

The EU taxonomy: Influencing Banks' Green Loan Portfolios and SMEs' Attitudes Towards Sustainability

An In-depth Study on the Impact of the EU taxonomy for Sustainable Activities in Norway

ELSETH, CHRISTINE ROSLAND MEIER, LINNÉA HOLSEN

SUPERVISOR EFRAT, KALANIT

University of Agder, 2023School of Business and Law
Department of Management

Abstract

The EU taxonomy was incorporated into Norwegian law at the beginning of 2023, directly impacting listed companies and financial institutions with over 500 employees. It obligates, among other actors, large Norwegian banks to report on their taxonomy-compliant financial activities. Given the EU's strong commitment to achieving climate neutrality by 2025, significant efforts have been made towards sustainable outcomes. It is projected that sustainability reporting aligned with the EU taxonomy will become mandatory for small and medium-sized enterprises (SMEs) by 2025.

This study aims to examine the impact of the EU taxonomy on banks' lending criteria for new commercial buildings and its implications for SMEs in the building and construction sector. The building and construction sector in Norway is responsible for 15 percent of the country's total emissions, with a significant portion of these firms being SMEs. Previous research has highlighted concerns regarding the lack of Norwegian definitions and practical implementation of the EU taxonomy. These studies are related to the impact of the EU taxonomy on actors in the building and construction sector and financial stakeholders. However, a research gap exists regarding the effects of the EU taxonomy on banks' green loan portfolios in relation to SMEs operating in the building and construction sector.

To address this gap, this study seeks to answer the following research questions: "How does the implementation of the EU Taxonomy affect banks' facilitation of a green loan portfolio for new commercial building projects?" and "How do SMEs in the building and construction sector strive to meet the upcoming sustainability requirements imposed by the EU Taxonomy, and what are their attitudes, drivers, and barriers?" We have explored these questions by collecting data through indepth interviews. Thematic analysis were employed to examine the practical impact of the EU taxonomy on these actors. Our study also facilitates document analysis to gain data on attitudes towards the EU taxonomy in the building and construction sector. The findings indicate that the EU taxonomy serves as the main driver shaping banks' green loan portfolios, while SMEs are indirectly affected by the EU taxonomy through green loans. SMEs exhibits predominantly positive attitudes towards forthcoming sustainability requirements despite some barriers related to resource constraints.

Preface

This thesis represents our final part of our Master of Science at "Shift Entrepreneurship and Innovation", a program that encourages sustainability and responsible development of society by utilizing UNs sustainability goals as fundamental aspects of its educational and practical approach. Through the program's close collaboration with industry and public experts in the business sector, we have had the pleasure of being challenged in both our academic and entrepreneurial journey. This has provided us with the opportunities to grow a valuable network and expand our knowledge through learning by doing and learning from failure. The program's emphasis on sustainable innovation influenced an interest for a further understanding of the subject. This led to a motivation to explore our own entrepreneurial ventures which generated a fascination in exploring implications of the newly adopted EU taxonomy effect on the SMEs in Norway.

During the process of writing our thesis we have gained valuable insight and encouragement from a variety of individuals. Initially, we would like to thank our interviewees in the bank sector, SMEs in the building and construction sector, and subject matter experts on the EU taxonomy, for their time to provide us with useful information and insight to finalize our thesis. Additionally, we would like to thank our respected lecturers during our academic journey at the University of Agder, for their valuable contribution and motivational support - laying the foundation for our master thesis. We would also like to thank our thesis supervisor, Kalanit Efrat, for helpful and directional feedback in our writing process. And lastly, we would like to thank our family and friends for supporting us through their network and valuable insight and feedback.

Linnéa Holsen Meier

Christine Rosland Elseth

Kristiansand 30 May 2023

Kristiansand 30 May 2023

Abbreviations

B&C Building and Construction

CSRD Corporate Sustainability Reporting Directive

DNSH Do no significant harm

EU European Union

EPC Energy Performance Certificate

FMP Financial Market Participant

GWP Global Warming Potential

HLEG High-Level Expert Group

IEA International Energy Agency

ILO International Labor Organizations

KPI Key Performance Indicator

MSEG Member State Expert Group

NFRD Non-Financial Reporting Directive

NGBC Norwegian Green Building Council

NZEB Nearly-Zero Energy Building

SD Sustainable Development

SDG Sustainable Development Goals

SFDR Sustainable Finance Disclosure Regulation

SSB Statistics Norway (Statistisk Sentralbyrå)

TEG Technical Expert Group

TR Taxonomy Regulation

TSC Technical Screening Criteria

UN United Nations

WGBC World Green Building Council

WEF World Economic Forum

Table of Contents

1 Introduction	<i>1</i>
1.1 Background	1
1.2 Research Focus	2
1.3 Research Questions	4
1.4 Significance of the Study	5
1.5 Structure of the Thesis	6
2 Theoretical Background and Framework	8
2.1 Sustainability and Finance	8
2.2 Overview of the EU Taxonomy for Sustainable Activities 2.2.1 The EU Taxonomy – a Regulation and Framework 2.2.2 Sustainability Reporting 2.2.3 Affected Parties and Timeline	13 16
2.3 Norway's Adoption and Implementation of the EU taxonomy	
2.4 Implication for SMEs in the Building and Construction Sector	
2.4 Network Theory	29
3 Methodology	31
3.1 Research Method	32
3.2 Data Collection	33 34 36
3.3 Data Analysis	39
3.4 Validity and Reliability	45

4 Findings	51
4.1 Document Analysis	51
4.2 Interviews	52
4.2.1 The EU Taxonomy's effect	
4.2.2 Banks perception of the EU Taxonomy	54
4.2.3 SMEs perception of the EU Taxonomy	
4.2.4 Banks facilitation towards a green loan portfolio	
4.2.5 SMEs perception of green loans for new commercial buildings	58
5 Discussion	59
5. 1 EU taxonomy's Facilitation of Green Finance	59
5.1.1 Banks Loan Portfolio for New Commercial Building Projects	
5.1.2 SMEs perception on Banks' Lending Criteria	
5.2 Attitudes towards sustainability requirements in the B&C sector	64
5.2.1 Negative Attitudes	
5.2.2 Positive Attitudes	66
6 Conclusion	69
6.1 Practical and Theoretical Implications	71
6.2 Limitations and Further Research	72
7 References	74
8 Appendix	81
Appendix 1 – Interview Guide for SMEs in the Building & Construction Sector	81
Appendix 2 – Interview Guide for Banks.	82
Appendix 3 - Information Letter and Declaration of Consent	83

List of Figures and Tables

Figure 1. Timeline of Key Events on Sustainability	10
Figure 2. Overview of ESG pillars.	11
Figure 3. Environmental objectives in the EU Taxonomy Regulation.	14
Figure 4. Criteria in the EU Taxonomy Regulation.	15
Figure 5. Three groups of Taxonomy users in the EU Taxonomy Regulation.	19
Figure 6. The thesis focused path in Network Theory.	30
Table 1. Overview of EUs timeline of companies obliged to report on sustainability.	20
Table 2. Overview of Norway's building regulations and certifications in the B&C sector.	29
Table 3. Overview of interview candidates categorized and abbreviated.	36
Table 4. Coding of interviews based on identified themes.	43
Table 5. Findings from Document Analysis.	51

1 Introduction

1.1 Background

Each year, a calculation compares the Earth's ecological resource capacity to human's ecological footprint demands. The Earth Overshoot Day is an annually marked day for when humans globally have depleted the Earth's resources, and in 2022 it landed on July 28. The annual trend shows that for each passing year, this day occurs earlier, indicating a growing gap between the depletion of Earth's resources and humanity's resource demands (EOD, n.d.). The Earth Overshoot Day highlights the unsustainable nature of humans' current consumption patterns. It is a strong reminder that the world needs to shift towards more sustainable practices and activities. "Sustainability" can be defined as the "(...) development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland et al., 1987; WCED, 1987), and is a term that has increasingly become more popular and acknowledged due to the urgency of environmental and climate challenges. In light of these challenges, a handful of efforts have been initiated to collectively comprehend the importance of sustainable development (SD) globally and in Europe. Among them are the well-known United Nations (UNs) Sustainable Development Goals (SDGs), the Paris Agreement, and the European Green Deal - all working towards a globally sustainable future (European Commission, n.d.-d).

Regardless of the widely recognized urgency of environmental and climate challenges, efforts still need to be made to achieve sustainable environmental outcomes. In 2020, the World Economic Forum (WEF) published its fifteenth Global Risk Report, rating climate change as the top global threat. This marked the first occasion in the report's history that the environment was included as a component of all the "top long-term risks by likelihood" (EU TEG, 2020, p. 7). Instead, global environmental efforts have caused an increase in "greenwashing", which is when companies convey false or misleading information about their sustainable practices (Ditlev-Simonsen, 2022, p. 192-193). This is explained by the lack of clarity on what can be defined as "green" or "sustainable". Consequently, this indicated a necessity for new tools to enable a sustainable transition, where finance plays a vital role in facilitating transformative improvements in existing

industries towards low-emissions economies (EU TEG, 2020, p. 7; Finansdepartementet, 2023; Klima- og miljødepartementet, 2021; Wagstaff & Belsom, 2022, p. 4). As a result of this, the European Commission published an Action Plan in 2018 on Financing Sustainable Growth, demanding the establishment of "(...) a common language and a clear definition of what 'sustainable' [is]" (European Commission, n.d.-c), eventually giving birth to the European Union (EU) taxonomy for sustainable activities.

The EU taxonomy aims to create a unified classification system, clarifying whether an economic project or activity can be considered environmentally sustainable. Its purpose is to channel capital to these projects, increase transparency, and prevent greenwashing by focusing on combining finance and sustainability. The initial goal is to help financial institutions, and investors make sustainable investment decisions (European Commission, n.d.-c; EU Taxonomy Info, n.d.-b; Finansdepartementet, 2023; Grønn byggallianse, 2020; Stapel & Wambach, n.d.), and foster transparency in the finance industry through sustainability reporting requirements (Oellingrath & Ray, 2022). Its reasoning is to facilitate growth in low-carbon sectors and decarbonize high-carbon sectors by making financial products that pursue environmentally sustainable objectives more accessible (European Union, 2020; EU TEG, 2020). The EU taxonomy currently affects Financial Market Particiants (FMP) and large listed companies with over 500 employees in the EU (European Commission, n.d.-c; European Union, 2020; EU Taxonomy Info, n.d.-a; EU TEG, 2020, p. 26; Och, 2020, s. 7), but are intended to facilitate further development of demanding regulations. This includes the development of standardized sustainability reporting regulations while also incorporating and building on existing legal instruments (Oellingrath & Ray, 2022; Pettingale et al., 2022). EUs timeline for reporting requirements, according to the EU taxonomy, also forecasts reporting obligations to include small and medium-sized enterprises (SMEs) by the financial year of 2025 (Dalsegg & Lidsheim, 2023, p. 33; PwC, 2022).

1.2 Research Focus

The affected FMP includes large banks, who are obligated to disclose information on their financial products through the EU taxonomy's sustainability reporting requirements (Oellingrath & Ray, 2022). Banks provide loans, offer savings, and ensure efficient capital allocation and payment

processing to and between private individuals, businesses, and authorities. They are, therefore, an important prerequisite for their customer's value creation and a link between many different financial actors in the society they operate in (PwC, 2021, p. 38). Through their customer relationships, banks are linked to several high-emissions sectors. Among these are the building and construction (B&C) sector. Globally, this sector is often referred to as the "40 percent industry" as this is how much percentage of process-related greenhouse gas emissions and operational energy it is responsible for (Bygg, 2021; Greenbuilt, 2023; Grønn Byggallianse, n.d.-a; United Nations Environment Programme, 2022, pp. 26-42; World Green Building Council, 2022, p. 8). In 2021 the B&C sector stood for 30 percent of the global energy emission and approximately 37 percent of global operational and process-related emissions (IEA, 2022; United Nations Environment Programme, 2022, pp. 26-42). This sector accounts for roughly one-third of global energy- and process-related greenhouse gas emissions (IEA, 2022). As banks allocate capital for projects and activities within this sector, they have a large environmental responsibility for a sustainable global transition.

This study will explore the recent implementation of the EU taxonomy in Norway. Even though Norway is not a member of the EU, it maintains a close economic and regulatory relationship with the EU through the European Economic Area (EEA) agreement (Utenriksdepartementet, 2021). Through the EEA agreement, the EU taxonomy was adopted and put into effect in Norway on January 1, 2023. It will continue to follow the EUs timeline for mandatory sustainability reporting requirements (Finansdepartementet, 2023), implicating reporting requirements for SMEs in 2025. Large banks are one of the few main actors affected by the reporting requirements in Norway. This is because the Norwegian business landscape primarily consists of SMEs, where approximately 99 percent of businesses have less than 100 employees (SMB Norge, 2020; SSB, 2023a). SMEs exclusively comprise the business sector in 70 percent of Norway's municipalities, comprising all private sector employment within those areas (BDO, n.d.; SMB Norge, 2020). This makes banks an essential key player in capital allocation towards sustainable activities and projects, especially within the Norwegian B&C sector. The B&C sector is the third largest employer in Norway (SSB, 2023b), where over 99 percent of the businesses operating in this sector are SMEs (SSB, 2023a).

Additionally, the B&C sector accounts for around 15 percent of total greenhouse gas emissions in Norway (Grønn Byggallianse, n.d.-a; Kommunal- og distriktsdepartementet, 2022). The majority of this percentage comes from indirect emissions, as the direct emission from this sector relates to the operation and heating of buildings, which predominantly come from renewable energy (Grønn Byggallianse, n.d.-a). Approximately 70 percent of annual emissions from the B&C sector come from the construction of new buildings, primarily due to the significant indirect emissions associated with material production and transportation (Dalsegg & Lidsheim, 2022, p. 33; Grønn Byggallianse, n.d.-a). This is significant considering that the annual rate of new buildings being constructed is only 1-2 percent (Grønn byggallianse, n. d.-a). Overall, making the B&C sector an important national focus area for decarbonization (Kommunal- og distriktsdepartementet, 2022).

1.3 Research Questions

The objective for this research is divided into two parts and aims to investigate the EU taxonomy's impact of (1) large banks and (2) SMEs operating in the B&C sector. Additionally, this thesis aims to examine the indirect impact of the EU taxonomy by exploring how banks facilitates towards sustainable building projects in the B&C sector, and how these businesses perceive it. Based on the preceding background and research focus, this thesis attempts to answer the following research questions:

RQ1: How does the implementation of the EU Taxonomy affect banks' facilitation of a green loan portfolio for new commercial building projects?

RQ2: How do SMEs in the building and construction sector strive to meet the upcoming sustainability requirements imposed by the EU Taxonomy, and what are their attitudes, drivers, and barriers?

In order to address these research questions, a qualitative analysis is employed. This thesis aims to identify the EU taxonomy's regulatory and perceived effectiveness on banks and SMEs in the B&C sector and examine SMEs attitudes towards upcoming sustainability requirements implied in the EU taxonomy. The context for this thesis the EU taxonomy, which was recently implemented into Norwegian Law. To gain a comprehensive understanding of the subject researched, in-depth interviews and document analysis are utilized as tools for collecting data. Our data includes

interviews from five banks and six SMEs, 11 interview objectives in total. Thematic analysis is applied to structure data collected from interviews and identify patterns.

1.4 Significance of the Study

A preliminary literature review was conducted to identify and gain insight on prior literature and studies relevant to this study's research questions. To identify existing literature and studies, keywords related to the research questions relevance were typed into electronic literature databases. These databases included Google Scholar and Oria, where keywords searched for were *EU taxonomy*, *Norway*, *Sustainable*, *Finance*, *Banks*, *SME*(*s*), *green*, *loan*(*s*), *facilitation*, *construction*, *(new) buildings*, *reporting*, *attitudes*, *drivers*, *barriers*, and *adaption*. Binding words like "OR", "AND" and "NOT" were used to gain relevance towards the research question. Publication dates were narrowed down to the period between 2018 and 2023, to gain relevant publications related to the EU taxonomy. This search process resulted in five articles in Google Scholar and two in Ora, where only one article and one thesis were somewhat relevant for this study's research questions.

The article examines the EU taxonomy's effect on the Norwegian B&C sector as well as real estate owners and facilities management providers. It was conducted a document analysis and in-dept interviews with main stakeholders in the financial sector, construction and real estate sector, authorities, environmental organizations, and businesses related to facility managements and real estate. Relevant findings showed that (1) stakeholders shared similar attitudes towards the EU taxonomy, and had generally positive attitudes towards it, but differed in some opinions. These opinions included: a high level of uncertainty and confusion regarding the EU taxonomy's practical implementation of its criteria's function and ambition, and concerns related to a lack of Norwegian definitions and regulations in the EU taxonomy. (2) Requirements for new and existing buildings are seen as stricter than current Norwegian practices, and (3) the EU taxonomy needs further development, but expressed a certainty that the EU taxonomy will impact the construction and real estate sector (Norang et al., 2023).

The second study found, explore the EU taxonomy criteria potential to reduce emissions in the Norwegian construction and real estate industry. It was conducted a document analysis and 12 indepth interviews of real estate/construction developer firms, advisor/consultant firms, and sector

organizations. Relevant findings revealed that (1) Significant energy-related emissions are linked to buildings in Norway, but these are greater in other countries in the EU. (2) Building materials are the largest source of emissions for the Norwegian construction and real estate sector. (3) There are varied opinions about the EU taxonomy's potential to reduce emissions in the Norwegian construction and real estate sector, but a large consensus on its importance for the sector. However, it depends on Norwegian definitions and adaptions, as well as further development of the EU taxonomy criteria. (4) Measures and criteria to reduce greenhouse gas emissions in Norway's construction and real estate sector include implementing level requirements for greenhouse gas calculations. Additionally, an emphasis should be placed on promoting low-emission materials, emission-free construction sites, optimizing solutions, land use and transportation, and reducing overall consumption. These measures are crucial for significant greenhouse gas reduction. And lastly, (5) the EU taxonomy has a potential to reduce Norway's emissions, which is strengthened by its criteria. Also includes the upcoming criteria that have not yet been implemented (Tysland, 2022).

Overall, neither of these studies specifically examined Norwegian SMEs in the B&C sector, nor do they entail the EU taxonomy's impact on banks green loan portfolio for new commercial buildings. This indicates a knowledge gap and an immaturity in this field of study, making the thesis research questions highly relevant to fill this gap. The EU taxonomy is still under development in the EU, and affected actors in Norway has yet to report according to the EU taxonomy due to its recent implementation. Regardless of the ongoing implementation of the, it still indicates a need for further research, exploration, and advancements to enhance the understanding and maturity of this field of study, due to its limitations in current literature.

1.5 Structure of the Thesis

The structure of the thesis is presented as follows. Section one covers the introduction, which consists of a comprehensive background for the study, before presenting the research questions. A preliminary literature review revealed the significance of the study, where it identified a knowledge gap in the literature. This establishes a context for the study.

Section two entails the theoretical background and framework of the study, where relevant theoretical concepts and frameworks were explored. Firstly, this section presents previous sustainability efforts leading to the need for an EU taxonomy for sustainable activities. Secondly, it presents the rationale behind establishing a taxonomy for sustainable activities before presenting the EU taxonomy as a regulatory framework and the emergence of sustainability reporting under the EU taxonomy. Subsequently, this section examines the specific application of the EU taxonomy within the Norwegian context, thereby highlighting the environmental impact of the building and construction sector at both a global and Norwegian level. Lastly, this section introduces network theory as a framework to explore the cooperative behavior between banks and SMEs. The network theory is used to model the interaction between these two actors in light of the EU Taxonomy.

Section three entails the methodology employed in the study, where the selection of appropriate tools and approaches is discussed. This section provides details on the use of in-depth interviews and document analysis as research methods and approaches to collect and analyze data obtained. Section four comprises the findings, and the discussion, which analyzes and interprets the findings in relation to the research questions and theoretical framework. Section six comprises the conclusion, where the findings from the theory and data collected are summarized according to the appropriate research question. Furthermore, it discusses the implications of the findings and their significance in the broader context of the study. Lastly, it provides a concise overview of practical and theoretical implications before considering limitations that may have influenced the findings, followed by further research.

The results of this study are relevant for Norwegian banks that have or plan to implement the EU taxonomy into their loan portfolio, as it provides insights into the motivations and obstacles faced regarding the EU Taxonomy. It is also relevant for businesses in the B&C sector that want to understand the expressed drivers and barriers towards upcoming sustainability reporting requirements. Moreover, the study outcomes are also valuable for the interest organization in Norway's B&C sector, regulatory actors, and market partners. The study sheds light on the essential factors that enable SMEs to adopt sustainable practices and pursue environmental efforts.

Additionally, these results can serve as a foundation for future research, providing a starting point for further exploration of the impact of the EU taxonomy on Norwegian SMEs in the B&C sector and the bank's contribution to this area.

2 Theoretical Background and Framework

2.1 Sustainability and Finance

To explain what the European Union (EU) taxonomy for sustainable finance is, and why it has come into existence, it is important to cover the background to see why there is a need for a 'taxonomy'. Providing context will help to gain an understanding of the EU taxonomy's relevance and significance. This section will cover theoretical background and key events that will provide a comprehensive understanding of the EU taxonomy.

