5:</b> The international uptake of BREEAM Communities. (BRE Global,2014a) <b>Figure 6.1:</b> Certification of BREEAM Communities (BAM - Building a sustainable future,	, 2013)
List of tables  Table 1.1 The structure of this report (own figure)	12
<b>Table 2.1</b> : A description of the most relevant documents used in this research project	
Table 2.2: The interviewees	19
<b>Table 2.3</b> : Definition of the size of the company. (Europakommisjonen, 2006)	22
<b>Table 3.1</b> BREEAM Communities certification. (BRE Global, 2014b)	33
Table 3.2: Categories and weightings (BRE Global, 2014b)	33
Table 3.3: Advantages by BREEAM Communities	35
Table 3.4: Market forces and motivation for sustainable development	37
<b>Table 4.1:</b> Advantages by a sustainable classified project	46
<b>Table 4.2</b> . Decisive factors for choosing BREEAM Communities	49
<b>Table 5.1:</b> The motivations for BREEAM Communities from the private developers of the first pilot projects of BREEAM Communities in Norway.	e three 57

# List of graphs

<b>Graph 4.1</b> : Evaluation of advantages of sustainable certification	45
<b>Graph 4.2:</b> Decisive factors for choosing BREEAM Communities	49
<b>Graph 4.3:</b> Evaluation of criteria in BREEAM Communities	51
<b>Graph 4.4</b> : Evaluation of whether the private developers would be willing to do requirements in BREEAM, in order to gain a certification	