The UN has, together with the world community, since 1972 established a variety of assemblies, held a handful of summits and conferences, and initiated a variety of agreements and goals - focusing on the environment and sustainability (United Nations, n.d.-a). The most predominant and applied initiative are the UNs 17 **Sustainable Development Goals** (SDG). It was adopted in 2015 through UNs plan called 'Transforming Our World: The 2030 Agenda', and officially came into force in 2016. The SDG is unique in the way it emphasizes and recognizes that ending poverty is strongly connected with both economic growth and protecting the planet (Ditlev-Simonsen, 2022, p. 20; European Union, 2020; United Nations, n.d.-a.; United Nations, n.d.-b.; United Nations, 2015; DNB, 2023a, 1:29).

The **Paris Agreement** is the first universal, legally binding treaty and global change agreement between almost 200 countries. It was adopted at the UN Climate Change Conference in 2015 and approved in October of 2016, setting long-term goals of limiting global warming (European Commission, n.d.-e; European Union, 2020, p. 13; EU TEG, 2020, p. 7; UNFCCC, n.d.) One of the key features and long-term goals is to limit global warming to well below 2 degrees Celsius, compared to pre-industrial levels. The treaty focuses on the collective effort to tackle climate change and emphasizes the concerns of already developing climate change impacts. It includes "(...) the commitment to align financial flows with a pathway towards low-carbon and climate-

resilient development" (European Commission, n.d.-d). The Paris Agreement puts the transition of clean energy on the agenda and sends a clear signal to shift away from fossil fuels (European Commission, n.d.-e; European Commission, 2016; EU TEG, 2020, p. 53; United Nations, n.d.-a.; Wagstaff & Belsom, 2022, p. 10).

During the time period from 2016 to 2018, the EU had a high level of activities around sustainability and finance (See *Figure 1*). Among them were the European Commission's (Commission) development of three expert groups:

- The High-Level Expert Group (HLEG) in 2016, consisting of 20 senior experts from civil society, finance sector, academia, and observers from European and international institutions (European Commission, n.d.-d), "(...) to develop an overarching and comprehensive Union strategy on sustainable finance" (European Union, 2020, p. 14).
- *The Member State Expert Group* (MSEG) in 2018, consists of financial market and environmental experts from Member States to assist in implementing EU legislation and policies related to sustainable finance (European Commission, n.d.-d).
- The Technical Expert Group (TEG) in 2018, consisting of 35 members from civil society, academia, business and the finance sector, and members and observers from EU, "(...) to assist in developing, in line with Commission's legislative proposals of May 2018" (European Commission, n.d.-d).

In the beginning of 2018, the HLEG put out a call for the creation of a classification system that clarifies and will easily identify activities as 'green' or 'sustainable' (European Union, 2020, p. 14). Later that year, the European Commission published an ambitious Action Plan on **Financing sustainable growth** - by recommendations from HLEG. The Action Plan outlines a comprehensive strategy where the goal is to further connect finance and sustainability to achieve sustainable growth. The most important and urgent action planned was the establishment of a unified classification system for sustainable activities (European Commission, n.d.-d; European Commission, 2018a; European Union, 2020, p. 14; Finansdepartementet, 2023; Och, 2020, p. 1). In May of 2018 three proposals of measures were made to the same Action Plan, where one of the proposals was the establishment of a 'taxonomy' for sustainable economic activities (European

Commission, 2018-b).

On 11 December 2019, the European Commission presented the **European Green Deal (Green Deal)**, a continuation of the Paris Agreement and Action Plan to transform the economy and society towards sustainability. It reaffirms the European Commission's commitment to address climate and environmental challenges. The Green Deal is a growth strategy and overarching framework to transform the European economy. An essential part of it is the legal commitment to achieve climate neutrality by 2050, pledging to reduce emissions by at least 55 percent by 2030, compared to 1990 levels. The aim is to mobilize sustainable investments and economic policies across both private and public sectors to continue the transitioning to a climate-neutral, competitive, and inclusive economy. To facilitate this, the European Commission presented the "European Green Deal Investment Plan" on January 14, 2020 (European Commission, n.d.-b; European Commission, n.d.-d; European Commission, 2019; European Union, 2020; EU TEG, 2020, p. 8).

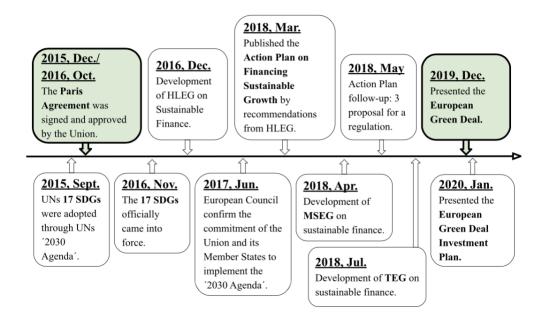


Figure 1: Timeline of Key Events on Sustainability.

2.1.1 Growing Reporting Trends

The EU's policy context refers to sustainable finance as actions that support economic growth while considering the impact on the Environment, Social and Governance principles - commonly referred to as ESG. ESG derives from responsible investment practices (Li et al., 2021, p. 1;

Wagstaff & Belsom, 2022, p. 2). It includes three pillars that are used to evaluate sustainability and socially responsible practices in the financial sector when making investment decisions (Ditlev-Simonsen, 2022, p. 190; European Commission, n.d.-d; DNB, 2023a, 2:07). These pillars are illustrated in *Figure 2* and have for the last two decades attracted attention and been actively practiced in developed countries as an approach to reduce risk and identify new business opportunities (Ditlev-Simonsen, 2022, p. 189; Li et al., 2021, p. 2). Due to its increased relevance, ESG is a commonly used framework to fulfill and pursue SD and requirements, particularly in business management and investment decisions (Ditlev-Simonsen, 2022, p. 166-167; Giannopoulos et al., 2022, p. 2; Li et al., 2021, p. 25). The objective is to ensure long-term investment in sustainable economic activities and projects (European Commission, n.d.-d; DNB, 2023a, 2:07; Wagstaff & Belsom, 2022, p. 6).



Figure 2: Overview of ESG pillars. Source: Wagstaff & Belsom, 2022, p. 2.

The cause for growing report trends on non-financial sustainability information is the increasing set of ESG related disclosure requirements companies are facing from investors, who are again expected to align their activities with global frameworks that promote ESG factors (Ditlev-Simonsen, 2022, p. 95; Giannopoulos et al., 2022, p. 1-2; Wagstaff & Belsom, 2022, p. 5). Dating back to 2006, the UN initiative Principles for Responsible Investment (PRI), recognized investors' critical role and responsibility while striving for SD and establishing a sustainable global economy (Ditlev-Simonsen, 2022, p. 189; Giannopoulos et al., 2022, p. 1). Among the mentioned focus on the Environmental (E) pillar pertaining to climate change, there has also been a rise in regulations related to human rights and working conditions. The recent development and adoption of new transparency laws relating to the Social (S) pillar has had an important focus in the responsible business field (Ditlev-Simonsen, 2022, p. 95; Giannopoulos et al., 2022, p. 2).

In Norway, ESG reporting has also become a growing trend, especially for listed companies in the last couple of years (Giannopoulos et al., 2022, p. 1 & 7). Despite being a small country, Norway is one of the leading nations in both corporate social responsibility and in the field of sustainability (Giannopoulos et al., 2022, p. 6 & 12). Surprisingly, only 20 Norwegian Stock Exchange companies out of 267, reported ESG actions every year for the last decade (Giannopoulos et al., 2022, p. 12). This number might, however, increase in the near future with Norway's Transparency Act (Åpenhetsloven) that was passed in 2021, and put into effect in 2022. The Act promotes businesses' respect for basic human rights and decent working conditions in connection with the production of goods and the provision of services and ensure public access to information about how businesses deal with negative consequences connected to these (Åpenhetsloven, 2021, §1). Compared to other countries passing similar laws, Norway's Transparency Act will affect 9000 companies, which is a fairly large proportion of companies due to Norway's small size (Ditlev-Simonsen, 2022, p. 96).

However, even though ESG is an important driving force to trigger SD, its research is in constant development (Li et al., 2021, p. 3 & 6). Due to a variety of quantitative metrics weighing results differently, it leads to inconsistencies in companies ESG profiles. This affects credibility and authority, making it difficult for investors to evaluate its reliability (Ditlev-Simonsen, 2022, p. 192-193; Li et al., 2021, p. 24). Inconsistencies in ESG ratings, combined with an increase in the use of labeling funds as "green", has caused a lack of clarity and a risk of greenwashing (Ditlev-Simonsen, 2022, p. 192-193).

2.2 Overview of the EU Taxonomy for Sustainable Activities

The EU taxonomy, commonly referred to as the Taxonomy Regulation (TR) or 'the taxonomy', is a result and an element of a larger project on sustainability and finance, to reach the Green Deals objectives and meet EUs climate and energy targets for 2030 (European Commission, n.d.-c), and become climate-neutral by 2050. For the EU to reach these ambitious goals, they are dependent on the private and finance market to channel their capital in a sustainable direction. The TR was first introduced in 2018, as a central component of the EU Commission's Action Plan for Sustainable Finance (European Commission, n.d.-c; EU Taxonomy Info, n.d.-b; Finansdepartementet, 2023; Grønn byggallianse, 2020; Stapel & Wambach, n.d.), and was in 2020, adopted as a proposed

regulation and tool to provide a clear definition for sustainable economic activities (European Commission, 2018a; Finansdepartementet, 2023; Och, 2020, p. 1). This chapter provides a comprehensive overview of the EU taxonomy, encompassing its definition, components, requirements for sustainability reporting, and the entities it applies to, along with the timeline of its implementation.

2.2.1 The EU Taxonomy – a Regulation and Framework

The EU taxonomy plays a significant role in the major sustainable finance efforts aimed at achieving sustainable environmental outcomes, as it serves as a fundamental basis for upcoming EU initiatives and regulations (Oellingrath & Ray, 2022; Pettingale et al., 2022). Beyond its regulatory function, the taxonomy primarily function as a framework and classification tool, facilitating the allocation of capital towards sustainable activities, which is the origin of its name. A 'taxonomy' is defined as a classification of something in a particular system, commonly used throughout time in biology to identify and map living organisms (Taxonomy, n., 2022). The EU taxonomy *does not* make assessment of "good" and "bad" businesses, nor does it entail environmental requirements. It simply classifies and clarifies economic sustainable activities (NHO, n.d.-a), and is meant as a *framework* and tool to foster transparency (Oellingrath & Ray, 2022). The goal is to reward and promote business practices and projects that are considered sustainable in accordance with the terms in the taxonomy (European Commission, n.d.-c; European Union, 2020; EU Taxonomy Info, n.d.-b). To determine environmental sustainability when performing economic activities, the taxonomy covers six environmental objectives as shown in *figure 3*.



Figure 3: Environmental objectives in the EU Taxonomy Regulation. Source: EU TEG, 2020, p. 2.

The taxonomy framework by itself only creates a basis of overarching environmental objectives. For the taxonomy to have any significant impact, it is supplemented by delegated acts. The TEG was established to develop recommendations for delegated acts under each environmental objective by defining performance thresholds, referred to as **Technical Screening Criteria (TSC)** (European Commission, n.d.-c; EU TEG, 2020). The TSCs contain lists of sector-specific activities and aim to cover all relevant economic activities. It is required that the TSC is science based, current market practices, and relevant to EU legislation. When evaluating the environmental impacts from the economic activity, it must consider the life cycle and assess previous life cycles. The TSC helps identify potential contributions and evaluate the extent it aligns with the given environmental objective targeted, meeting both long-term and short-term impact of the objective (European Commission, n.d.-c; European Union, 2020; EU TEG, 2020; Och, 2020, p. 5).

The first delegated act on sustainable activities became applicable in January 2022, and includes TSC for "Climate Change Mitigation" and "Climate Change Adaptation". To this date, these are the only environmental objectives that are relevant under the EU taxonomy (European Commission, n.d.-c; Stapel & Wambach, n.d.). The remaining environmental objectives are currently under development by the TEG and are projected to be ready before the end of 2023

(European Commission, n.d.-c). The taxonomy currently covers 13 sectors with 70 TSC for goal one, and 68 TSC for goal two (European Commission, n.d.-c; Pettingale et al., 2022), but will cover more activities and industries in the future with additional delegated acts (Stapel & Wambach, n.d.).

An economic activity or project are considered to be "Taxonomy-eligible", and qualify as a sustainable activity, if it contributes to sector-relevant TSC under one of the taxonomy environmental objectives (Oellingrath & Ray, 2022; Pettingale et al., 2022). However, for an economic activity to be "Taxonomy-aligned" it must also fulfill the following taxonomy criteria's in *figure 4* (EU Taxonomy Info, n.d.-b; EU TEG, 2020; Och, 2020, p. 3; Pettingale et al., 2022; Stapel & Wambach, n. d.):

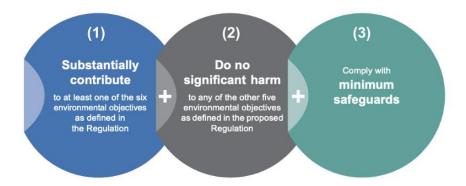


Figure 4: Criteria in the EU Taxonomy Regulation. Source: EU TEG, 2020, p. 2.

1) Substantially contribution.

It is required that the economic activities performed must contribute to at least one of the environmental objectives, complying with relevant TSC thresholds (European Union, 2020; EU TEG, 2020; Och, 2020, p. 3). The EU taxonomy has been limited to the objectives targeting climate change mitigation and adaptation until January 2024, when an alignment on all six environmental objectives is mandatory (Oellingrath & Ray, 2022). To contribute to objective one, an economic activity must contribute significantly in terms of reducing greenhouse gas emissions, or by enhancing solutions for greenhouse gas removals. Additionally, the activity must also comply with the Paris Agreement and aspects of Union Law. To contribute to objective two, an economic activity must reduce and prevent adverse effects on the climate in terms of people, nature, and assets, without causing an increase of climate risks. To do so, monitoring and assessing climate

projections and industry related sensitivities must be carried out and comply with the Union Law and the Sendai Framework for Disaster Risk Reduction 2015-2030 (European Union, 2020; Och, 2020, p. 4).

2) Do no significant harm.

This entails that an economic activity must not significantly harm any of the environmental objectives. Each objective has their own requirements that must be met (European Union, 2020; EU TEG, 2020; Och, 2020, p. 4).

3) Compliance with minimum social safeguards.

In order to be compliant, it has to meet social standards such as sustainable and inclusive growth, and recognition of relevant international minimum standards, labor and human rights (European Union, 2020). The economic activity must align with international guidelines including the International Labor Organizations (ILO), OECD guidelines for Multinational Enterprises, Principles from the UN on Business and Human Rights and the International Bill of Human Rights. At the minimum, it must cover workers' rights in terms of prevention of forced labor, freedom of association, right to organize and bargain collectively, equal pay, and prevention of child labor (European Union, 2020; Och, 2020, p. 4-5).

2.2.2 Sustainability Reporting

As the EU taxonomy by itself serves as classification framework and tool, it facilitates further development of demanding regulations. This includes both the development of standardized sustainability reporting regulations, and incorporations and expansion of existing legal instruments (Oellingrath & Ray, 2022; Pettingale et al., 2022). The Sustainable Finance Disclosure Regulation (SFDR) is an existing sustainable finance legislation utilized by the taxonomy. The EU taxonomy establishes reporting criteria through the SFDR, which was implemented in March of 2021 to ensure legal clarity and equal competition (EU Taxonomy Info, n.d.-b; Och, 2020, pp. 10-11; Pettingale et al., 2022; Stapel & Wambach, n.d.). Under SFDR, financial market participants (FMPs) are required to classify investments based on ESG factors (Pettingale et al., 2022), and

disclose information about their financial products alignment with the taxonomy objectives in *figure 3* (Oellingrath & Ray, 2022).

Another existing legal reporting instrument the EU taxonomy has incorporated is the Non-Financial Reporting Directive (NFRD), initially aiming at reporting requirements for large, listed firms (European Commission, 2021; EU Taxonomy Info, n.d.-a; Och, 2020, pp. 7-8; Oellingrath & Ray, 2022). This reporting directive was first adopted in 2014 and has throughout the years been revised and clarified. The reporting requirements under det NFRD covers about 11, 700 companies and has improved the quality of information disclosed by affected companies since 2018 (European Commission, 2021). All parties that are affected by the NFRD and the taxonomy are expected to include disclosure of:

- Taxonomy-compliant share of turnover
- Capital Expenditures (CapEx)
- Operating Expenditures (OpEx)

Additionally, FMPs and non-financial, large, listed companies are expected to eventually report disclosure on taxonomy eligibility and alignment (EU Taxonomy Info, n.d.-a; Niewold, 2023; Och, 2020, pp. 7-8; Oellingrath & Ray, 2022).

While the EU taxonomy incorporates the NFRD to facilitate reporting on a non-financial company's eligibility and alignment with the taxonomy, it does not give mandatory assurance of taxonomy-related reporting (Oellingrath & Ray, 2022). Therefore, the European Commission put out a proposal for a Corporate Sustainability Reporting Directive (CSRD) in April of 2021, aiming to amend and replace the NFRD (European Commission, 2021; Och, 2020, pp. 10-15; PwC, 2022). The purpose of CSRD is to simplify and standardize existing reporting procedures to EU policies, by providing clarity, minimizing expenses, and enhancing efficiency related to sustainability reporting (European Commission, n.d.-a; European Commission, 2021; Oellingrath & Ray, 2022). It entered into force on January 5th, 2023, and is aligned with the criteria in the taxonomy, playing a crucial role in ensuring that essential data is constantly collected and reported, while also ensuring transparency towards investors and stakeholders about sustainability issues (European

Commission, n.d.-a; European Commission, 2021; Och, 2020, pp. 14-15). The CSRD implies an extended range of requirements in terms of sustainability reporting aimed at companies (Dalsegg & Lidsheim, 2023, p. 33; PwC, 2022), and includes:

- Disclosure of sustainability and climate change risks
- Impact on society and environment
- Identifying material sustainability topics for stakeholders
- Targets and progress
- Report in line with SFDR and the EU taxonomy

Any company that complies with the CSRD, will provide the necessary information relevant to the taxonomy - also enabling companies that are not obligated to comply with the EU taxonomy, to report according to it (Och, 2020, pp. 14-15; Pettingale et al., 2022). Overall, NFRD, SFDR, and CSRD are central components of the EUs sustainable finance strategy under sustainable reporting requirements (European Commission, 2021), and aims to establish uniform reporting standards and enhance openness by making information more accessible (Och, 2020, pp. 14-15; Pettingale et al., 2022). Reporting efforts related to the EU taxonomy focuses presently on the two developed environmental objectives, until delegated acts for the remaining four environmental objectives is completed (Oellingrath & Ray, 2022).

2.2.3 Affected Parties and Timeline

The EU taxonomy disclosure requirements for environmental objectives one and two became effective January 1st, 2022 (European Commission, n.d.-c; Och, 2020, p. 10), and is mandatory for:



Figure 5: Three groups of Taxonomy users in the EU Taxonomy Regulation. Source: EU TEG, 2020, p. 26.

- 1. FMP, including ones that offer financial products in the EU, and banks and insurance companies with over 500 employees.
- 2. Large, listed companies, including non-financial companies who are already obligated to report under NFRD (11, 700 companies).
- 3. The EU and Member States. Member States can adopt the full TR or keep existing measures, provided that they are compliant with the TR (European Commission, n.d.-c; European Union, 2020; EU Taxonomy Info, n.d.-a; EU TEG, 2020, p. 26; Och, 2020, s. 7).

Other companies can use it voluntarily to meet sustainability requirements from business partners or to optimize their potential (European Commission, 2021; Stapel & Wambach, n.d.).

The development of the TR is an ongoing process and will continue to evolve through additional delegated acts and revision of existing ones, to include more sectors and economic activities in the future. Because of this, the EU Commission adopted a graduate implementation strategy when the TR came into effect in 2022, allowing mandatory parties to only report a portion of their economic activities under NFRD. This means that since 2022, financial and non-financial companies have only been required to report Taxonomy-eligibility rather than Taxonomy-alignment. However, it is planned that both Taxonomy-eligibility and Taxonomy-alignment will be required in the near future (Niewold, 2023; Oellingrath & Ray, 2022; Pettingale et al., 2022). The recently implemented CSRD is projected to simplify and standardize sustainability reporting according for non-financial companies, making it easier to meet TR requirements, hence achieving Taxonomy-eligibility and -alignment (European Commission, n.d.-a; European Commission, 2021; Oellingrath & Ray, 2022). *Table 1* shows the EU's timeline for when different companies are obligated to report on

activities in CSRD. It reveals that SMEs will most likely be obligated during the financial year of 2026 (Dalsegg & Lidsheim, 2023, p. 33; PwC, 2022).

Companies covered by the CSRD			
Financial Year	Employees	Sales Revenue	Balance
2024	Listed companies, banks, insurance- and credit-company with at least 500 employees	>40 M EUR	>20 M EUR
2025	>250	>40 M EUR	>20 M EUR
2026	Average of 50 employees through the year	Between 700 000 and 40 M EUR	Sum between 350 000 and 20 M EUR

Table 1: Overview of EUs timeline of companies obliged to report on sustainability (Dalsegg & Lidsheim, 2022, p. 33; PwC, 2022).

2.3 Norway's Adoption and Implementation of the EU taxonomy

The Norwegian Parliament adopted a new law on sustainable finance in December of 2021, which implements the TR in Norwegian law. The law entered into force on 1 January 2023 (Finansdepartementet, 2023). Even though Norway is not a member of the EU, it maintains a close economic and regulatory relationship with the EU through the European Economic Area (EEA) agreement. The EEA agreement connects the EU Member States and three additional countries - Norway, Iceland, and Lichtenstein - to an 'internal market'. This means that EEA countries gain the same rights and obligations as the rest of the EU Member States when it comes to free movement of trade (goods, services, capital) and people. A prerequisite for the EEA countries rights in the internal market is that EUs regulations are continuously incorporated into the EEA agreement as regulations develop (Utenriksdepartementet, 2021). Before the TR could be incorporated into Norwegian law, the EEA committee first needed to decide if the new regulation

was to be included in the EEA agreement. After the decision was made, the TR was adopted in Norway to later undergo the process of implementation into national laws, ultimately requiring an approval from the Parliament (Utenriksdepartementet, 2023).

Since the implementation of the TR in Norwegian law, it has raised certain issues regarding the TR criteria that do not apply in Norway. Norway's Ministry of Climate and Environment and the Ministry of Finance, together with other ministries, have mapped out the first set of criteria to identify activities where the EU TR and Norwegian definitions do not align. They have created an overview, for informal purposes only, of the criteria that have been implemented into Norwegian law. However, when affected parties of the TR in Norway must report in 2024 for the 2023 financial year, they have to assess the TR criteria with how they appear in the EU (Finansdepartementet, 2023). The reporting obligation according to the TR applies to large, listed companies, banks, and insurance companies with over 500 employees. Businesses that are not covered by the reporting obligation are free to report the TR information on a voluntary basis. Despite facing challenges in aligning certain criteria of the TR with Norwegian law, Norway will follow the EUs timeline for mandatory reporting requirements under the CSRD, as shown in *Table 1* (Dalsegg & Lidsheim, 2023, p. 33; Finansdepartementet, 2023; PwC, 2022).

2.3.1 Banks

The financial market is important in the transitioning to a low-emission economy, but have lacked common definitions of what sustainable is, making it difficult for banks and investors to identify sustainable investments. The aim of the taxonomy for the FMP, is to be a useful tool to prevent greenwashing and form the basis for standards and labeling schemes for green financial products and instruments (Finansdepartementet, 2023). Large Norwegian banks are among the affected FMP in the TR that came into effect in Norway 1 January 2023 (Finansdepartementet, 2023), and are supposed to report under SFDR (Pettingale et al., 2022), as well as disclosing TR information for financial products (Oellingrath & Ray, 2022). As banks offers financial benefits and services to and between private individuals, businesses and authorities, they are an important prerequisite for their customers value creation and a link between many different financial actors in society (PwC, 2021, p. 38).

In a report prepared by PwC (2021) on behalf of the Norwegian Finance Association (Finansforbundet), Norwegian banks have the last couple of years had an increasingly focus on sustainability-related lending thorough their loan portfolios, to ensure the desired adaptation to the TR. Many banks have therefore established sustainability Key Performance Indicators (KPIs) for lending to companies, offering favorable loan conditions to borrowers meeting climate targets. Nevertheless, securing reliable sustainability data remains a challenge for establishing risk-based pricing differences between green (sustainable) and non-green lending (PwC, 2021, p. 38). Norwegian banks have in the last couple of years had a significant exposure in lending to private and commercial property, especially in the private market. In the private market, there has been an increase in green loans, providing borrowers with improved loan terms and conditions. For commercial property, only some banks offer green loans and improved loan conditions to business customers, given that the building meets certain requirements and standards. While a significant portion of this funding is directed towards the construction of new buildings, there has been comparatively less progress by banks in terms of offering favorable loan conditions in comparison to the private market (PwC, 2021, p. 39). As demands from the market and authorities turn in a sustainable direction, banks, investors, and insurance companies will experience high-risk related to non-green lending. Norwegian financial institutions now use the EU's taxonomy to shape their own criteria for green investments and green lending. Currently, there are allegedly given improved loan conditions for "green" buildings, but in the future, this could become an absolute requirement for obtaining financing and insurance (Grønn byggallianse, 2020).

2.4 Implication for SMEs in the Building and Construction Sector

The B&C sector is one of the thirteen sectors that is currently covered by the TR with accompanying TSC, named "Construction and Real Estate" (Grønn byggallianse, 2020; Pettingale et al., 2022). Within the TR, this sector consists of subcategories, where the two main ones are: "construction of new buildings" and "building renovation" (EU TEG, 2020, p. 59; Greenbuilt, 2023). For the purpose of this study, this section will primarily focus on the construction of new buildings. This section will provide an overview of the B&C sector's environmental impact, followed by an explanation of TR-compliance specifically related to the construction of new

buildings. Subsequently, a comprehensive review of the Norwegian context within the B&C sector will be conducted.

In a 'buildings'-report prepared by IEA (2022), gives an overview of the B&C sectors global emissions in 2021. The sector is responsible for 30 percent of the global energy, referring to the use of electricity and fossil fuels used in buildings, and approximately 37 percent of global operational and process related greenhouse gas and energy usage emissions. Overall, the sector stands for roughly one-third of global energy- and process-related greenhouse gas emissions and confirms the large greenhouse gas emission footprint the B&C sector has. Decarbonizing in this sector is critical to prevent climate change (IEA, 2022), and is why the B&C sector is a central aim in the TR to achieve climate neutrality and significantly reduce emissions by 2050 (European Union, 2020; World Green Building Council, 2022, p. 24). The TR aims for the B&C sector is to transition into a circular economy by promoting reusability and reducing resource use. The goal is to direct investments towards energy-efficient buildings, but also reduce hazardous substances in materials and products. To achieve this, the TR puts an emphasis on preserving and renovating buildings, but also requirements for the construction process and the design of new buildings, in order to have a low climate footprint. This includes an increase of product durability, reparability, and reusability, as well as thoughtful design and material choices to minimize resource consumption in the B&C sector (Bygg, 2021; European Union, 2020; United Nations Environment Programme, 2022, p. 86). Consequently, it is anticipated that the entire B&C sector will be affected by reporting requirements, including SMEs who will eventually require to disclosure TR information through CSRD (see table 1) (Dalsegg & Lidsheim, 2023, p. 33; Greenbuilt, 2023; PwC, 2022).

As implications reveal that SMEs are projected to reporting requirements according to the TR, the TEG has developed TSC for the currently affected large, listed companies. Down below are the present requirements that must be met for construction of New Buildings under objective one and two in the TR.

To comply with Climate Change Mitigation:

- 1) New buildings must have a primary energy requirement 10 percent lower than the Nearly-Zero Energy Building (NZEB) verified with an energy label. This also includes energy efficiency and renewable energy production (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).
- 2) Completed buildings over 5000 m2 require testing and documentation of air tightness and thermal bridge value (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).
- 3) For buildings over 5000 m2, a life cycle analysis of global warming potential (GWP) must be carried out for each step in the building process. The reference point is made in regard to national standards (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).

To comply with Climate Change Adaptation:

1) A climate risk analysis must be carried out and necessary measures in terms of climate adaptation must be implemented. The requirements include that the building must be solidly build and able to withstand extreme rainfall, floods and expected increased temperatures. The measures must be in accordance with local/regional/national against predefined Key Performance Indicators (KPIs). Furthermore, choosing nature-based solutions must be emphasized in terms of climate adaptation and green infrastructure (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).

The following requirements to not cause significant harm to the other environmental objectives must be met:

- 1) Climate change mitigation: New buildings cannot have primary energy exceeding the NZEB level (Greenbuilt, 2023; Asker, 2022; Bygg, 2021; Bygg, 2021).
- 2) Climate change adaptation: Execute climate risk analysis and implement necessary measures (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).
- 3) Sustainable use and protection of water and marine resources: Identification and implementation of necessary measures of impact on water bodies and water-saving installations is required (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).
- 4) Transition to a circular economy: Arrange that at least 70 percent of non-hazardous waste is reused or recycled in accordance with the EU Construction and Demolition Waste Management Protocol. Use of circular solutions when designing and constructing buildings

- referencing the ISO standard 20887 or other equivalent standards (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).
- 5) Pollution prevention and control: The project cannot cause pollution in accordance with EU legislation, including the chemical regulation REACH (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).
- 6) Protection and restoration of biodiversity and ecosystems: Execute environmental impact analysis and implement necessary measures (Asker, 2022; Bygg, 2021; Greenbuilt, 2023).

2.4.1 Norwegian Context

The Norwegian B&C sector largely consist of SMEs (SSB, 2023a), meaning that the majority of the current reporting requirements will not directly affect this sector. Yet, this sector is an important enabler for Norway to become more sustainable, as it stands for around 15 percent of national greenhouse gas emissions. Even though the nations direct emissions are low, due to the use of renewable energy, the indirect emissions are what makes up the majority of this sectors total emission. The indirect emissions are important to focus on because the B&C sector serves as a significant enabler for other high-emission sectors, as they can influence decisions regarding material selection, transportation patterns and emission, as well as energy suppliers or buildings (Grønn Byggallianse, n.d.-a).

When looking closer at specific activities within the B&C sector, construction of new buildings is the primary source of emissions (Dalsegg & Lidsheim, 2022, p. 33; Grønn Byggallianse, n.d.-a). These indirect emissions account for over 50 percent of a building's total emissions throughout its lifecycle. One of the most important efforts to reduce these emissions is therefore to limit construction of new buildings, by preserving existing buildings and avoiding demolition (Grønn Byggallianse, n.d.-a). This is also beneficial for Norway to reduce its waste, as the B&C sector also stands for the largest waste source in the country (Kommunal- og distriktsdepartementet, 2022), covering 25 percent of Norway's waste (Grønn byggallianse, n. d.-c). According to Statistics Norway, about 33 percent comes from constructions of new buildings, 25 percent comes from building rehabilitation, and 42 percent comes from building demolition (SSB, 2022). The most impactful approach to decarbonize the B&C sector is to prioritize the rehabilitation of existing

buildings, thus avoiding demolition of buildings by preserving land, foundation, and supporting existing structures (Grønn byggallianse, n. d.-c).

However, the process of decarbonization is far more complex than solely emphasizing on rehabilitating buildings. A clear obstacle arises from the fact that older buildings are not designed to be taken apart, but to be demolished (Grønn byggallianse, n. d.-c). The reality is that the construction of new buildings cannot be eliminated. Afterall, construction of new buildings still stands for 70 percent of emissions in the B&C sector yearly, even if the annual rate of new buildings being constructed is only 1-2 percent (Grønn byggallianse, n. d.-a). It can also take over 50 years before the low energy usage in a new constructed building makes up for the emissions caused from the process of building it (Grønn Byggallianse, n.d.-c). Therefore, it is crucial that each actor in the B&C sector proactively identify and assess their emissions throughout their value chain to reduce their environmental impact (Dalsegg & Lidsheim, 2022, p. 33; Gillerhaugen & Andenæs, 2023). With a workforce of approximately 250,000 people (BDO, n.d.; Dalsegg & Lidsheim, 2022, p. 3; SSB, 2023b), this sector carries a substantial social responsibility. Given its environmental implications, the B&C sector is needed to play a decisive role in transforming Norway into a low-emission society (Dalsegg & Lidsheim, 2022, p. 3).

Nevertheless, there will be increasingly greater demands for reporting on sustainability in the coming years, both through formal requirements from public authorities, but also from other market actors, such as banks, customers, and partners (BDO, 2022; Dalsegg & Lidsheim, 2022, p. 35; Gillerhaugen & Andenæs, 2023). According to a survey conducted by BDO (2022), examining 1,200 firms, over half of Norwegian SMEs in the B&C have implemented or plan to implement sustainable development measures. However, 23 percent assess these measures and only 20 percent report on them. Reporting on sustainability can make SMEs attractive subcontractors and provide access to favorable financing options (BDO, 2022). Another analysis suggests that 90 percent of firms required to report through CSRD for year 2025 will not meet the criteria (Dalsegg & Lidsheim, 2022, p. 35; Gillerhaugen & Andenæs, 2023). Increasing demands for sustainability reporting from large companies in the B&C sector will indirectly force smaller subcontractors to report, to avoid the risk of losing partners and projects. The upcoming EU directives and delegated acts will impact SMEs in one way or another (Gillerhaugen & Andenæs, 2023). Failure to account

for sustainability in bidding processes can result in missed projects and opportunities for SMEs. (BDO, 2022; Dalsegg & Lidsheim, 2022, pp. 35-36; Gillerhaugen & Andenæs, 2023).

2.4.1.1 Regulations and certifications

Norway, compared to other countries, has always made strict demands related to planning, location, design, and maintenance of buildings (Miljødirektoratet, 2019). In *table* 2, is an overview of Norway's current regulations and certifications in the B&C sector.

Technical	The TEK-17 regulation describes the minimum characteristics a
requirements	building must have in order to be legally constructed in Norway
for buildings	(Byggteknisk forskrift, 2017). It ensures that measures are planned,
(TEK-17)	designed, and carried out with regard to good visual quality, universal
	design and meets technical requirements for safety, environment,
	health and energy (Byggteknisk forskrift, 2017, §1). Documentation
	must be submitted, and must provide a basis for how the
	commissioning, management, operation and maintenance of the
	building, technical installations and facilities must be carried out in a
	satisfactory manner (Byggteknisk forskrift, 2017, §4). The
	government made updates to this regulation in 2022, with a transition
	period of one year, where these changes contribute to emission-
	reduction from buildings. These mainly relates to building
	disassembling and reuse, sorting of waste on construction sites, and
	simplification and clarification of the energy rules (Kommunal- og
	distriktsdepartementet, 2022).
The Energy Label	The regulation regulates energy labeling of homes and buildings and
Regulations	energy assessment of technical facilities in homes and buildings
(Energimerke-	(Energimerkeforskriften, 2009, §2). The regulation contributes to
forskriften)	securing information to the market about the energy status of homes,
	buildings and technical facilities and the opportunities for

improvement. It creates a greater interest in concrete energy efficiency measures, concrete measures for converting to renewable energy sources, and providing a more correct valuation of homes and buildings (Energimerkeforskriften, 2009, §1) An energy label is in the form of a grade scale from A to G, where A is the best grade. The grade gives an indication of whether the home or building has a high or low energy demand compared to other homes and buildings within the same building category. Grade A cannot be given without a tightness control of the home or building (Energimerkeforskriften, 2009, §11). The Transparency The transparency will ensure safeguarding of basic human needs and **Act (Åpenhetsloven)** work conditions in firms supply chains (Apenhetsloven, 2021, §1), also including social dumping and labor crime, known phenomena in the B&C sector. Through this act it can reveal objectionable environments and safeguard rightful competition (Dalsegg & Lidsheim, 2022, p. 36). Out of the 9,000 affected firms (Ditlev-Simonsen, 2022, p. 96), 20 percent of them are in the B&C sector, where SMEs are affected by it though their partnerships and value chain (Moen, 2023). **BREEAM-NOR** BREEAM-NOR is Norway's most widely used environmental certification system for buildings, and documents quality. A building can be certified at five levels: Pass Good, Very Good, Excellent, and Outstanding (Grønn byggallianse, n.d.-b). It is Green Building Alliance (Grønn Byggallianse) that delivers the certification in

TR (Grønn byggallianse, 2020).

Norway, where they also guide companies on how businesses can

order the certification for new construction projects in line with the

The Nordic Ecolabel	The Nordic Ecolabel focuses on buildings environmental choices.
(Svanemerket)	The requirements emphasize resource efficiency, lower climate
	impact, a more circular economy without environmental toxins, and
	conservation of natural diversity. They also promote buildings with a
	good indoor climate and high quality. The Nordic Ecolabel is also a
	good tool for construction of new buildings compliance with the TR
	(Svanemerket, 2023).

Table 2: Overview of Norway's building regulations and certifications in the B&C sector.

2.4 Network Theory

Network Theory and its concept is used to contribute to a better understanding of the study's research questions. This theory is used to explore the cooperative behavior between banks and SMEs and model the interaction between them in the light of the EU Taxonomy.

A network can be defined as a collection of elements that are linked together in a given system, often classified in accordance with the element characteristics and the interactions between them. The individual elements of a network are called *nodes*, and the interactions between them are called *edges*. In a social and behavioral context, the *nodes* in a network are a usually an actor and *edges* refers to the relationship, link, or ties that exist among multiple nodes (Banteka, 2019, p. 346; Borgatti & Halgin, 2011, p. 1169; Oh & Monge, 2016, p. 1; USC, n.d.). The context and application of a network determines what the nodes and edges are, as well as the research focus, and should be dictated by a study's research question and explanatory theory (Banteka, 2019, p. 346; Borgatti & Halgin, 2011, p. 1169). By choosing a focus area in the network it can yield a measurable effect, rather than making a claim that no other ties exist by ignoring other influences (Borgatti & Halgin, 2011, p. 1169). Nodes may represent people, groups, organizations, markets, or countries (Banteka, 2019, p. 346; Borgatti & Halgin, 2011, p. 1169; Parkhe et al., 2006, p. 561; Oh & Monge, 2016, p. 1; USC, n.d.).

Even though a network, by definition, only captures basic patterns and can lack information about the actual system the node and edges represent (Oh & Monge, 2016, p. 1), there are some common characteristics traditionally shared among them. These are participation, process, enforcement, and institutionalization. Across fields, the term "network" reflects nonhierarchical and interdependent entity groups, displaying high levels of informal collaborations while exhibiting capacity for making and enforcing rules. A network structure possesses informal ties, occupying a central positing between hierarchies and markets. Even though there is not any clarification for why a network emerges, it is usually formed when neither market-driven or hierarchical structures are present or are unable to provide a favorable organization platform for action. Networks have therefore a faster and more efficient response time to complexities than hierarchies and markets (Banteka, 2019, p. 346-348). Overall, networks "(...) provides valuable insights into understanding the underlying structure and mechanisms of the systems as well as their effects on the behavior of individual components" (Oh & Monge, 2016, p. 1). By arranging the ties among the nodes in a network, it helps mapping out structure functions and measuring its effects, and resulting in understanding a system better (Banteka, 2019, p. 346-348).

In alignment with the thesis's research question and Norwegian context, the nodes in this network are the EU taxonomy, banks with over 500 employees, and SMEs in the B&C sector (see *Figure 4*). This thesis aims to examine the edges between these nodes, referring to the current ties between them, and the effect on behavior of the individual component.

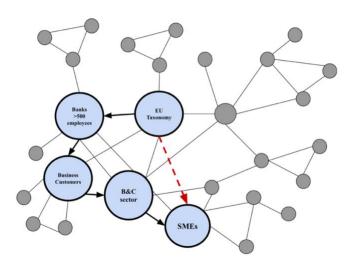


Figure 6: The thesis focused path in Network Theory.

3 Methodology

Research methodology is the overall approach to guide research and understand a phenomenon. Common approaches are quantitative, qualitative, and mixed methods. Quantitative research is a statistical approach to collect data that can be expressed numerically to interpret connections and tendencies of the phenomenon being studied (Dawson, 2007, p. 16; Johannessen et al., 2016, p. 93 & 237; Williams, 2007, p. 65; Sekeran & Bougie, 2016, p. 2). Qualitative research is textual and a more in-depth approach to collect data, and often results in predictive, explanatory, and confirming findings (Dawson, 2007, pp. 15-16; Williams, 2007, p. 66; Sekeran & Bougie, 2016, p. 2). It is used to draw specific conclusions and gain a better understanding of the phenomenon studied by using less formalized data collection procedures and analyzing the data (Johannessen et al., 2016, p. 93; Johannessen et al., 2016, p. 237; Flick et al., 2004, p 3). Mixed methods are a combination of qualitative and quantitative research approaches, collecting both numerical and textual data (Williams, 2007, p. 70).

This thesis seeks to collect in-depth data on experiences to gain a better understanding of the TR effect on SMEs in the B&C sector by examining it from two perspectives. The first objective examines the direct effect of the EU Taxonomy by analyzing its distinct guidelines, impact, and implementation on large banks with over 500 employees. More specifically aimed at banks' lending criteria and sustainable financing of businesses new commercial building projects. The second viewpoint examines the indirect impact of the regulation on SMEs in the B&C sector, as well as their attitudes, drivers, and barriers towards upcoming reporting requirements. Additionally, this thesis aims to examine if the banks perceived TR impact on their loan portfolio for new commercial buildings truly influences SMEs in the B&C sector. Overall, this thesis will examine the effect of the TR from two perspectives and will give a comprehensive understanding of the regulations impact and potential implications on SMEs in the B&C sector. As the setting in qualitative research is more natural, allowing the researcher to retrieve in-depth, detailed, and experience-based information (Williams, 2007, p. 67), a qualitative approach is deemed suitable.

3.1 Research Method

A study's research method differs from a research methodology. While a research methodology guides a study, a research method is the tool chosen to gather necessary data (Dawson, 2007). Through the thesis preliminary literature review, it was revealed limitations in current literature and a knowledge gap related to TR impact on banks and SMEs in the B&C sector. Due to the nature of the thesis, the tools chosen to obtain relevant data to answer the research questions is interviews and document analysis. Both interviews and document analysis seek to collect in-depth data on experiences to gain a better understanding of the area of study (Bowen, 2009; Cooper & Schindler, 2014, p. 152).

3.1.1 Document Analysis

Document analysis is a structured approach aimed at evaluating and examining various types of documents or materials, with subsequent interpretation to gain relevant knowledge. Document analysis uses secondary data and can encompass a wide range of sources, including but not limited to news articles, webinars, manuals, books, journals, press releases, charts, reports, and public records. Incorporating document analysis as part of a research study is often done in conjunction with other research methods to complement additional data collection, validate and enhance data credibility, and mitigate potential biases. It can also serve to address knowledge gaps and provide insights (Bowen, 2009). Considering the recent implementation of the EU taxonomy in Norway and the identified gaps in existing literature, this document analysis serves as a valuable tool for identifying changes, tracking developments, and exploring attitudes.

3.1.2 Interviews

Conducting interviews is the primary data collection method in qualitative research (Cooper & Schindler, 2014, p. 152). There are several ways to conduct qualitative interviews with a variety of types and procedures. Interviews are divided into three fundamental types; 1) structured, consisting of predetermined questions and interview guide 2) semi-structured, the structure of the interviews can vary depending on the purpose of the study, and 3) unstructured, no specific organization in

terms of predetermined questions or order of topic (Flick et al, 2004, p. 204; Gill et al., 2008, p. 291; Bryman & Bell, 2007, p. 204; Cooper & Schindler, 2014, p. 153).

Based on the purpose of this thesis, the data collection is conducted as semi-structured interviews as it provides a deeper understanding of the phenomenon studied, especially when little is already known about the subject. Additionally, semi-structured is more flexible and versatile, as the structure of the interviews can vary depending on the purpose of the study. This type of interview has shown a great success rate in terms of enabling reciprocity between the interviewer and the participant. In terms of the data collected from the interviews, researchers can compare results from the interview if the interview questions are similar from one interview to another. This also enables the researchers to get more in depth in terms of crucial factors regarding the subject studied (Bryman & Bell, 2007, p. 205; Gill et al., 2008, p. 291; Cooper & Schindler, 2014, p. 153; Kallio et al., 2016, p. 2955).

3.2 Data Collection

This section consists of the process for collecting data through semi-structured interviews and document analysis. Obtaining data from relevant documents involves identifying and selecting sources that offer valuable information relevant to the research questions of the thesis. The interview process entails selecting suitable candidates, preparing an interview guide, and conducting the interviews.

3.2.1 Document Analysis Process

There are limited existing knowledge in literature regarding the attitudes towards the EU taxonomy in the B&C sector, due to its recent implementation in Norway at the beginning of 2023. The EU taxonomy are meant to serve as an important facilitator towards sustainable projects and activities and is anticipated to affect large part of the financial and non-financial markets. Recognizing the significance of the EU taxonomy, market participants are actively seeking to comprehend its impact. In this document analysis, news articles and website posts/articles from 2020 are utilized as sources of information. These sources are chosen for their accessibility and ability to provide insights into attitudes of the B&C sector toward upcoming sustainability requirements. The objective of the analysis is to reveal various aspects of the thesis objective aimed at SMEs in the

building and construction sector, that may not be covered through interviews. To gain relevant information in line with the thesis, there were performed searches relevant to companies in the B&C sector. Reasons for conducting a document analysis exclusively for this part of the thesis is due to the lack of theoretical information on B&C sectors attitudes towards the EU taxonomy. The news articles and website posts/articles were obtained through Google Searches by using keywords such as EU taxonomy, attitudes, B&C sector, building sector, implications, and requirements. Similar to the preliminary literature review, words like "OR", "AND" and "NOT" were used to gain relevant hits towards the thesis referring to companies in the B&C sector.

To determine a documents relevance to the thesis research question and object, it is important to determine its authenticity, reliability, accuracy, and inclusiveness. The chosen document should also be assessed whether the document is comprehensively or selective, meaning if the document covers a broad topic or focus on some aspect to the topic researched. Additionally, the collector of these documents should take into consideration if it is based on experience or a secondary source, whether it the information written is requested or not, edited or unedited, and if the information has an author or is anonymous. As documents are context specific, it should also be compared to other sources. The amount of data collected thorough document analysis, depends on its application. Since this thesis utilize document analysis as a tool for information verification in addition to interviews, fewer data sources can provide effective means (Bowen, 2009, p. 33).

3.2.2 Semi-Structured Interview Process

3.2.2.1. Selection of Interview Candidates

The thesis has two objectives, aiming at examining (1) banks perspective of the EU taxonomy, and (2) perspective of firms in the B&C sector. As the thesis has a clear purpose, a strategic selection of informants was made to gain relevant knowledge and insight. Therefore, to appropriately answer the thesis research questions, two separate groups of interview candidates were selected based on the objectives mentioned above. To obtain a more extensive and diverse representation, the interview candidates were chosen to cover various operational regions within Norway. Candidates selected for group (1) were participant representing individual banks with over 500 employees, hence subject to the EU taxonomy (European Commission, n.d.-c, European Union, 2020). Due to

the interconnectedness of the thesis two research questions, the selection criteria for candidates in the second group were stricter. Therefore, the selected participants for group (2) were required to fulfill the following conditions:

- they had to be representatives of an SME (defined as firms with less than 100 employees according to the Confederation of Norwegian Enterprise definition (NHO, n.d.-b).
- engage in the construction of new commercial building projects.
- maintain a financial relationship with the bank in terms of project funding.

All participants were chosen based on their knowledge, experience, and attitudes within the appropriate field, to provide data covering the full scope of the thesis aim (Sargeant, 2012, p. 1; Cooper & Schindler, 2014, p. 156). Subsequently, the sample size of interviewees was considered, as it is not predetermined in qualitative research. The number of participating candidates varies and depends on the quantity required to comprehensively cover all significant aspects of the studied phenomenon, but are generally small (Bryman & Bell, 2007, p. 490; Sargeant, 2012, p. 1; Cooper & Schindler, 2014, p. 151-152). As shown in *table 3*, five banks and six SMEs in the B&C sectors were interviewed to get a balanced data collection with approximately equal data collected from each sector.

Interview	Category	Abbreviation	Position	Employees
1	Bank/ Finance	F1	Head of Business Market	5 000+
2	Bank/ Finance	F2	Region Director & Business Advisor	500+
3	Bank/ Finance	F3	Analyst in Risk Management	500+
4	Bank/ Finance	F4	Customer Advisor & Head of Sustainability	10 000+
5	Bank/ Finance	F5	Bank Manager	10 000+
6	SME/	BC1	Part Owner of the Company &	20+

	B&C		Project Manager	
7	SME/ B&C	BC2	Executive Director	10+
8	SME/ B&C	BC3	Head of Administration & Properties	15+
9	SME/ B&C	BC4	Executive Director	10+
10	SME/ B&C	BC5	Executive Director	40+
11	SME/ B&C	BC6	Project Manager & Head of Sustainability	50+

Table 3: Overview of interview candidates categorized and abbreviated, n = 11 (n = number of interviews)

3.2.3 Interview Guide

For this interview format, it is required a certain level of familiarity or study of the subject matter prior to the interview, as the questions are formulated based on this foundation. The interview guide consists of a focused structure with several predetermined questions, designed to facilitate exploration and help delimit areas being examined (Bryman & Bell, 2007, p.205; Gill et al., 2008, p. 291; Kallio et al., 2016, p. 2960). The format allows flexibility to explore further topics with follow-up questions, ensuring detailed responses. These follow-up questions can be used to redirect the conversation back to the main topic and facilitate participants comprehension. In some of the interviews follow-up questions were pre-designed to ensure topic consistency, while other were spontaneous and provided additional elaborations on specific points (Gill et al., 2008, p. 291; Kallio et al., 2016, p. 2960). The main objective behind the used structure is to collect information of similar nature from each participant, enabling the comparison of answers across interviews (Kallio et al., 2016, p. 2965).

To obtain valuable insight and relevant perspective from both banks and SMEs in the B&C sector, two separate semi-structured interview guides were developed. By doing so, it ensured that the questions were tailored specifically to the sector to which the interviewed company belonged, also

allowing for a targeted exploration of relevant topics (Gill et al., 2008, p. 291; Kallio et al., 2016, p. 2955).

The interview guide directed towards banks are structured into four parts, where the first part includes general information on company background. The second part covers detailed questions regarding lending criteria and the associated process relating to the construction of new commercial building projects. This section objective is to obtain insight into the bank's loan portfolio concerning sustainable projects and to assess whether the EU taxonomy have any impact on lending criteria. Additionally, it aims to investigate any changes in the loan process and criteria in the recent years, as well as the banks plans to modify them based on global and political changes. The third part comprises the EU taxonomy. In this section the aim is to assess the Taxonomy impact in depth and how the banks perceive its advantages and disadvantages. Lastly, there was left room for clarifications, allowing the candidates to elaborate on what they considered to be the most significant topics and address additional information left out.

The interviews directed to SMEs in the B&C sector are structured into five parts, following the same setup as the previous mentioned interview guide. The first part covers general information on company background, followed by the second part covering the project process. The objective for this section is to examine the importance of sustainable practice through the company's project guidelines. The third part includes financing processes for new construction projects, where the aim is to gain the company's perspective on banks' lending criteria and its impact on sustainable incentives for a construction project. The intention is to gain deeper insights into specific measures companies can take to achieve improved loan conditions, and whether this serves as an incentive for companies to transition towards sustainable practices in their project processes. The fourth part focuses on the EU Taxonomy, with the overreaching objective of examining its impact on the company and to gain a clear insight of barriers and key incentives of implementation. The final section of the interview guide contains the same clarification questions as the previous mentioned interview guide.

3.2.4 Conducting the Interviews

Prior to conducting the interviews, all the relevant candidates were contacted via email or phone, giving them the opportunity participate in the process. Responses from banks were exclusively positive, where few banks declined due to lack of time. Regarding the SMEs, participants were increasingly more difficult to obtain. A significant number of SMEs in the B&C sector were reached out to with little success. In most cases, we received little to no response whereas most of them declined due to relevance. To all candidates who ended up participating, the interview guide and consent form were sent out before the scheduled interview. This allowed them sufficient time to prepare and gather necessary data and information, enabling them to provide the best possible answer to the questions. This also gave the candidates time to investigate any uncertainties related to the interview and seek clarification through asking questions, if needed.

The interviews were conducted online through video meeting on Teams, doing so enabled us to conduct the interviews in a timelier manner and use candidates from a wider geographic area. Even though interviews conducted face-to-face have an overall benefit in terms of observing nonverbal behavior, we were still able to observe nonverbal behavior through the camera. Online interviews can also result in a higher quality of the interview as the participants might feel more refreshed and comfortable during the interview (Bryman & Bell, 2007, p. 206; Cooper & Schindler, 2014, p. 153). To gain a deeper understanding, the quality of the data collected was ensured through audio recording and transcribing. By doing so, it guarantees that no valuable information is overlooked, allowing for the capture of nuanced details that this method is designed for (Cooper & Schindler, 2014, p. 157). The interviews had a set timeframe of approximately 45 minutes per interview, the duration varied from participant to participant, however, more time was allowed if needed. Most of the participants had interviews that lasted approximately 45 minutes, where only a few lasted as short as 20 minutes.

3.3 Data Analysis

This chapter addresses the qualitative data collected and how the analysis is performed. The qualitative data from this thesis originates from semi-structured interviews and document analysis. The interviews data consists of a large corpus of unstructured textual material. Due to the large

amount and lack of structure, this form of data can be challenging to analyze (Bryman & Bell, 2007, p. 570). This is due to the extensive and large amount of data a qualitative approach generates, this data collection is referred to as an "attractive nuisance" as it consists of a richness of insights gathered, however, it makes it challenging to find analytical paths (Bryman & Bell, 2007, p. 571).

3.3.1 Document Analysis

Data gathered from news articles and websites articles highlights the B&C sectors positive and negative attitudes towards the EU taxonomy and was analyzed accordingly. The document analysis consists of eight news articles and websites articles as it were considered as enough data to achieve information verification as an addition to interviews (Bowen, 2009, p. 33). The findings from the document analysis are presented in *table 5*.

3.3.2 Thematic Analysis of Interviews

In terms of the interview data gathered for this thesis, a thematic analysis as an appropriate approach due to the diverse, complex, and nuanced nature of a qualitative approach. A thematic analysis is a useful research tool providing freedom and flexibility through the data analysis process, enabling us to create a rich and complex account of our data (Braun & Clarke, 2006, p. 78). It is also one of the most widely used approaches in qualitative data analysis (Braun & Clarke, 2006, p. 79; Bryman & Bell, 2007, p. 571). Through the conducted interviews, a comprehensive and large amount of textual material through transcriptions were gathered. A thematic analysis will enable us to create a structure and identify patterns, uncover different points of view, and provide us with a better understanding of the implementation effect the EU taxonomy has on the Norwegian B&C sector. This data analysis approach identifies patterns within data and uncovers recurring themes within the topic researched across the data set (Braun & Clarke, 2006, p. 79; Jason & Glenwick, 2016, p. 33). The main challenge of this approach is to highlight important aspects of themes in a systematic way to answer the research question (Bryman & Bell, 2007, p. 571).

Our study is conducted with the use of semi-structured interviews with an abductive design, as this study relies on qualitative findings based on the EU taxonomy framework. The EU taxonomy is a

comprehensive field with many areas to explore. By using semi-structured interviews, we were able to limit the scope and create a focus area. This enabled us to achieve the desired in-depth analysis while giving us room to explore specific areas that were brought up if necessary. By conducting a thematic analysis of these interviews, we were able to identify the recurring themes across interviews (Jason & Glenwick, 2016, p. 33). The focus of this study is to draw specific conclusions from stakeholders' attribute meaning to the EU taxonomy, and how the interaction between banks and stakeholders in the Norwegian B&C sector is in a context-specific setting. How they make sense of the implementation, and their experience is therefore a crucial aspect as they may differ in their understanding. In their perspective, there is no fixed reality apart from their interpretations of the implementation of the EU taxonomy (Jason & Glenwick, 2016, p. 34).

The analysis process does not begin until all data is collected. Conducting a thematic analysis involves a process of organizing information to identify recurring themes from a textual data set by constantly going back and forward through the entire data set (Braun & Clarke, 2006, p. 86; Jason & Glenwick, 2016, p. 34). The analysis process is divided into six phases to provide guidelines. It's important to note that these are not the rules of a thematic analysis as this is not a linear process and movement through the phases may be needed (Braun & Clarke, 2006, p. 86).

Phase 1 - Familiarizing yourself with your data.

Regardless of how the data is acquired, it is crucial to understand and familiarize yourself with the data to know the extent of it in terms of its depth and breadth. This process often involves an active and repeated way of reading continuously probing for meanings and patterns from the data. Ideally, the data set should be read through at least once before starting the process of coding (Braun & Clarke, 2006, p. 87; Jason & Glenwick, 2016, p. 34). In regard to our study, the process of transcribing the verbal data was finished before starting to thematically analyze the data. This is a time-consuming process; however, we used it as an advantage to start familiarizing us with the data (Braun & Clarke, 2006, p. 87). As the interviews were conducted over a longer period, the transcription process happened continuously. When the process of transcribing all interviews were finished, we read over the coherent transcribing documents a few times to ensure a consistently good understanding of the information provided to us. Transcribing the data made it easier for us

to capture details and create a good foundation for a more thorough analysis in terms of understanding of the data (Braun & Clarke, 2006, p. 88).

Phase 2 & 3 - Generating initial codes and searching for themes.

Identifying codes is the second phase and started once we gained familiarization with the data, and involving an assessment of what is meaningful in regard to studied phenomena. The codes are supervisory, the goal is to gather as many meaningful codes as possible into potential themes (Braun & Clark, 2006, p. 88; Jason & Glenwick, 2016, p. 34). In phase three the focus is redirected towards a broader view by analyzing how the different codes may fit into themes (Braun & Clarke, 2006, p. 89; Jason & Glenwick, 2026, p. 43). The themes can either be implicit or explicit in the presence of the data set, often emerging multiple times within an interview as well as across different interviews, capturing important aspects related to the research question (Jason & Glenwick, 2016, p. 34).

Initially, our interview guides were well structured, covering various aspects to gain more insight about in relation to our research question. This made it more convenient for us to code and identify themes as it was easier to navigate through the transcription. Each interview was transcript into separate tables. The coding of the transcription was done manually, where we added a column to the right to get a better overview. The codes were given short names, followed up with extracts of the data related to the code.

After coding each interview, several tables were created based on the different identified themes. The themes covered both the perspective of the banks and SMEs, with the codes related to the stakeholders sorted out in coding names with extracts of transcription, as illustrated in the *table 4*.

Perceived attitudes			
	Banks		SMEs
Positive	Negative	Positive	Negative

Contributes in the right direction

"You help ensure that we get a direction that makes things go well here and reduce emissions and make it more efficient and so that we can help to reduce the problems."

"I think that you have to focus on why we are doing this here, which is that we want a world that also exists in 100 years, and then we have to do this (sustainability reporting)."

"We have to take the climate seriously and then we have to go in the right direction to become greener. It's that easy."

"The customer understands more and more that this is a direction we must go. We have to take our share of the responsibility for this planet and the country, so in a way we have no choice."

Reporting

"It's a bit of heavy work (reporting), it should have been a bit simplified. So that is probably the most important thing to improve."

"It will probably be more about reporting and use of resources; we must use more resources to report according to the EU taxonomy."

"It is difficult to report on things as we are dependent on our customers. We also don't know how to report, there is no approved way to know how much emissions are allowed in our portfolio."

"The processes have been a bit heavy, but it's just that they are new processes, and it has been a disadvantage that they have required a lot of resources."

Great contributor for change

"It (the implementation) helps speed up the change that we see happening. I think anything like that makes things go faster. It is a move that increases the speed of innovation."

"It's not the reporting that's really interesting, it's the sum of all the little things we do between the reporting. All the physical and mental, how we develop our thoughts and actions and how the structure changes to actually take a greater responsibility to better care for our planet."

"Even if you spend a lot of time getting to grips with it and it is demanding, it is an important part of social development, you get into it eventually."

No current disadvantages

"It (taxonomy) is not a disadvantage for us. There is none. I simply think that the reporting we do is about sharpening ourselves."

"I can't say we experience any inconvenience with it (taxonomy), the only inconvenience that surprises me is related to the certification of buildings."

"No disadvantages, not right now, but we can see that it will become stricter with the new reporting requirements.

"We do not have a large administration and lack resources for it. We see that the system is very complicated, we need something that is a little more simplified and manageable for us as a middle-sized entrepreneur."

Increased awareness

"There is more focus on that (sustainability), banks must measure their CO2 footprint and environmental considerations in their own balance sheet in relation to borrowed money, with time it becomes easier to finance good environmental buildings, directly including consideration of the environmental aspect."

Profitability

"The most critical (disadvantage) is profitability, for example in relation to new construction. How much extra will it cost to build a taxonomy compliant, and who will be paying? Both the tenants and home buyers need to be willing to pay for it."

"Challenging to calculate the costs needed to comply with the taxonomy."

Increased awareness

"I just think it's good. If it is not for our own part, it's for our surroundings."

"I think raising awareness is the most important thing, effective sustainability."

"Sustainability is becoming more important. That it is lifted up and a part of everyday life is good. I think that is important and important to achieve those

Strict requirements

"It's not something I can say right away, but if demands are made too strict too early, so that you are unable to adapt, it can potentially be a big disadvantage.

"A clear disadvantage is that the more and more stringent requirements when we are constructing new buildings will increase the prices of the buildings."

"Increased focus on the environmental requirements." "Increased awareness of energy efficiency and increased awareness of climate risk."	"It (the implementation) is expensive, but it has to be done somehow. It is not very much better paid in that sense."	objectives (the Paris Agreement and the Green Deal)."	"I would say that it is a good thing, but at the same time it must not become too theoretical about certain things. Then it will be difficult to implement."
"It (taxonomy) increases awareness of what you buy in from other places. I think these are positive contributions."			

Table 4: Coding of interviews based on identified themes.

Eleven interviews were conducted, resulting in a large textual data set once the interviews were transcribed. The extract from the table above is only a small part covering one of many identified codes and themes. We chose to only show one selected part as an extract of the whole data set to limit the scope, as this is only to illustrate how the textual data set was analyzed and generated into codes and themes.

Phase 4 - Reviewing themes.

When the potential themes are identified, they need to be reviewed and refined. A clear coherence between the data in the themes and equally distinct boundaries between the themes should be identified (Braun & Clarke, 2006, p. 91; Jason & Glenwick, 2016, p. 35). This phase consists of two levels in terms of reviewing and refining the themes, in the first level involves a reviewing of coded extracts to assess if they form a coherent pattern. Level two follows the same process, however, in this phase the whole data set is assessed (Braun & Clarke, 2006, p. 91). After thoroughly reviewing collated extracts from each of the themes, we saw that the pattern already was coherent, and therefore went straight to level two. This level considers the validity of the themes in relation to the data set, by rereading the data set to assess if the themes fit the data set and to re-code additional data if needed (Braun & Clarke, 2006, p. 91). In regard to our study, the themes as a whole captured all aspects of the data set, with the exceptions of the aspects covering the company background and clarifications. However, the aspects regarding the clarification rarely provided us with "new" as it was merely a recap of information from the interview. The rereading

was important for us to conduct a thorough analysis. Even though, re-coding is considered as an ongoing organic process, this was highly necessary in terms of our study due to the large amount of data generated. Several rimes through this process new codes were found that we had previously overlooked, or some codes were "eliminated", but found to be significant later in the process (Braun & Clarke, 2006, p. 91; Jason & Glenwick, 2016, p. 35).

Phase 5 - Defining and naming themes.

In this phase the themes are further defined and refined by identifying the essence of each theme, as well as the overall perspective of the themes, and determining what aspect these themes capture (Braun & Clarke, 2006, p. 92; Jason & Glenwick, 2016, p. 35). To cover all aspects of our research questions, we identified several themes with a central idea for each of them, naming them after the dimensions these themes capture. The themes that derived from the textual data set is divided into five, whereas some of them consisted of subcategories to capture the dimension of the theme (Jason & Glenwick, 2016, p. 35):

- 1) The EU taxonomy's effect
- 2) Banks perception of the EU taxonomy with subcategories advantages and disadvantages
- 3) SMEs perception of the EU taxonomy with subcategory attitudes, drivers, and barriers
- 4) Bank's facilitation towards a green loan portfolio
- 5) SMEs perception of green loans for new commercial buildings

Each of these themes was analyzed through a review of a compiled data extract from each theme and further examining how these fits into the overall picture of the data set (Braun & Clarke, 2006, p. 92; Jason & Glenwick, 2016, p. 35). Due to the well-structured interview guide and the collated data extracts from the textual data set, it was easy to review these for each theme. While there were some overlapping of some aspects between the different themes, we systematically placed the collated data extracts where the content of these was best captured. This resulted in smooth transitions that fit well with the overall picture of the data set.

Phase 6 - Producing the report.

After the themes and their interrelationships are identified, the process of writing of the research report begins. To get a good report, one must go further than just a depiction of the data. The analysis must explain the data within and across themes and the story of the data in a way that gives it merit and validity to the reader. Additionally, the report must be able to give a significant amount of evidence in relation to the themes originating from the textual data set (Braun & Clarke, 2006, p. 93; Jason & Glenwick, 2016, p. 35). To ensure this through the analysis of the qualitative interviews conducted for our study, we elaborated on the points demonstrated, and embedded extracts to further elaborate the essence to compellingly illustrate the data (Braun & Clarke, 2006, p. 94).

3.4 Validity and Reliability

"The value of scientific research is partially dependent on the ability of individual researchers to demonstrate the credibility of their findings" (LeCompte & Goetz, 1982, p. 31). Validity and reliability are important in all fields engaging in scientific inquiry, regardless of the data collection and analysis methods, studies conducted should always strive for authentic results and good measurement (LeCompte & Goetz, 1982, p. 31; Bryman & Bell, 2007, p. 395; Cooper & Schindler, 2014, p. 257). When establishing validity, we distinguish between two types: Internal validity and external validity. Internal validity concerns the extent to which conclusions accurately represent empirical reality and measure what we wish to measure in terms of supplying consistent results. External validity refers to the findings and to what extent they can be generalized across persons, settings, and times. Reliability contributes to validity and concerns the replicability of the scientific findings in terms of the accuracy of the measurement procedure. When establishing reliability, we distinguish between internal and external reliability. Reliability alone is not sufficient as a condition to validity (LeCompte & Goetz, 1982, p. 32 & 44, Bryman & Bell, 2007, p. 395; Alshenqeeti, 2014, p. 43; Cooper & Schindler, 2014, p. 257 & 260).

3.4.1 Validity

To establish internal validity, we need to be sure that what we want to find out provides and points out accurate conclusions (LeCompte & Goetz, 1982, p. 44). We were critical to the sources used in our theoretical background and set high standards in regard to our theoretical foundations. In

terms of the EU taxonomy, our focus was primarily on using official documents, reports, and websites where the EU taxonomy originates such as the EU commission - whose job is to shape the overall strategy, propose EU laws and policies, budget management and monitoring implementation of measures such as the EU taxonomy (European Commission, n.d.-f). To gain a broader understanding of the EU taxonomy, we supplemented with research articles and websites from stakeholders affected by the implementation of the taxonomy. The theory used in regard to the B&C sector primarily consists of information gathered from a membership organization from businesses from the entire building, construction and property sector called the Norwegian Green Building Council (Grønn Byggallianse, n.d.-d). This is considered a valid source as the Norwegian Green Building Council is a well-known and respected organization in Norway working on promoting sustainability in the B&C sector. Additionally, they are also responsible for the BREEAM-NOR certification, a Norwegian certification promoting green buildings (Grønn Byggallinase, n.d.-b). The organization has a high professional level consisting of experts related to sustainable construction such as World Green Building Council (WGBC), Norsk Eiendom, Entreprenørforeningen Bygg & Anlegg (EBA), SINTEF, & FutureBuilt (Grønn Byggallianse, n.d.d). To further ensure the validity, supplemented with other less recognized sources to obtain further confirmation of the information gathered from the Norwegian Green Building Council.

Regarding our primary data collection, all necessary data was gathered through semi-structured interviews. To ensure that the information gathered from the interviews is valid, the interview guides were adapted to cover all aspects in our research questions, leaving nothing unanswered. A lot of time was spent searching for the right candidates with sufficient knowledge about our topic to ensure the quality of the data gathered from the interview. As mentioned above, we made sure that all our participants met the requirements set in terms of their experience and knowledge. To maintain a higher level of validity in qualitative interviews, it's recommended that the interviewer minimizes the possibility of bias. To enable this, following factors should be considered; the interviewer's attitudes and prospects, awareness of tendencies leading to seek answers of their prejudiced opinions, misconceptions from the interviewer in terms of what is said and vice versa (Alshenqeeti, 2014, p. 43-44). To prevent this, we had a thorough review of the interview questions to make sure that the measures to maintain validity were followed. This included avoiding asking leading questions and leaving room at the end of the interview for clarifications. This gave the

interviewee to fill in the gaps or specify something of importance further. Additionally, notes of the interview were taken to not rely completely on the recordings (Alshenqeeti, 2014, p. 44).

To establish external validity, we need to assess if our findings can be generalized, meaning that aspects of the study can legitimately compare the representation across groups (LeCompte & Goetz, 1982, p. 32; Alshenqeeti, 2014, p. 43). In terms of qualitative research, this is challenging due to researchers' tendencies to gather small samples when conducting qualitative research (Bryman & Bell, 2007, p. 395). Our assessment of the findings is done by considering two perspectives, if (1) our findings can be generalized in Norway, and (2) if our findings can be generalized in relation to other EU countries subject to the requirements from the EU taxonomy.

Our findings can be generalized across Norway due to conducting interviews of banks and SMEs on a national level varying in different sizes and locations. Our assessment regarding generalization of the findings of our study to EU countries shows that the degree of generalizability is higher in Norway. The main reason for this is due to Norway's laws and regulations within the B&C sector are stricter, as the climate is harsh, setting stricter requirements to planning, location, design and maintenance of buildings (Miljødirektoratet, 2019). Nevertheless, certain aspects of our study, particularly those pertaining to the EU taxonomy and banks, can be generalized to other EU countries, given the shared framework being implemented towards FMP and large listed firms across the EU. However, this cannot be said with certainty as it's only a small part of the total data collection. Additionally, the document analysis conducted to explore the Norwegian B&C sector is based on a limited sample size. Nevertheless, it is considered adequate for the purpose of this thesis, as it serves to varify information gathered from interviews. Moreover, the findings align with the preliminary literature review, indicating a degree of external validity with respect to Norway.

3.4.2 Reliability

To establish reliability, we need to assess if the measurement of our study is contributing to consistent results (LeCompte & Goetz, 1982, p. 37; Bryman & Bell, 2007, p. 395; Cooper & Schindler, 2014, p. 260). There are two types of reliability, external and internal. External reliability refers to the degree of which a study can be replicated, meaning the consistency of results or

findings from research. In regard to qualitative research, this is considered as a difficult task, as it requires the researcher to "freeze" a social setting and its circumstances to obtain data that can reveal similar results. However, there are approaches that can be utilized to measure external reliability. One way is by utilizing same data collecting approach for different subjects for the research (Bryman & Bell, 2007, p. 395; LeCompte & Goetz, 1982, p. 37). Internal reliability, also known as interobserver consistency, pertains to the agreement among multiple observers or researchers regarding their interpretation of the same observation. It signifies that different individuals conducting an observation agrees on what they perceive and comprehend. In other words, there is a consensus and consistency in the interpretation of similar observations across observers, indicating a high level of internal reliability (Bryman & Bell, 2007, p. 395; LeCompte & Goetz, 1982, p. 41).

External reliability of this study is achieved by using various sources from literature, document analysis, and data collected through interviews to look for information consistency. This thesis utilizes multiple sources to gather information on similar matters, to enhance the reliability of the study. Internal reliability was achieved by conducting semi-structured interviews. When it was conducted interviews of participants in the banking sector and SMEs in the B&C sector, two interview guides were used: one pertaining to the banks and one to the SMEs. These two interview guides had the same questions regarding perceived impact on the EU taxonomy for both sectors. The remaining question related to sector specific questions, apart from company background and clarification questions. Responses were voice recorded and transcribed afterwards, enabling us to place responses to the appropriate questions asked. Using thematic analysis, we were able to identify patterns and similar responses. The findings from data collected through interviews were then compared to previous studies, literature findings, and document analysis. These findings are discussed in section five of this thesis. Literature used in the study are form several sources published at different times, where some of these sources has emphasized similar findings or communicated information, enhancing the reliability and credibility of our findings. Overall, majority of our findings in literature also showed some consistency with responses from a large majority of respondents.

3.5 Ethical Considerations

In this section we examine the ethical concerns that might occur when conducting research. When taking ethical considerations into account in research, this is about safeguarding the rights to the participating subjects. It is important to make sure that the participant does not suffer any physical harm, pain, discomfort, embarrassment, or privacy loss. In order to protect these rights, there are several considerations researchers should contemplate. (LeCompte & Goetz, 1982, p. 37; Bryman & Bell, 2007, p. 122; Connelly, 2014, p. 54; Cooper & Schindler, 2014, p. 28). The ethical principles concern common issues that might occur in research is broken into four principles (Bryman & Bell, 2007, p. 128):

1) Harm to participants

Research harming its participants is regarded as unacceptable, the researcher is accountable and needs to assess the potential harms that can be done. In terms of our study, a possible harm to our participants could be related to stress, career prospects or future employment (Bryman & Bell, 2007, p. 128). The participants in our study can potentially be harmed in this way by either sharing sensitive information or sharing an individual's opinion that is not supported by the company interviewed. Further, we need to carefully maintain confidentiality of records and anonymity of accounts. Issues regarding confidentiality are more common in qualitative research than quantitative research, it is difficult to ensure 100 percent anonymity as there is a possibility of identification of persons, organization, and places. This means that all information related to the companies and participants in our study do not go astray and are misused (Bryman & Bell, 2007, p. 129-130). To ensure this *Nettskjema*, an online survey tool created for research purposes, was used. This allows us to store sensitive information safely. Furthermore, we have taken precautions to ensure that information is not disclosed in a manner that could potentially reveal the identities of the participants or the companies they are associated with.

2) Lack of informed consent

The principle of informed consent does not simply mean that the participant agrees to take part in the research project, it also entails the implication that participants are fully informed about the research process. This process normally takes place in the beginning or in advance of the interview and informs whether observation techniques of recording equipment is used (Bryman & Bell, 2007, p. 132-133). Before the actual interview, both the interview guide and a consent form and accepted written consent by signature through a declaration of consent were sent out. The consent form contained the overall purpose of our study as well as features of how the study was carried out. Additionally, an explanation of the relevance of their participation and what their participation would involve were added. Finally, participants were presented with checkboxes to indicate their consent for participation, including granting permission for sound recording. This allowed us as researchers and our supervisor to use information related to the individual for the project. It also acknowledges that published information may allow recognition based on sector, company size, main areas, and position within the company. However, it was emphasized that participants had the freedom to withdraw their consent at any time during the process.

3) Invasion of privacy

Privacy is linked to informed consent based on an understanding to participants involvement in the research project entails, with that the participant acknowledges that the right to privacy regarding that limited domain is surrendered. The participants still have the right to refuse answering questions on grounds they feel are justified (Bryman & Bell, 2007, p. 136). In our case, refusal to answer questions may be based on topics they regard as sensitive and not wish to make public. Further, the issue of privacy can also be linked to the subject of anonymity and confidentiality, which we have already elaborated in the context of harm to participants (Bryman & Bell, 2007, p. 136).

4) Deception

The issue related to deception occurs when researchers misrepresent their research by presenting it as something other than what it is (Bryman & Bell, 2007, p. 136). Deception should always be minimized. Nevertheless, different levels of deception are quite common in research as researchers often try to limit the participants knowledge about the objective of the research, to get the participant to respond more naturally (Bryman & Bell, 2007, p. 137). In regard to our study, we were attentive in terms of deceiving our participants. It was ensured in the consent form and at the beginning of the interview that recording devices would be used. The reason for the study was also included in the consent form, informing participants of the true nature of our study. Lastly, the

participants were allowed to ask questions regarding our study at any given time to express concerns they might have or provide us with feedback.

To expand on the topic of recording and capturing more authentic responses, we observed that the knowledge of recordings did not noticeably influence the participants' responses in a manner that hindered natural expression. This could be attributed to the fact that much of the information shared by participants is not considered sensitive and does not pose any harm to their respective companies if made public.

4 Findings

4.1 Document Analysis

Findings from the document analysis aimed at companies in the B&C sector is retrieved from news articles and website posts/articles and are presented in *table 5*.

Positive attitudes	Negative attitudes
Sustainability clarity (Bøe, 2021; Kjeldsberg,	Significant resources for restructuring (Bygg,
2021).	2023; Eide & Koppang, 2022).
Business opportunities in sustainability	
(Bygg, 2023; Saltnes, 2022; Skjevestad, 2021;	Taxonomy standards and definitions do not
Strandquist, 2021).	correspond to Norwegian standards (Bøe,
	2021; Eide & Koppang, 2022; Jortveit, 2022;
Favorable financing (Kjeldsberg, 2021;	Skjevestad, 2021).
Saltnes, 2022; Strandquist, 2021).	
Increased awareness of sustainability	
(Kjeldsberg, 2021; Saltnes, 2022;	
Strandquist, 2021).	

Table 5: Findings from Document Analysis, n = 8.

4.2 Interviews

4.2.1 The EU Taxonomy's effect

This section elaborates the findings regarding the impact the EU taxonomy has on stakeholders within the banking sector and the Norwegian B&C sector.

As mentioned previously, all participants interviewed from the banking sector are directly influenced by the EU taxonomy and have reporting obligations, whereas the participating SMEs are not yet directly impacted by the EU taxonomy. When questioned about the impact of the EU taxonomy, the bank respondents expressed an increased effect on their daily operations and an increased emphasis on their customers. This is primarily due to the banks' obligation to engage in sustainability reporting, encompassing not only their own portfolios but also the activities they finance. One respondent noted the increased focus on the customers through their lending activities stating:

"The taxonomy affects us a lot, especially in terms of reporting. (...) when we are reporting in terms of our portfolio, we are dependent on our customers. As I said, our emissions are low, the largest emissions originate from the activities we lend out to." - Respondent F4.

The reporting obligation creates an increased focus on the activities they lend out to, resulting in a dependency in relation to their customers in terms of balancing their portfolio. This further affects the banks increased awareness on sustainability by developing solutions in relation to green financing, by increasing the pressure on the customers towards sustainable development.

While the respondents from the B&C sector generally experience minimal direct effects from the implementation of the EU taxonomy, certain SMEs experience an indirect impact in relation to the financing of their construction projects. The EU taxonomy influences their business practices, particularly in terms of securing financial support for their building projects. In cases where these SMEs received financing from banks, they become subject to reporting obligations to the lending institutions.

"We are obliged to report to the banks, (...) especially in terms of the green buildings they have financed (...). They want this information to ensure we can maintain the green loans, using it in their sustainability reporting." - Respondent BC2.

This finding confirms and demonstrates the alignment with the banks' obligation to report on sustainability in relation to the activities they finance. As a result, participants from the B&C sector have experiences an increased focus on sustainability and its connection to certifications for construction projects. A small number of respondents from the B&C sector have voluntarily initiated sustainability reporting regarding the upcoming EU taxonomy requirements. However, the majority of stakeholders in the B&C sector have acknowledged the impending requirements and have started preparations to meet the applicable criteria.

The responses revealed a clear distinction between the banks and SMEs in the B&C sector regarding their knowledge of the EU taxonomy. The participating banks demonstrated a generally high level of understanding of the taxonomy and its requirements, whereas the SMEs revealed limited knowledge of the EU taxonomy and appeared less prepared for the forthcoming reporting obligations. This discrepancy may arise from the direct and indirect impacts of the EU taxonomy on banks and SMEs in the B&C sector. Given that banks are directly obligated to comply with the EU taxonomy requirements and report accordingly, they need to possess a comprehensive understanding of the effects on their day-to-day operations.

In contrast to the banks, the SMEs in the B&C sector, who experience indirect effects from the EU taxonomy through their interactions with banks, do not have the same incentive to acquire the same level of knowledge regarding the EU taxonomy. As one respondent from the banking sector stated:

"Historically speaking, the customer has had limited knowledge regarding the taxonomy. However, they have recently improved." - Respondent F2.

As a result of the disparity in knowledge between the banks and SMEs, the banks contributed a greater volume of data regarding the EU taxonomy, whereas the participants from the B&C sector generally generated a lower response rate.

4.2.2 Banks perception of the EU Taxonomy

This section includes the findings from the bank's perception of the EU taxonomy as an extension of the previous findings regarding the impact of the implementation of the EU taxonomy. Dividing the findings into subcategories of advantages and disadvantages.

4.2.2.1 Advantages

Based on a thorough analysis of the implementation effect the EU taxonomy has on large banks, several significant advantages were highlighted. The most prominent advantage highlighted is the increased awareness on sustainability. The EU taxonomy establishes a unified framework for sustainable financial activities, effectively establishing a benchmark for stakeholders. This, in turn, enhances stakeholders' awareness and cause them to be more reflective when evaluating the impact of their financial activities and assessing their consequences. One of the respondents drew attention to the reporting requirements, previously mentioned as a prominent disadvantage and states:

"Although the reporting requirements are viewed negatively, the advantage really is that we have to start. It makes the climate change challenges more realistic; we must take ownership of our part." - Respondent F4.

Consequently, the banks experience an increased level of accountability and responsibility for their actions and their environmental impact. The implementation of the EU taxonomy is considered as a 'step in the right direction', and an essential measure in fostering sustainable development.

4.2.2.2 Disadvantages

The analysis from the textual data set from the interviews with the banks identified several disadvantages in relation to the implementation of the EU taxonomy.

When asked about the disadvantages they encountered during the implementation process, the majority of banks expressed concerns and emphasized that the primary disadvantages are linked to the EU taxonomy framework and its reporting requirements. The most challenging expressed aspect is the reporting requirements that have not been fully completed, making it difficult to comply with the requirements. These findings can be explained through comprehensive and

complex scope requirements of the EU taxonomy meets, requiring a large number of resources to get a thorough understanding.

Additionally, profitability was highlighted on several occasions as challenge, and became the subject for further investigation. Questions regarding profitability and the extra costs related to taxonomy compliance were raised. The participants responded that there is a lot of uncertainty regarding these costs, as well as the willingness to pay for it. Among the respondents, only one individual stood out by expressing that they did not experience any disadvantages in relation to the implementation of the EU taxonomy:

"No, there are incredible few disadvantaged linked to the EU taxonomy, we only see the areas of opportunity this brings out. Simply put, we need to take the climate challenges we face seriously. It's that easy." - Respondent F1.

Overall, the processes the banks go through in terms of both implementing and reporting in accordance with the EU taxonomy require substantial resources in terms of time, expertise, and financial investments. However, we found that the good outweighed the bad, whereas one of the banks responded that:

"If you're not 'on top of it' now, you will end up as the loser in the future." - Respondent F2.

Implying that incorporating the EU taxonomy will be profitable in the long-term perspective.

4.2.3 SMEs perception of the EU Taxonomy

This section carries out the same review of the findings from conducted interviews on the implementation effect that was previously reviewed in the banking sector. This section focuses on the SMEs in the Norwegian B&C sector and their current perception of the EU taxonomy, dividing them into attitudes, drivers, and barriers.

4.2.3.1 Attitudes, drivers, and barriers

The participants from the SMEs in the B&C sector shared similar attitudes as the participants from the banking sector, however they differed in some aspects of advantages and disadvantages. Considering attitudes towards the implementation of the EU taxonomy, we saw a clear distinction.

Overall, our finding revealed that the SMEs in the B&C sector have generally more positive attitudes regarding the implementation of the EU taxonomy. The majority of the participants experienced a few to no barriers towards the EU taxonomy, stating that it is rather a necessary measure.

"The implementation helps speeding up the change that needs to happen (...). Whether it happens now or later, it's still bound to happen. All these measures we take to increase the focus on sustainability are necessary" - Respondent BC2.

Nevertheless, respondents who experienced barriers expressed concerns about the complexity and strict requirements set out in the EU taxonomy, as well as challenges about its practical implementation. Overall, we found that the positive attitudes outweighed the negative ones, in terms of increased awareness on sustainability, and perceiving it as a step in the right direction. Whereas one of the participants responded that:

"There are absolutely no disadvantages. None. The sustainability reporting is simply about stepping up" - Respondent BC2.

The main drivers identified towards the adoption of the EU taxonomy include market demands and recent regulatory changes. These regulatory changes, among other regulation, include stricter environmental in TEK-17 (technical requirements for buildings). Compliance with these regulations is mandatory for all building actors and encompasses energy efficiency, material use, and waste sorting in buildings.

"Within new construction, we mainly relate to regulations in the industry, because it consists of an enormous number of requirements on different levels" - Respondent BC5

Market demands were also highlighted as a significant driver, as the construction of new buildings is often requested by the market. This increased market demand has led to an increased focus on sustainability among SMEs, driven by customer expectations. The social responsibility of the sector towards sustainable transitioning was emphasized as well, with many SMEs expressing their interest in fulfilling this responsibility through sustainable practices and ESG reporting. Certification schemes like BREEAM-NOR or the Nordic Ecolabel (Svanemerket) were mentioned

as tools used by a considerable number of SMEs to demonstrate their commitment to sustainability and enhance their attractiveness in the market.

However, it was emphasized that financial viability remains a crucial prerequisite for pursuing sustainability initiatives. Without the opportunity to earn money, running a company sustainably becomes challenging. In this context, banks offering green loans with better loan terms were seen as a positive incentive towards sustainability.

4.2.4 Banks facilitation towards a green loan portfolio

The banks have several requirements in relation to their loan criteria, their payment capacity and collateral ability are crucial elements in terms of getting the banks to finance building projects. However, we found that most of the bank's offer "green loans" without many explicit requirements. Getting better loan terms in relation to green loans is rather a part of an overall assessment of the project where aspects such as certifications, energy effectiveness, energy consumption and their CO2 footprint are assessed.

Concerns regarding construction of new buildings were raised in relation to the requirements set by the EU taxonomy. The definitions of the requirements for new buildings to align with the taxonomy were recently implemented, therefore banks have not yet made any explicit requirements that must be met by the stakeholders from the B&C sector in order to get green loans. One participant highlighted this fact stating:

"The challenge with new building projects is the recent received requirements that must be met in order to comply with the EU taxonomy. Our impression is that we hardly have any buildings that have been built that is compliant" - Respondent F2.

Although the requirements are challenging to adapt to, the banks framework used for green financing is influenced by the taxonomy. Obtaining green loans does not mean that the building projects financed by this is compliant with the taxonomy, however, it is seen as a measure to adapt to these requirements.

Despite the challenges, a majority of the banks have increased their focus on sustainability and are working towards facilitating a green loan portfolio in relation to the economic activities they lend

out to. As of today, we observe that the banks have some aspects that stand out in terms of giving green loans, even though there is no set pricing towards these loan customers, building sustainable still has a positive effect on the pricing of the loan after an overall assessment. After all, the banks are highly motivated to take part in the green transition and take responsibility. One of the respondents stated that:

"A fundemental attitude in the way we work is that we should go the extra mile to keep those customers working towards sustainability. They are important to us, and we believe that is a great risk not to have such customers with us in the future." - Respondent F2.

This demonstrates the banks' commitment to supporting companies in their transition towards sustainable development by actively engaging with customers to facilitate this change. Some banks have even incorporated certification requirements as part of their loan criteria. However, thorough our analysis, this is not currently perceived as the primary focus. This is because banks also need to consider factors such as payment capacity and collateral ability when evaluating projects.

4.2.5 SMEs perception of green loans for new commercial buildings

All participants from the B&C sector demonstrated awareness of the EU taxonomy and its potential impact on their businesses. However, we noticed a notable distinction among the SMEs in terms of their level of proactivity towards the EU taxonomy and its upcoming requirements. This distinction was consistent across the respondents, with a slight majority of stakeholders displaying a proactive approach to sustainable development in their projects involving construction of new buildings. Regarding green loans, we found that the proactive stakeholders in the B&C sector possess more knowledge and experience when it comes to obtaining green loans. They emphasized that green loans have had a significant growth in recent years and serve as a motivating incentive for promoting sustainable development in the sector.

The companies expressing these views expressed a generally positive attitude towards the EU taxonomy and a strong desire to align their new buildings with sustainable measures. Moreover, it was found that SMEs in the B&C sector view green loans, compared to normal loans, as a desirable financing even though it only yields marginal results. One of the SMEs highlighted this particularly:

"Getting green finance for our building project was cutting-edge, we like to be early adopters (...) Better loan criteria is motivational, but the building had to be built anyways (...) We chose to spend the time building green in order to stretch ourselves further." - Respondent BC2.

Although the results of the discount of green loans are perceived as marginal, they have a high significance of the overall picture. In addition to this, the same stakeholders considered getting a green loan as a great motivational factor in sustainable development viewing it as a recognition itself. They feel confident that the banks value their efforts towards sustainability and experienced that it was easier to attain better financing on their green building projects.

5 Discussion

5. 1 EU taxonomy's Facilitation of Green Finance

The emergence of the EU taxonomy has occurred due to the pressing need for sustainable and environmental outcomes, where finance have been identified as a vital facilitator toward the goal of becoming climate-neutral by 2050. Previous efforts have lacked clarity and standards, leading to an increase in greenwashing (EU TEG, 2020, p. 7; Finansdepartementet, 2023; Klima- og miljødepartementet, 2021; Wagstaff & Belsom, 2022, p. 4). The EU taxonomy as a framework and newly implemented regulation aim to clarify and standardize existing sustainability practices, as well as being the backbone to emerging regulations and initiatives (Oellingrath & Ray, 2022; Pettingale et al., 2022). Findings from banks interviews reveal that the EU taxonomy is an important initiative on the right path towards sustainability, leading to a rise in awareness, (F1; F2; F3; F4; F5), and direct the capital in the right direction (F4). This further confirms the need for a common and unified framework in terms of guidelines and standards as a tool to reach objectives of the Green Deal and meet the climate and energy targets set by the EU (European Commission, n.d.-c).

On the other hand, some banks expressed a need for a simplified way to report according to the taxonomy (F2; F4), because it sets high demands and increased use of resources (F3; F5). This is also expressed thorough our findings in the preliminary literature review, where Norang with

collages (2023) found that some stakeholders expressed concerns related to the lack Norwegian definitions and confusion surrounding the EU taxonomy's practical implementation (Finansdepartementet, 2023). However, with the CSRD reporting recent implementation, this might change, as it aims to provide clarity, minimizing expenses, and enhancing efficiency related to sustainability reporting (European Commission, n.d.-a; European Commission, 2021; Oellingrath & Ray, 2022). Even though the CSRD is mainly aimed at companies, it can be used voluntarily to align with the EU taxonomy (Dalsegg & Lidsheim, 2023, p. 33; PwC, 2022).

5.1.1 Banks Loan Portfolio for New Commercial Building Projects

Bank interviewees mentioned that the EU taxonomy has led to a larger focus on green financing, which is considered to be the main impact on bank's loan portfolio (F2; F3; F4; F5), also in regard to construction of new commercial buildings. Banks consider it their corporate social responsibility to be a driving force thorough their green loan portfolios (F1; F2; F4; F5), requesting greater demands from their customers (F1; F2; F5). This aligns with the information published in a report prepared by PwC (2021), which revealed that Norwegian banks have in the last few years had an increasing focus on sustainability-related lending throughout their loan portfolios, to ensure EU taxonomy adaptation.

Some banks have updated their lending criteria for green loans to include sustainability certifications such as BREEAM-NOR and the Nordic Ecolabel (Svanemerket) to facilitate towards the EU taxonomy (F1; F4). Other banks have mentioned these certifications as something that can help achieving better loan conditions towards construction of new building but was not mentioned as a part of their lending criteria (F2; F3; F5). Both BREEAM-NOR and the Nordic Ecolabel (Svanemerket) are commonly used building certifications used in Norway for construction of new building projects (Grønn byggallianse, n.d.-b; Svanemerket, 2023). These building-certifications promote an alignment with the EU taxonomy in their certification processes (Grønn byggallianse, 2020; Svanemerket, 2023), and is most likely the reason why banks commonly employ these as a part of their lending criteria for green loans.

There are, however, a larger focus among banks, that focus on energy labeling and energy efficiency of building (F1; F2; F3 F4; F5). Nevertheless, the B&C sector is responsible for 15

percent of Norway's emissions (Kommunal- og distriktsdepartementet, 2022), but only 1-2 percent of this emission relates to direct emission from buildings energy usage due to it predominantly comes from renewable energy (Grønn Byggallianse, n.d.-a). The reason for its large focus on energy labeling among banks could be that the TEK-17 regulation already requires minimum characteristics for energy rules (Byggteknisk forskrift, 2017, §1; Kommunal- og distriktsdepartementet, 2022), as well as Norway's Energy Label Regulation requires assessment of buildings for correct labeling of energy status (Energimerkeforskriften, 2009, §11). Is seems like the bank largely focus on facilitating their green loan criteria's towards utilizing existing market practices in the B&C market. The reason for this could either be to make it easier on their customers obtaining green loans, or due to the lack of Norwegian definitions surrounding the EU taxonomy's practical implementation (Finansdepartementet, 2023).

Even though the EU taxonomy has led to an increase focus on banks green loan portfolio of new commercial buildings (PwC, 2021, p. 38), it reveals that there are few financial benefits to be gained from these loans. Some banks mentioned slight discount on interest margin for green buildings in general (F5; F4), and others mentioned discount in relation to achieving a greater energy label (F2; F5). Other banks have mainly focused their green loans towards renovation of buildings, as the construction of new building definitions in the Norwegian EU taxonomy is still premature (F2; F3). However, all the banks expressed that they are constantly working towards aligning loan condition in relation to the EU taxonomy. The reason for few financial benefits gained through green loans, could be the challenge of securing reliable sustainability data to establish risk-based pricing differences between green-and non-green lending (PwC, 2021, p. 38). It also aligns with information revealed in the theory section, that only some banks offer green loans and improved loan conditions to buildings meeting certain requirements and standards (PwC, 2021, p. 39).

Nevertheless, loan criteria are set individually and depends on several additional factors required from the banks (F1; F2; F3; F4). One bank expressed that the reason for their lack of focus on green financing of new commercial buildings, is because there are few new buildings being constructed in their region (F2). This is further reinforced in the theoretical section, where it is highlighted that despite new buildings accounting for 70 percent of the total emissions in the B&C sector, the annual

rate of new construction projects is merely 1-2 percent (Grønn byggallianse, n. d.-a). Other banks have also mentioned that the loan criteria are set on the basis of the new commercial building's usage (F1; F4), which means that it depends on whether it is a building to be rented out or sold.

The most predominant finding from the interviews reveals that sustainability cannot come at the expense of the bank's profitability (F1; F2; F3; F4; F5). All banks interviewed expressed that the most important factor in the loan criteria, aimed at new commercial buildings, is the considered financial factors. Financial factors linked to each customer are what determines most of the lending criteria aimed at their business customers, where it is an overall assessment aligning with the banks' lending policy (F2; F3; F4; F5). This information is not highlighted in the theoretical section, where it is found that there is currently given improved loan conditions for "green" buildings (Grønn byggallianse, 2020). However, the term "improved" lacks clarity and can be ambiguous, leading to potential misunderstandings or differing interpretations. This can also be applied to the interpretation of the interview data analysis, and the research biases aimed at the different understandings of what entails in "facilitating of a green loan portfolio" (Alshengeeti, 2014, p. 43-44). After analyzing the data collected, with theory, it initially appeared as that the banks primarily emphasized customers financial advantages as an incentive towards promotion of their green financial offerings. However, upon closer examination of the interview findings, it becomes apparent that this is more likely related to highlighting the importance of sustainable development. The benefit of green loans is not solely derived from financial gains but also from the demonstration of their commitment to green financing and sustainability, which seems to have become a commercial advantage.

However, as the banks are still working on their Taxonomy-eligibility (Niewold, 2023; Oellingrath & Ray, 2022; Pettingale et al., 2022), and as demands from the market and authorities is approaching, banks will experience high-risk related to non-green lending (Grønn byggallianse, 2020). To sum it up, the interviews have revealed that the banks have initiated the process of integrating the EU taxonomy into their green loan portfolios, where they wait for the remaining clarification of the EU taxonomy to largely facilitate this process.

5.1.2 SMEs perception on Banks' Lending Criteria

All SMEs participants interviewed from the B&C mentioned the importance of a close relationship with their banks, as they provide funding towards their building projects (BC1; BC2; BC3; BC4; BC5; BC6). Most participants also highlighted that better loan conditions serve as a strong financial incentive for obtaining green financing. Fulfilling the bank's loan criteria not only makes it easier to implement sustainable efforts in a project, but also enables them to secure favorable financing terms and advantageous deals (BC2; BC3; BC4; BC5; BC6). This finding also aligns with findings from the document analysis, where one of the positive reoccurring attitudes in the B&C sector mentioned favorable financing as an incentive to incorporate the EU taxonomy (Kjeldsberg, 2021; Saltnes, 2022; Strandquist, 2021).

Only half of the participants in the interviews mentioned an indirect impact of the EU taxonomy through banks providing green funding for their projects (BC2; BC3; BC5), however, all respondents acknowledge the upcoming sustainability focus. One participant shared their experience of obtaining green funding from two banks, which required BREEAM-NOR certification at the Excellent level. They received favorable loan terms, including a discount and larger loan amount. The participant underwent a thorough evaluation process, demonstrating high standards in ethics, absence, and climate-related achievements (BC2). The the remaining participants in the B&C sector did not share the same experience. However, two participants mentioned the requirement to provide documentation and meet criteria for their projects to secure green financing and obtain better loan terms (B2; B3). Nevertheless, majority of the participants expressed an increased focus on sustainability in relation to their building project, where they try to obtain environmentally friendly buildings regardless. There were two reasons mentioned for this, one being enhanced reputation and strengthened recognition (BC2; BC3; BC4; BC6), and second one being an environmental responsibility (BC1; BC2; BC4; BC5).

Half of the respondents have experienced enhanced loan conditions as a result of obtaining green financing, which aligns with the findings in the theory section (Grønn byggallianse, 2020). However, as there is a lack of information in the theory section regarding the relationship and attitudes of businesses in the B&C sectors towards banks, it is not possible to confirm the perceived attitudes related to improved lending conditions. Nevertheless, considering the extensive

regulations already imposed on businesses in the B&C sectors, such as the updated TEK-17 characteristics (Byggteknisk forskrift, 2017, §4) in Norwegian law, which now incorporate various environmental aspects (Kommunal- og distriktsdepartementet, 2022), along with energy labeling requirements (Energimerkeforskriften, 2009, §2), it is possible that the current loan conditions do not provide significant enough financial incentives for SMEs in this sector to actively pursue green financing. Another possible explanation for the limited focus on green financing among the participants, could be that the existing regulations already impose significant requirements and resources. This was expressed by one of the interview participants, who stated, "Within new construction, we mainly relate to regulations in the industry, because it consists of an enormous number of requirements on different levels" - Respondent BC5.

In the theory section of this thesis, network theory was employed to develop a theoretical comprehension of the interplay between large banks and SMEs in the B&C sector. The sections above discussed findings that align with the chosen theory, demonstrating conformity to it. By utilizing this theory, the research aims to explore the relationship between these two market actors in a way that allows for measurable effects, rather than disregarding other influences and claiming that no other connections exist (Borgatti & Halgin, 2011, p. 1169). Through this theoretical view, an indirect impact of the EU taxonomy on SMEs in the B&C sector has been identified, while acknowledging the presence of other influences.

5.2 Attitudes towards sustainability requirements in the B&C sector

Qualitative interviews were conducted to explore the perception and attitudes of banks and SMEs in the Norwegian B&C sector regarding the implementation of the EU taxonomy. This entails attitudes towards the overall framework of the EU taxonomy, including the underlying TSC for the B&C sector (Grønn byggallianse, 2020; Pettingale et al., 2022), as well as the timeline set by the EU for implementing CSRD requirements for SMEs to align with the EU taxonomy (Dalsegg & Lidsheim, 2023, p. 33; PwC, 2022). The interviews revealed both advantages and disadvantages, but a common theme revealed an overall positive attitude among the respondents. These findings align with a previous study on Norwegian stakeholders' attitudes towards the EU taxonomy, which also reported a generally positive outlook (Norang et al., 2023, p. 417). In the following section,

we will discuss the positive and negative attitudes expressed by SMEs in the B&C sector and compare them with the findings from the document analysis and in the context of relevant theory.

5.2.1 Negative Attitudes

In this section, the negative attitudes discussed primarily pertain to the barriers identified by the interview respondents, document analysis, and theory. Even if the majority the thesis findings revealed the EU taxonomy as a positive incentive for promoting sustainability, they acknowledge certain obstacles or challenges that need to be addressed.

Among these challenges were the significance of resources needed for restructuring, found through the document analysis (Bygg, 2023; Eide & Koppang, 2022). This also aligns with findings from the interviews where majority of the respondents addressed potential lack of resources, referring to capital and employees (BC4; BC5; BC6), as a barrier to upcoming sustainability requirements proposed by the EU taxonomy. The concerns raised relates to strict requirements set out in the EU taxonomy, and challenges about its practical implementation. Previous research has also highlighted concerns related to the functionality and level of ambition of the criteria in the EU taxonomy, specifically in the context of the Norwegian B&C sector (Norang et al., 2023, p. 417). These concerns contribute to the uncertainty surrounding the feasibility and achievability of the goals for stakeholders in the sector, potentially leading to negative attitudes towards the practical implementation of the taxonomy and impacting the acceptance of the framework. It is important to acknowledge that while some stakeholders perceive the criteria as too strict and resulting in limited taxonomy-aligned activities, the underlying purpose of the EU taxonomy is to drive sustainability efforts (Norang et al., 2023, p. 422).

Findings from the interviews also emphasized that financial viability remains a crucial prerequisite for pursuing sustainability initiatives (BC4; BC5; BC6). Because without the opportunity to earn money, running a company sustainably becomes challenging. Additionally, concerns revolve around the feasibility of small actors in the B&C sector competing against larger companies with apparent unlimited resources. While most SMEs did not specifically mention the upcoming CSRD, it can be presumed that their concerns are related to the EU taxonomy as a whole. The CSRD aims to simplify, clarify, and standardize reporting procedures in alignment with EU policies, with the

goal of reducing costs and improving efficiency in sustainability reporting (European Commission, n.d.-a; European Commission, 2021; Oellingrath & Ray, 2022). However, an analysis reveals that the majority of SMEs (90 percent) obligated to comply with the CSRD reporting requirements by 2025 are unlikely to meet the criteria (Dalsegg & Lidsheim, 2022, p. 35; Gillerhaugen & Andenæs, 2023). It is also noted that the absence of reporting can risk losing partnerships and opportunities for project bids (BDO, 2022; Dalsegg & Lidsheim, 2022, pp. 35-36; Gillerhaugen & Andenæs, 2023). Nevertheless, the concerns regarding the impact of CSRD implementation on SMEs are still relevant, as it still uncertain how the actual resource requirements for meeting the reporting obligations will be affected, despite the indication of potential cost reduction and improved efficiency. In regards of partnerships and project bids, interviews expressed increased demands from market players as a positive driver towards sustainable practices (BC1; BC3; BC4; BC5; BC6).

Another finding from the document analysis is the lack of alignment between the EU taxonomy standards and definitions with existing Norwegian standards (Bøe, 2021; Eide & Koppang, 2022; Jortveit, 2022; Skjevestad, 2021). This was not a mentioned barrier form the interviews, but it has been a nationally expressed issue regarding the EU taxonym not being applicable to Norwegian standards. Therefore, ministries in Norway have mapped out and identified activities in the first two criteria sets in the EUs definition that does not align with Norway's definitions. Even though this is for informal use only, it gives a pinpoint of which criteria have been implemented into Norwegian law (Finansdepartementet, 2023). Based on the publication dates of the sources expressing concerns and the information available on Norway's official government pages, it appears that Norway is actively addressing the expressed concern in the market. This could be one of the reasons the interview respondents no longer view this as a significant barrier.

5.2.2 Positive Attitudes

This section highlights the positive attitudes observed and identified among the interview respondents, document analysis, and theory. These positive attitudes primarily pertain drivers and overall perspectives expressed.

One of the positive attitudes identified in the document analysis within the B&C sector was a notable increase in sustainability awareness (Kjeldsberg, 2021; Saltnes, 2022; Strandquist, 2021). The majority of interview participants share a similar viewpoint, expressing positive attitudes towards the implementation of the taxonomy as a positive step towards a more sustainable society. They believe that it can accelerate progress and address the challenges associated with climate change. It is seen as necessary, a significant contribution, and a step in the right direction (BC2; BC3; BC4; BC5; BC6). In line with theory, sustainability awareness is the overall goal of the EU Taxonomy, as it aims to help low-carbon sectors to grow, while decarbonizing high-carbon sectors. Another attitude revealed in the document analysis were positivity towards sustainability clarity (Bøe, 2021; Kjeldsberg, 2021). This were not specifically brought up in the interviewees but is also one of the reasons for the EU Taxonomy's framework existence, bring clarity to the sustainability definition (European Commission, n.d.-c). This just comes to show that the EU taxonomy is doing exactly what it was made for: sustainability awareness and clarity.

One driver towards sustainability requirements expressed by all interviewees were TEK-17 regulations (BC1; BC2; BC3; BC4; BC5; BC6), pertaining to minimum requirements for buildings to be legally constructed in Norway (Byggteknisk forskrift, 2017, §1). Recent updated have been made in this regulation on environmental considerations in 2022, with a transitioning period of one year (Kommunal- og distriktsdepartementet, 2022). The high number of participants mentioning TEK-17 were both in relations to questions about strict regulatory demands they must fulfill in the sector, but also in relation to sustainability focus. This could mean that the current updates to TEK-17 have led to an increased awareness of sustainability, as they are no longer in the transitioning period for fulfilling environmental criteria from this update.

Other non-regulatory drivers towards sustainability largely consist of financial incentives and market demands. The document analysis revealed gaining favorable financing as a key driver towards sustainability (Kjeldsberg, 2021; Saltnes, 2022; Strandquist, 2021), aligning with responses from interviews when asked about financial incentives and drivers for transitioning towards sustainable practices (BC2; BC3; BC4; BC5; BC6). These financial incentives relate to banks green loans, where many banks have established sustainability KPIs for lending to companies, offering favorable loan conditions to borrowers meeting climate targets (PwC, 2021,

p. 38). The same interviewees expressed that favorable loan conditions as a crucial incentive towards transitioning towards sustainable practices, where some have obtained green financing, while other SMEs are in the process of trying to obtain it. The remaining respondents pointed out that the currently financial incentives from banks does not yet produce favorable enough loan conditions for applying for green loans. Even though theory points out that improved loan conditions are given to buildings that can be documented as green (Grønn byggallianse, 2020). This could be explained by the expressed marginal loan conditions currently given for green loans, as explained by the bank-interviewees. SMEs may perceive the cost of meeting the green loan criteria as too high compared to the benefits they receive from the supposedly improved loan conditions.

In accordance with favorable financing, some SMEs also perceive environmental building certifications as a driver to incorporate sustainability into their building project processes (BC2; BC3; BC6). Certifications such as BREEAM-NOR and the Nordic Ecolabel (Svanemerket) was expressed as a favorable tool and driver towards sustainable transitioning (BC2; BC3; BC6), both through obtaining favorable financing from banks, but also as a proof for their sustainable efforts. Other mentioned a higher focus on reporting according to the ESG pillars (BC3; BC6). ESG includes three pillars that are used to evaluate sustainability and socially responsible practices (Ditley-Simonsen, 2022, p. 190; European Commission, n.d.-d; DNB, 2023a, 2:07). It is used in the EU's policy context referring to sustainable actions and financial practices that supports economic growth while considering the impact on the Environment, Social and Governance principles (Li et al., 2021, p. 1; Wagstaff & Belsom, 2022, p. 2). ESG is a commonly used framework to fulfill and pursue sustainability efforts and requirements, especially in business management and investment decisions (Ditley-Simonsen, 2022, p. 166-167; Giannopoulos et al., 2022, p. 2; Li et al., 2021, p. 25). ESG reporting have become a growing trend in Norway, especially for listed companies (Giannopoulos et al., 2022, p. 1 & 7). This might explain the reason why few of the SME interviewees expressed a focus on ESG reporting.

Nevertheless, when it comes to environmental certifications such as BREEAM-NOR and the Nordic Ecolabel, certain SMEs viewed these certifications as a means to improve their reputation and competitiveness (BC2; BC3; BC6). On the other hand, the majority of the other participants

identified the broader emphasis on sustainability as a driver for enhancing their reputation, competitiveness, and being a role model (BC2; BC3; BC4; BC5; BC6). Where SMEs also express demands from market actors as a positive driver towards sustainability (BC1; BC3; BC4; BC5; BC6). Some of the SMEs expressed these two sustainability drivers in accordance with each other, which can relate to the findings in the document analysis where it was found that there are business opportunities in sustainability (Bygg, 2023; Saltnes, 2022; Skjevestad, 2021; Strandquist, 2021). Overall, market demands are highlighted as a significant driver among SMEs, relating to that the construction of new buildings is often requested by the market. This increased market demand has led to an increased focus on sustainability among SMEs, driven by customer expectations. From theory it reveals that failure in accounting for sustainability can risk in losing partners, opportunities, and projects for SMEs (BDO, 2022; Dalsegg & Lidsheim, 2022, pp. 35-36; Gillerhaugen & Andenæs, 2023). On the flip side of this, the increased focus on sustainability and accounting for it can provide new partners, opportunities, and projects. Overall, it was expressed an acknowledged of the large social responsibility the B&C sector has towards sustainable transitioning, with many SMEs expressing their interest in fulfilling this responsibility through sustainable practices and focus.

Generally, we found that the positive attitudes outweighed the negative ones, in terms of drivers and barriers. Both through data collection and through theory it is revealed an increased in awareness and responsibility among actors in the B&C sector.

6 Conclusion

This thesis was conducted to the recent implementation of the EU taxonomy in Norway. Through a preliminary literature review, there were identified and highlighted a knowledge gap in literature examining the EU taxonomy's impact in Norway on SMBs in the B&C sector and large impacted banks loan portfolios for new commercial buildings. This thesis makes an effort to fill the existing knowledge gap in literature, by examine the following two research questions:

1. How does the implementation of the EU Taxonomy affect banks' facilitation of a green loan portfolio for new commercial building projects?

2. How do SMEs in the building and construction sector strive to meet the upcoming sustainability requirements imposed by the EU Taxonomy, and what are their attitudes, drivers, and barriers?

The findings on the first research question "How does the implementation of the EU Taxonomy affect banks' facilitation of a green loan portfolio for new commercial building projects?", show that:

- The EU taxonomy is regarded as the primary driver influencing the green loan portfolio of
 most Norwegian banks, as it has resulted in an increased emphasis on green financing.
 Banks also perceive alignment with the taxonomy as part of their corporate social
 responsibility and a key motivator for establishing a green loan portfolio.
- A significant number of banks are imposing higher requirements on their business customers, with some banks including environmental certifications such as BREEAM-NOR and the Nordic Ecolabel (Svanemerke) building certifications as prerequisites for granting green loans. This finding is also supported by SMBs in the B&C sector.
- The ongoing development of the EU taxonomy has created uncertainty regarding its proper implementation into bank portfolios. However, many banks have taken steps to align their sustainability measures with existing Norwegian standards by incorporating regulations and requirements such as energy labeling of buildings and TEK-17 into their loan criteria.
- Money trumps the environment, where it is shown in some cases that there are given few advantages towards green loans for new commercial buildings. Majority of the banks decide loan amount and received benefits are based on an overall evaluation of the customers financial standpoint and security in relation to banks individual policy. Few green building loan advantages are the reason some SMEs have yet to obtain green loans. This is partially due to the money and the effort it takes to achieve criteria for a green loan are higher than the yield from the loan, where SMEs are calling for better economic incentives to invest in environmental building improvements.

Findings on the second research question "How do SMEs in the building and construction sector strive to meet the upcoming sustainability requirements imposed by the EU Taxonomy, and what are their attitudes, drivers, and barriers?", show that:

- There is an overall positive attitude towards the EU taxonomy, where the majority of SMEs
 experience an indirect impact of the regulation through banks' green lending. The SMEs
 that have yet to experience the indirect impact through these loans, are currently striving to
 meet these criteria.
- Key drivers toward the EU taxonomy include acknowledgement of a large corporate social responsibility, favorable financing, enhanced reputation and competitiveness, and increased market demands and business opportunities.
- Key barriers toward the EU taxonomy include concerns on excessive requirements, feasibility and achievability, financial viability towards reporting demands, and lack of resources.

6.1 Practical and Theoretical Implications

This research represents the first comprehensive study examining the practical implications of the EU taxonomy on SMEs in the B&C sector, particularly focusing on the context of green loans offered by banks in Norway. The findings highlight the significance of directing attention towards SMBs in this sector, as they contribute a substantial share to Norway's overall emissions. Considering that Norway is home to a considerable number of SMEs, the B&C sector is no exception.

Given the forthcoming reporting obligations imposed on SMEs, it is crucial to ensure that the requirements are not overly stringent, as this could jeopardize the existence of these businesses due to resource limitations. The findings also emphasize the importance of banks towards facilitating the establishment of a green loan portfolio targeted at new commercial buildings. Collaborative efforts between SMEs and banks reflect their shared corporate social responsibility and are vital for achieving positive outcomes in sustainable development within Norway.

Practical implications extend to the Norwegian government, which plays a key role in implementing and facilitating the forthcoming EU regulatory requirements. Additionally, other market actors possess the influence to demand sustainability changes in the B&C sector, particularly regarding the construction of new buildings.

6.2 Limitations and Further Research

Throughout the process of our research, certain limitations have been identified and brought to attention in relation to our thesis. The EU taxonomy regulation is relatively recent in Norway and is still undergoing development within the EU as a whole. Throughout our research process, we encountered updates pertaining to the EU taxonomy both at the EU level and within Norway. Consequently, this study may lack up-to-date information regarding forthcoming requirements and the timeline of implementation. This issue was particularly evident in relation to the recently implemented CSRD reporting, where EU sources provided rapid updates on the progress of the EU taxonomy, resulting in differences in information when compared to Norwegian sources. This also relates to the information gained through data collection, as banks and SMEs in the B&C sector are still trying to figure out the demands coming from the EU.

Another limitation of this study pertains to the relatively limited amount of data gathered through interviews and document analysis. Despite conducting interviews with large national banks located in various regions of Norway, there were a significant variation of smaller and larger banks affected by the EU taxonomy. Some of the banks interviewed had around 10,000 employees, while others had just over 500, barley being affected by the EU taxonomy. Limitations applied to the challenges of obtaining interview objectives of SMEs operating in the B&C sector, as only a small number of businesses agreed to participate despite a large number of contact attempts being made. Although we managed to collect data from various actors and banks located in different regions of Norway, further research should explore the potential correlation between sustainability initiatives pursued by SMEs in the B&C sector and the corresponding efforts made by regional banks operating within the same area. This research should examine whether the sustainability requirements imposed by regional banks significantly impact SMEs in the B&C sector within the same geographic region.

Moreover, our study exclusively concentrates on stakeholders involved in the construction of new buildings and the loan criteria of banks pertaining to this aspect. It has been expressed through interviews that lending criteria for building rehabilitation have made greater progress in the development of green loans. This also highlights an area for further study. Lastly, we recommend further research on other market factors that influence the impact of the EU taxonomy on SMEs in the B&C sector. This is important as there were identified influences from other market actors,

such as requirements imposed by municipalities in the areas where SMEs operate and the demands of tenants. Exploring these aspects can provide a more comprehensive understanding of the various drivers that shape SMEs' transition towards sustainable practices.

7 References

- Alshenqeeti, H. (2014). Interviewing as a Data Collection Method: A Critical Review. *English Linguistics Research*, 3(1), 39-45. https://doi.org/10.5430/ELR.V3N1P39
- Asker, L. (2022, 30 May). *Hvilke krav stiller EUs taksonomi til nybygg?* DnB Næringsmegling. Retrieved 13 April 2023, from https://www.dnbnaringsmegling.no/no/hvilke-krav-stiller-eus-taksonomi-til-nybygg/
- Banteka, N. (2019). A Network Theory Approach to Global Legislative Action. *Seton Hall Law Review*, 50(2), 339-399.
- BDO. (2022, 28 June). *Kun 1 av 10 mindre eiendomsbedrifter rapporterer på bærekraftstiltak*. Retrieved 28 April 2023, from https://www.bdo.no/nb-no/nyheter/2022/kun-1-av-10-mindre-eiendomsbedrifter-rapporterer-paa-baerekraftstiltak
- BDO. (n.d.). Bygg og anlegg. Retreived 20 May 2023, from https://www.bdo.no/nb-no/bransjer-nb/bygg-og-anlegg
- Borgatti, S. P. & Halgin, D. S. (2011) On Network Theory. Organization Science 22(5), 1168-1181.
- Bowen, G. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27-40. https://doi.org/10.3316/QRJ0902027
- Braun, V & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, (3)2, 77-101. https://doi.org/10.1191/1478088706qp063oa
- Brundtland, G. H., Khalid, M., Agnelli, S., Al-Athel, S. A., Chidzero, B. J. N. Y., Fadika, L. M., ... & Singh, N. (1987). *Our common future; by world commission on environment and development.* World Commission on Environment and Development. http://www.un-documents.net/our-common-future.pdf
- Bryman, A. & Bell, E. (2007). Business Research Methods, (3rd ed.). Oxford University Press.
- Bygg. (2021, 27 April). *Hva betyr taksonomien for bygg- og eiendomssektoren?*. Retrieved 13 April 2023 from https://www.bygg.no/innlegg-hva-betyr-taksonomien-for-bygg-og-eiendomssektoren/1465523!/
- Bygg. (2023, 30 January). Færre bedrifter vil jobbe med bærekraft i 2023. Retreived 25 May 2023, from https://www.bygg.no/faerre-bedrifter-vil-jobbe-med-baerekraft-i-2023/1517808!/
- Byggteknisk forskrift. (2017). Forskrift om tekniske krav til byggverk (Byggteknisk forskrift) (FOR-2017-06-19-840). Lovdata. https://lovdata.no/dokument/LTI/forskrift/2017-06-19-840
- Bøe, K. (2021, 21 December). *Taksonomi i Norge er vi klare?* Fremtidens Byggnæring. Retreived 20 April 2023, from https://www.fremtidensbygg.no/taksonomi-i-norge-er-vi-klare/
- Connelly L. M. (2014). Ethical considerations in research studies. *Medsurg nursing : official journal of the Academy of Medical-Surgical Nurses*, 23(1), 54–55.
- Cooper, D. & Schindler, P. (2014). Business research methods (12th ed.). McGraw-Hill.
- Dalsegg, H. & Lidsheim, T. (2022). *Bygg og anleggsanalysen: Etter vekst kommer fall*. BDO. https://issuu.com/konsis/docs/bygg-_og_anleggsanalysen_2022_?fr=sNGI0NjQ4MzI1NjQ

- Dawson, C. (2007). A practical guide to research methods: A user-friendly manual for mastering research techniques and projects (3th ed.). How To Books.
- Ditlev-Simonsen, C. D. (2022). A Guide to Sustainable Corporate Responsibility: From Theory to Action. Palgrave Macmillan.
- DNB. (2023, 15. march). *Dybdykk EUs taksonomi* [Video]. DNB. https://www.dnb.no/bedrift/dagligbank/treasury-management/treasury-management-tidligere-arrangement
- Earth Overshoot Day (EOD). (n.d.). *Past Earth Overshoot Days*. Retrieved 15 May 2023, from https://www.overshootday.org/newsroom/past-earth-overshoot-days/
- Eide, M. S. L. & Koppgang, K. (2022, 9 March). *EUs taksonomi treffer små og mellomstore bedrifter hardt*. Finansavisen. Retreived 15 May 2023, from https://www.finansavisen.no/nyheter/debattinnlegg/2022/03/09/7831940/eus-taksonomi-treffer-sma-og-mellomstore-bedrifter-hardt
- Energimerkeforskriften. (2009). Forskrift om energimerking av bygninger og energivurdering av tekniske anlegg (energimerkeforskriften) (FOR-2009-12-18-1665). Lovdata. https://lovdata.no/dokument/LTI/forskrift/2009-12-18-1665
- EU Taxonomy Info. (n.d.-a). *Application of the EU Taxonomy for Companies*. Retrieved 16 March 2023, from https://eu-taxonomy.info/info/eu-taxonomy-for-companies
- EU Taxonomy Info. (n.d.-b) *EU Taxonomy Overview*. Retrieved 31 January 2023, from https://eutaxonomy.info/info/eu-taxonomy-overview
- EU Technical Expert Group on Sustainable Finance (TEG). (2020). *Taxonomy: Final report of the Technical Expert Group on Sustainable Finance*. Retrieved from https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf
- European Commission. (2016, 2 March). The Road from Paris: assessing the implications of the Paris Agreement and accompanying the proposal for a Council decision on the signing, on behalf of the European Union, of the Paris agreement adopted under the United Nations Framework Convention on Climate Change. COM/2016/0110 final.
- European Commission. (2018, 24 May). Commission legislative proposals on sustainable finance. Retrieved 24 January 2023, from https://finance.ec.europa.eu/publications/commission-legislative-proposals-sustainable-finance en
- European Commission. (2018a, 8 March). Renewed sustainable finance strategy and implementation of the action plan on financing sustainable growth. Retrieved 8 February 2023, from https://finance.ec.europa.eu/publications/renewed-sustainable-finance-strategy-and-implementation-action-plan-financing-sustainable-growth_en
- European Commission. (2019, 11 December). COMMUNICATION FROM THE COMMISSION The European Green Deal. COM/2019/640 final.
- European Commission. (2021, 21 April). Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. COM/2021/189 final.

- European Commission. (n. d.-c). *EU taxonomy for sustainable activities*. Retrieved 24 January 2023, from https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en#compass
- European Commission. (n.d.-a). *Corporate sustainability reporting*. Retrieved 14 May 2023, from https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en
- European Commission. (n.d.-b). *Delivering the European Green Deal*. Retrieved 31 January 2023, from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en
- European Commission. (n.d.-d). *Overview of sustainable finance*. Retrieved 23 March 2023, from https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en
- European Commission. (n.d.-e). *Paris Agreement*. Retrieved 31 January 2023, from https://climate.ec.europa.eu/eu-action/international-action-climate-change/climate-negotiations/paris-agreement en
- European Commission. (n.d.-f). *What the European Commission does*. Retrieved 28 April 2023, from https://commission.europa.eu/about-european-commission/what-european-commission-does_en
- European Union. (2020, 22 June). Regulation (EU) 2020/852 of the European Parliament and of the Council. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852&from=EN
- Finansdepartementet. (2023, 8 May). *Taksonomien for bærekraftig økonomisk aktivitet*. Retrieved 8 February 2023, from https://www.regjeringen.no/no/tema/okonomi-og-budsjett/finansmarkedene/taksonomien-forbarekraftig-okonomisk-aktivitet/id2924859
- Flick, U., Kardoff, E. & Steinke, I. (2004). A Companion to Qualitative Research. Sage Publications.
- Giannopoulos, G., Kihle Fagernes, R. V., Elmarzouky, M. & Afzal Hossain, K. A. B. M. (2022). The ESG disclosure and the financial performance of Norwegian listed firms. *Journal of Risk and Financial Management*, *15*(6), 1-16. https://doi.org/10.3390/jrfm15060237
- Gill, P., Stewart, K. & Treasure, E. (2008). Methods of data collection in qualitative research: interviews and focus groups. *Br Dent J*, 204, 291–295. https://doi.org/10.1038/bdj.2008.192
- Gillerhaugen, R., M, & Andenæs, Z., M. (2023, 3 January). Blog: *Hvordan skal bygg- og anleggsbransjen bli klar til å håndtere nye EU-krav til bærekraft innen 2025?*. BDO. Retrieved 16 April 2023, from https://www.bdo.no/nb-no/bloggen/hvordan-skal-bygg-og-anleggsbransjen-bli-klar-til-aa-haandtere-nye-eu-krav-til-baerekraft-innen-2025
- Greenbuilt. (2023, 6 March). *EU taksonomien i praksis for bygg- og eiendomssektoren*. Retrieved 13 April 2023, from https://www.greenbuilt.no/2023/03/06/eu-taksonomien-for-bygg-og-eiendomssektoren-varen-2023/
- Grønn byggallianse. (2020). *BREEAM og EUs klassifisering av grønne bygg*. Retrieved 19 March 2023, from https://byggalliansen.no/wp-content/uploads/2020/09/200911-Infoark-om-EUs-taksonomi-for-b%C3%A6rekraftige-bygg.pdf
- Grønn byggallianse. (n.d.-a). *Klimakur for bygg og eiendom*. Retrieved 10 May 2023, from https://byggalliansen.no/kunnskapssenter/publikasjoner/infopakkeklimakjempen/#1610543721156-39143120-001d

- Grønn byggallianse. (n.d.-b). *Nysgjerrig på breeam-nor?* Retrieved 12 March 2023, from https://byggalliansen.no/sertifisering/om-breeam/nysgjerrig-pa-breeam-nor/
- Grønn byggallianse. (n.d.-c). *Ombruk i byggeprosjekter*. Retrieved 15 May 2023, from https://byggalliansen.no/kunnskapssenter/ombruk-i-byggeprosjekter/#1613729332663-5b71492e-9d74
- Grønn byggallianse. (n.d.-d). Om oss. Retrieved 14 May 2023, from https://byggalliansen.no/hjem/om-oss/
- IEA. (2022). Buildings. https://www.iea.org/reports/buildings License: CC BY 4.0
- Jason, L. A. & Glenwick, D. S. (Eds.). (2016). *Handbook of methodological approaches to community-based research: Qualitative, quantitative, and mixed methods*. Oxford University Press.
- Johannessen, A., Tufte, P.A. & Christoffersen, L. (2016). *Introduksjon til Samfunnsvitenskapelig Metode*. (5th ed.). Abstrakt Forlag.
- Jortveit, A. (2022, 29 May). *Taksonomien: Sommel fra regjeringen kan svekke byggsektorens tilgang til kapital*. Energi og Klima. Retreived 11 May 2023, from https://energiogklima.no/nyhet/taksonomien-sommel-fra-regjeringen-kan-svekke-byggsektorens-tilgang-til-kapital/
- Kallio, H., Pietilä, A.-M., Johnson, M. & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965. https://doi.org/10.1111/jan.13031
- Kjeldsberg. (2021, 15 March). *EUs taksonomi setter bærekraft høyt på agendaen i eiendomsbransjen*. Retreived 10 May 2023, from https://kjeldsberg-ef.no/2021/03/eus-taksonomi-setter-baerekraft-hoyt-pa-agendaen-i-eiendomsbransjen/
- Klima- og miljødepartementet. (2021, 8 December). *Det Grønne Skiftet*. Retrieved 8 February 2023, from https://www.regjeringen.no/no/tema/klima-og-miljo/innsiktsartikler-klima-miljo/det-gronne-skiftet/id2879075/
- Kommunal- og distriktsdepartementet. (2022, 1 June). Fleire tiltak for å auke ombruk og redusere klimautslepp frå byggenæringa. Retrieved 19 May 2023, from https://www.regjeringen.no/no/aktuelt/fleire-tiltak-for-a-auke-ombruk-og-redusere-klimautslepp-fra-byggenaringa/id2916781/
- LeCompte, M. D. & Goetz, J. P. (1982). Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research*, *52*(1), 31–60. https://doi.org/10.3102/00346543052001031
- Li, T. T., Wang, K., Sueyoshi, T., & Wang, D. D. (2021). ESG: Research progress and future prospects. Sustainability, 13(21), 1-28. https://doi.org/10.3390/su132111663
- Miljødirektoratet. (2019, 2 December). *Klimatilpasning av bygg og anlegg*. Retrieved 3 May 2023, from https://www.miljodirektoratet.no/ansvarsomrader/klima/for-myndigheter/klimatilpasning/klimatilpasning-i-sektorer/bygg-og-anlegg/
- Moen, H. (2023, 21 March). Blog: Åpenhetsloven hvilken betydning har den for eiendom-, bygg-, og anleggsbransjen? BDO. Retrieved 19 May 2023, from https://blogg.magnuslegal.no/aapenhetsloven-betydning-for-eiendom-bygg-og-anleggsbransjen
- NHO. (n.d.-a). *EUs taksonomi og handlingsplan for bærekraftig finans*. Retrieved 14 May 2023, from https://www.nho.no/tema/energi-miljo-og-klima/artikler/eus-taksonomi-og-handlingsplan-for-barekraftig-finans/

- NHO. (n.d.-b). *Fakta om små og mellomstore bedrifter (SMB)*. Retrieved 19 April 2023, from https://www.nho.no/tema/sma-og-mellomstore-bedrifter/artikler/sma-og-mellomstore-bedrifter-smb/
- Niewold, J. (2023, 27 January). *How organization fared in the first annual EU Taxonomy reporting*. EY. https://www.ey.com/en_no/assurance/how-organizations-fared-in-the-first-annual-eu-taxonomy-reporting
- Norang, H., Støre-Valen, M., Kvale, N. & Temeljotov-Salaj, A. (2023). Norwegian stakeholder's attitudes towards EU taxonomy, *Facilities*, 41(5/6), 407-433. https://doi.org/10.1108/F-03-2022-0051
- Och, M. (2020, 3 December). Sustainable Finance and the EU Taxonomy Regulation Hype or Hope? *Jan Ronse Institute for Company & Financial Law*, 2020(5), 1-19. https://doi.org/10.2139/ssrn.3738255
- Oellingrath & Ray. (2022, 9 November). *EU Taxonomy reporting: A first look at the challenges and best practices*. Nordea. Retrieved 25 March 2023, from https://www.nordea.com/en/news/eu-taxonomy-reporting-a-first-look-at-the-challenges-and-best-practices
- Oh, P., & Monge, P. (2016). Network theory and models. *The International Encyclopedia of Communication Theory and Philosophy*, 1-15. https://doi.org/10.1002/9781118766804.wbiect246
- Parkhe, A., Wasserman, S. & Ralston, D. A. (2006). New frontiers in network theory development. *Academy of management Review*, 31(3), 560-568.
- Pettingale, H., Kuenzer, J., Reilly, P. & Maupeou, S. (2022, 4 April). *EU taxonomy and the future of reporting*. The Harvard Law School Forum on Corporate Governance. https://corpgov.law.harvard.edu/2022/04/04/eutaxonomy-and-the-future-of-reporting/#3
- PwC. (2021). Finansnæringen som katalysator for bærekraftig utvikling. Finansforbundet. https://www.finansforbundet.no/content/uploads/2021/04/PwC_Finansforbundet_K6.pdf
- PwC. (2022, 20 December). *Enighet om Bærekraftsdirektivet (CSRD) hva betyr det for din virksomhet?* Retrieved 31 January 2023, from https://www.pwc.no/no/pwc-aktuelt/enighet-om-baerekraftsdirektivet-csrd.html
- Saltnes, D. J. (2022, 16 June). *Eiendomsbransjen ser ikke forretningsmuligheter i bærekraft*. Estate. Retreived 5 May 2023, from https://www.estatenyheter.no/eiendomsbransjen-ser-ikke-forretningsmuligheter-ibaerekraft/339784
- Sargeant, J. (2012). Qualitative Research Part II: Participants, Analysis, and Quality Assurance. *Journal of Graduate Medical Education*, 4(1), 1-3. https://doi.org/10.4300/jgme-d-11-00307.1
- Sekaran, U. & Bougie, R. (2016) Research Methods for Business: A Skill-Building Approach. (7th ed.). Wiley & Sons.
- Skjevestad, H. (2021, 18 August). *Hjort deler råd om bærekraftige investeringer*. Advokatbladet. Retreived 19 May 2023, from https://www.advokatbladet.no/arendalsuka2021-hjort/hjort-deler-rad-om-baerekraftige-investeringer/165961
- SMB Norge. (2020, 14 September). *Fakta om Små og Mellomstore Bedrifter (SMB) i Norge*. Din bedrift. Retrieved 12 May 2023, from https://dinbedrift.no/fakta-om-sma-og-mellomstore-bedrifter-i-norge-smb-2/
- Stapel, C. & Wambach, M. (n.d.). *How sustainable are companies?* MHP. Retrieved 8 February 2023, from https://www.mhp.com/en/insights/sustainability-blog/how-sustainable-are-companies-the-eu-taxonomy-provides-orientation

- Statistisk Sentralbyrå (SSB). (2022, 13 December). *Virksomheter*. Retrieved 20 May 2023, from https://www.ssb.no/natur-og-miljo/avfall/statistikk/avfall-fra-byggeaktivitet
- Statistisk Sentralbyrå (SSB). (2023a, 5 January). *Virksomheter*. Retrieved 12 May 2023, from https://www.ssb.no/virksomheter-foretak-og-regnskap/virksomheter-og-foretak/statistikk/virksomheter
- Statistisk Sentralbyrå (SSB). (2023b, 24 February). Sysselsetting, registerbasert. Retrieved 21 May 2023, from https://www.ssb.no/arbeid-og-lonn/sysselsetting/statistikk/sysselsetting-registerbasert
- Strandquist, B. (2021, 26 May). *Hvordan vil EUs taksonomi for bærekraftige investeringer påvirke norsk bygg- og anleggssektor?*. Bellona. Retreived 10 May 2023, from https://bellona.no/nyheter/bygg/2021-05-hvordan-vil-eus-taksonomi-for-bærekraftige-investeringer-pævirke-norsk-bygg-og-anleggssektor
- Svanemerket. (2023, 21 April). *Svanemerkets krav til bygg*. Retrieved 26 May 2023, from https://svanemerket.no/krav/bygg/
- Taxonomy, n. (2022). *Oxford English Dictionary*. Retrieved 15 May 2023, from https://www.oed.com/view/Entry/198305#eid19054874
- Tysland, I. (2022). Kriteriene i EUs taksonomi og reduksjon av klimagassutslipp i norsk bygg- og eiendomsnærin: EU Taxonomy Criteria and Reduction of Greenhouse Gas Emissions in the Norwegian Construction and Real Estate Industry [Master thesis, Norwegian University of Life Sciences]. https://hdl.handle.net/11250/3031531
- UNFCCC. (n.d.). *The Paris Agreement*. Retrieved 31 January 2023, from https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement
- United Nations Environment Programme. (2022). 2022 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector. https://www.unep.org/resources/publication/2022-global-status-report-buildings-and-construction
- United Nations. (2015, 24 September). Blog: Summit Charts New Era of Sustainable Development. Retrieved 25 March 2023, from https://www.un.org/sustainabledevelopment/blog/2015/09/summit-charts-new-era-of-sustainable-development-world-leaders-to-gavel-universal-agenda-to-transform-our-world-for-people-and-planet/
- United Nations. (n.d.-a). *Conferences Environment and sustainable development*. Retrieved 23 March 2023, from https://www.un.org/en/conferences/environment
- United Nations. (n.d.-b). *The Sustainable Development Agenda*. Retrieved 22 March 2023, from https://www.un.org/sustainabledevelopment/development-agenda-retired/
- University of Southern California (USC). (n.d.). *What You Need to Know About Network Theory*. Retrieved 15 April 2023, from https://communicationmgmt.usc.edu/blog/what-you-need-to-know-about-network-theory/
- Utenriksdepartementet. (2021, 6 December). *Hva EØS-avtalen omfatter*. Retrieved 16 May 2023, from https://www.regjeringen.no/no/tema/europapolitikk/eos1/hva-avtalen-omfatter/id685024/
- Utenriksdepartementet. (2023, 21 March). *Slik blir EØS-regelverk til*. Retrieved 16 May 2023, from https://www.regjeringen.no/no/tema/europapolitikk/eos1/eos-regelverk/id686837/
- Wagstaff, E. & Belsom, T. (2022). What is responsible investment? UN PRI. Retrieved 13 April 2023, from https://www.unpri.org/introductory-guides-to-responsible-investment/what-is-responsible-investment/4780.article

- WCED, S. W. S. (1987). World commission on environment and development. Our common future, 17(1), 1-91.
- Williams, C. (2007). Research Methods. *Journal of Business & Economics Research (JBER)*, 5(3), 65-72. https://doi.org/10.19030/jber.v5i3.2532
- World Green Building Council. (2022). Annual Report 2022. https://worldgbc.org/wp-content/uploads/2022/12/WorldGBC-Annual-Report-2022_FINAL-version_LR.pdf
- Åpenhetsloven. (2021). Lov om virksomheters åpenhet og arbeid med grunnleggende menneskerettigheter og anstendige arbeidsforhold (åpenhetsloven) (LOV-2021-06-18-99). Lovdata. https://lovdata.no/dokument/LTI/lov/2021-06-18-99

8 Appendix

Appendix 1 – Interview Guide for SMEs in the Building & Construction Sector.

Bedriftsinformasjon

- 1) Hva er din stilling i selskapet?
- 2) Hvor mange ansatte har selskapet?
- 3) Når ble selskapet etablert?
- 4) Hva er selskapets viktigste hovedområder?

Prosjekt prosessen

- 5) Innenfor nybygg, hvilke regler dere må forholde dere til? Nevn de viktigste.
- 6) Hvor stor påvirkning har utleieren i hvilke krav som blir stilt til bygget?
- 7) I hvor stor grad påvirker lånebetingelser fra banker utformingen av et byggeprosjekt?
- 8) Hvilke prosesser må dere gjennom for å få finansiering fra banker?
 - a) Er det noen tiltak dere kan gjøre for å oppnå bedre lånebetingelser for deres nybyggprosjekter? Utdyp.
- 9) Hvilke faktorer påvirker valg av bank til lån?
 - a) Hvilke forhold har dere til banken?
- 10) I hvor stor grad fokuserer bedriften deres på miljøet og bærekraft gjennom nybyggprosjekter?
- 11) I lys av globale og politiske endringer, hvordan har kravene til byggverk endret seg de siste årene?
 - a) Hva forventes å endres/implementeres i bransjen deres i fremtiden?

EU-taksonomien

- 12) Hvordan påvirker EU-taksonomien selskapet deres?
- 13) Hvilke ulemper opplever dere som følge av EU-taksonomien?
 - a) Hvilken av de nevnte ulempene vil dere si er den mest kritiske?
- 14) Hvilke fordeler opplever dere som følge av EU-taksonomien?
 - a) Hvilken av de nevnte fordelene vil dere si er mest hensiktsmessig?
- 15) Er det noen økonomiske insentiver som gjør at det er fordelaktig for dere å implementere EUtaksonomien i deres drift? Hvilke?
 - a) Hvis ikke, hva ville det vært?
- 16) Hvordan bidrar EU-taksonomien til å oppfylle bygg- og anleggsbransjen sitt samfunnsansvar?

Avklaring:

- 17) Hvis du måtte trekke frem tre ting du mener er de viktigste temaene vi har diskutert, hva ville det vært?
- 18) Er det noen spørsmål vi ikke har stilt som etter din mening er viktig å vite eller noe du vil legge til?
- 19) Kan vi kontakte deg igjen ved behov?

Appendix 2 – Interview Guide for Banks.

Bedriftsinformasjon

- 1) Hva er din stilling i selskapet?
- 2) Hvor mange ansatte har selskapet?
- 3) Når ble selskapet etablert?
- 4) Hva er selskapets viktigste hovedområder?

Lånekriterier

- 5) Hva er deres gjeldende kriterier innenfor bedriftslån til nybyggprosjekter?
 - a) Hvilke faktorer kan påvirke lånebetingelsene?
- 6) I lys av globale og politiske endringer, hvordan har kriteriene for lån til nybyggprosjekter endret seg de siste årene?
- 7) I prosessen med å gi finansiering til nybyggprosjekter, hva forventes å endres/implementeres fremover? Eventuelt når?
- 8) I hvor stor grad fokuserer dere på å støtte bedrifters bærekraftige nybyggprosjekter gjennom deres låneportefølje?
- 9) Er det noen tiltak deres bedriftskunder kan gjøre for å oppnå bedre lånebetingelser for sine nybyggprosjekter? Utdyp.

EU-taksonomi

- 10) Hvordan påvirker EU-taksonomien selskapet deres?
- 11) Hvilke ulemper opplever dere som følge av EU-taksonomien?
 - a) Hvilken av de nevnte ulempene vil dere si er den mest kritiske?
- 12) Hvilke fordeler opplever dere som følge av EU-taksonomien?
 - a) Hvilken av de nevnte fordelene vil dere si er mest hensiktsmessig?
- 13) Hvordan har EU-taksonomien påvirket utlånsprosessen for bedrifters nybyggprosjekter?
- 14) Hvordan bidrar EU-taksonomien til å oppfylle bankens samfunnsansvar?

Avklaring:

- 15) Hvis du måtte trekke frem tre ting du mener er de viktigste temaene vi har diskutert, hva ville det vært?
- 16) Er det noen spørsmål vi ikke har stilt som etter din mening er viktig å vite eller noe du vil legge til?
- 17) Kan vi kontakte deg igjen ved behov?

Takk for din deltakelse!

Appendix 3 - Information Letter and Declaration of Consent

Vil du delta i forskningsprosjektet

«EU-taksonomiens påvirkning innenfor bygg- og anleggssektoren i Norge»?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt "EU-taksonomiens påvirkning innenfor bygg- og anleggssektoren i Norge". I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med prosjektet er å undersøke EU-taksonomiens påvirkning på bygg- og anleggssektoren i Norge, spesifikt innenfor nybygg. EU-taksonomien er et rammeverk og en felles klassifisering av investeringer for finansielle virksomheter. Store finansielle virksomheter i Norge er, siden 1. januar 2023, pålagt og ansvarlige for å integrere taksonomien i sine investeringsbeslutninger, rapportere og oppfylle taksonomiens krav og kriterier. Første del av forskningsprosjektet vil undersøke banker i Norge, som er direkte påvirket av taksonomien, om hvilke krav som blir stilt eller kommer til å bli stilt til deres bedriftskunder innenfor lån til nybygg. Andre del av forskningsprosjektet vil undersøke SMB'er i bygg- og anleggssektoren, som ikke er direkte underlagt taksonomien, om hvilke holdninger de har til kommende rapporteringskrav. Basert på politiske signaler så langt, antas det at Norge vil følge EUs tidslinje for rapporteringspliktige foretak, noe som inkluderer at børsnoterte SMB'er blir rapporteringspliktige for regnskapsåret 2026. Gjennom flere intervjuer av banker og SMB'er skal prosjektet undersøke taksonomiens påvirkning i bygg- og anleggssektoren i Norge.

Forskningsprosjektet er relatert til en masteroppgave og skal analysere følgende forskningsspørsmål:

- 1. How does the EU Taxonomy affect Norwegian banks lending criterias for businesses associated with construction of new buildings? / Hvordan påvirker EU-taksonomien norske banker sine lånekriterier for bedriftskunder knyttet til nybyggprosjekter?
- 2. What are the SMEs within the building and construction sector's attitudes, drivers, and barriers towards the adaptation of the EU Taxonomy? / Hva er SMB'er innenfor bygg- og anleggssektoren sine holdninger, drivere og barrierer mot tilpasningen av EU-taksonomien?

Hvem er ansvarlig for forskningsprosjektet?

Universitetet i Agder er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Utvalget er trukket på bakgrunn av en eller flere av disse utvalgskriteriene:

- SMB'er innenfor bygg- og anleggssektoren i Norge.
- 2. Bank i Norge som er direkte påvirket av EU-taksonomien.
- 3. Kunnskap om EU-taksonomiens samfunnspåvirkning i Norge.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det at du besvarer ca. 17 intervjuspørsmål relatert til selskapet du representerer. Det vil ta deg ca. 45 minutter. Intervjuet inneholder spørsmål om

selskapet sine hovedområder, utviklingen av selskapet i lys av globale og politiske forandringer, forholdet selskapet har til bærekraftig utvikling og hvordan selskapet påvirkes av EU-taksonomien for bærekraftig finans. Vi tar lydopptak og notater fra intervjuet.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Opplysningene du oppgir vil kun være tilgjengelig for forskningsprosjektets studentgruppe og veileder ved Universitetet i Agder. For å sikre at ingen uvedkommende får tilgang til personopplysningene dine vil vi erstatte navn og kontaktopplysningene dine med en kode som lagres på egen navneliste adskilt fra øvrige data. Andre tiltak inkluderer bruk av Nettskjema, et digitalt verktøy for å samle inn data via nett, til å midlertidig lagre lydopptak fra intervjuet. Nettskjema er tilrettelagt for å tilfredsstille krav til personvern. Kontaktopplysninger vil være adskilt fra informasjonen oppgitt på lydopptaket.

Opplysninger som blir brukt i publikasjonen kan kunne gjenkjennes på bakgrunn av opplysninger som sektor, selskapets størrelse, hovedområder og stilling.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes [01.06.2023]. Etter prosjektslutt vil datamaterialet med dine personopplysninger anonymiseres. Personopplysningene anonymiseres ved å slette kodelisten som knytter navn og kontaktopplysninger opp mot informasjon oppgitt på lydopptak. Lydopptak vil også bli slettet etter transkribering av intervju.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Universitetet i Agder har Sikt – Kunnskapssektorens tjenesteleverandør vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

- Kalanit Efrat på e-post <u>kalanite@uia.no</u> eller 38141484 ved Universitetet i Agder.
- Vårt personvernombud: Trond Hauso, personvernombud@uia.no

Hvis du har spørsmål knyttet til vurderingen som er gjort av personverntjenestene fra Sikt, kan du ta kontakt via:

• Epost: personverntjenester@sikt.no eller telefon: 73 98 40 40.
Med vennlig hilsen
Linnéa H. Meier, Christine. R Elseth & Kalanit Efrat (Forsker/veileder)
Samtykkeerklæring
Jeg har mottatt og forstått informasjon om prosjektet "EU-taksonomiens påvirkning innenfor bygg- og anleggssektoren i Norge", og har fått anledning til å stille spørsmål. Jeg samtykker til:
 å delta i intervju med lydopptak at forskningsprosjektets studentgruppe og veileder kan gi opplysninger om meg til prosjektet at opplysninger om meg publiseres kan kunne gjenkjennes på bakgrunn av sektor, selskapets størrelse, hovedområder og stilling
Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet
(Signert av prosjektdeltaker, dato)