Abstract

This research examined how the concept of sustainability was framed in ESG reports by large Norwegian companies and how knowledge of the topic could increase their sustainable performance. The research applied relevant concepts and theories to analyze ESG reports from eight Norwegian companies within four sectors. Semi-structured interviews were applied to triangulate the problem statement. Analysis was conducted by comparing data from document analysis and semi-structured interviews together with relevant concepts and theories on the topic of sustainability. The primary results were that the concept of sustainability was vast and complex. One way of addressing the too wide and complex use of the concept was to apply suitable frameworks, with the following result of enhanced sustainable performance for large Norwegian companies and better ESG reporting. The main findings were that the sustainable development goals and the European union's taxonomy were the most applicable frameworks to meet the objective.

The research is relevant for actors with interest in economics and sustainability. Results could be transferrable to other companies under the premise that the same overarching terms are present such as juridical and cultural frames.

Acknowledgments

I end my master's program in Energy, Environment, and Society with this research at the University of Stavanger. The program has given me in-depth knowledge regarding sustainability issues that should be addressed to mitigate climate change and enhance sustainable development. In this regard, I want to thank the University of Stavanger for allowing me to learn, grow and mature in this progress.

I am also grateful for the students and professors in the study program. I want to give a special thanks to my supervisor Dr. Kendra Dupuy from the Fritjof Nansen Institute, for helping me form the master thesis and supporting me along the way.

My family must also be mentioned, as they are the cornerstones of my life. My wife always supports me, and my children are my inner motivation for conducting research that could help children live on a healthy planet in the future.

I have experienced studying under challenging circumstances due to the Covid-19 pandemic, while at the same time becoming a father to twin boys for the first time with all the happiness and challenges it implies. However, the mentioned people and institutions made it possible to complete the program with this thesis as the final result. I am very grateful.

I could have dedicated many pages to people I am grateful to. However, those who are not mentioned are not forgotten.

Stavanger, 13.06.2022

Andreas Enoksen Berg

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List of abbreviations

CSR	Corporate social responsibility
CS	Corporate sustainability
ESG	Environmental, social, and governance
EU	European Union
SCC	Social cost of carbon
SDGs	Sustainable development goals
UN	United Nations

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1 Introduction

I want to introduce you to my motivation for researching the subject. I am passionate about the green transition, or the "sustainable transition," as I call it, regarding the latter pointing at several essential aspects of the concept of sustainability. It is necessary to see sustainability from a broad and long-term perspective to enable adequate and diversified progress for sustainable development (Nations, 2015c). I want to research to help people and companies make good, sustainable, and pragmatic decisions. My interpretation of the current sustainable discourse is that there is a lot of motivation for change but insufficient substance regarding ways to achieve it. Knowledge enhancement regarding sustainable company activities can help actors make decisions that enhance sustainable development (Global Reporting Initiative, 2017). As the current trajectory for the planet is not sustainable, we need effective knowledge-based action. My motivation is to conduct research that is useful for non-professionals and professionals with a particular interest in the field of sustainability and environment, social and governance reporting, hereafter referred to as ESG reporting. I want to conduct research relevant to the economy, specifically, the companies running it. Without reallocating investments towards more sustainable activities, it will be hard, if not impossible to achieve sustainable development in the long term (Chang et al., 2017).

1.1 Background for choice of topic

According to the Paris agreement, the world should limit global warming to well below 2 degrees Celsius and strive to limit global warming to 1.5 degrees. Countries need to reduce greenhouse gas emissions as soon as possible (Nations, 2015b). Greenhouse gas emissions refer to gases like CO_2 and methane, with expected effects of trapping infrared heat from the sun, increasing the temperature on earth (Schneider, 1989). The latter reference to Schneider back in 1989 underlines that this is not a new phenomenon. The worldwide recognition of this as a severe challenge was first commonly recognized formally in 2015 when 196 parties adopted the international treaty on climate change, commonly referred to as the Paris agreement (Nations, 2015b)[1]. The consequences of climate change illustrate the vulnerability if we do not act on sustainability matters before it has severe implications on the economy,

[1] https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

planet, and people (Masson-Delmotte et al., 2021). The latter has gained increased focus from companies in the last few years (Eccles et al., 2020). However, focus on company sustainability can be traced far back, even before discourse relating to climate change and global warming (Masson-Delmotte et al., 2021).

The background and the rise of environment, social, and governance, hereafter referred to as ESG, started many decades ago. Already in the 1960s, there was a need for addressing values outside regular financial returns, which at the time were referred to as “socially responsible investments,” hereafter referred to as SRI, and the rise of SRI challenged the incumbent economists and their ways of thinking (Eccles et al., 2020). It was said that a company was responsible for earning as much money as possible, and the company could not have other social responsibilities outside its commercial interests and only individual people should have such obligations (Friedman, 1970).

The increasing problem with this view is that it is not enough to prevent humans from pushing or trespassing planetary boundaries (Steffen et al., 2015). As pressure on the planet’s ecological system has increased in the last few years, so has the landscape pressure on companies to take responsibility to mitigate and prevent increased degradation of the planet’s natural foundation (Geels, 2014; Steffen et al., 2015). However, in recent years winds have shifted. Companies acknowledge their responsibility for action towards a more sustainable trajectory, which has materialized in the modern framing of ESG reporting, on the premise that it is socially constructed (Eccles et al., 2020). The latter refers to ESG reports that are individually filled with meaning and objectives, and thus are considered a socially constructed term (Eccles et al., 2020). This implies a lack of consensus regarding what ESG reports should include and how they should be presented. Companies running the economy should shift focus towards sustainability to enable transition (Stoknes, 2020). More recently, there has also been a focus on the increased financial value of companies fulfilling sustainability measures (Reboredo et al., 2017). Summed up, there is a need for tools to measure and guide actors with interest through the jungle of ESG reporting (Eccles et al., 2020).

1.2 The purpose of the research

This research aims to investigate how the concept of sustainability is framed by large Norwegian companies, and how knowledge on the topic can improve sustainable performance.

The concept of sustainable development was first mentioned in the Brundtland report and is still regarded as a ground layer for defining a holistic view of sustainability (Brundtland, 1987). “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, pp. chapter 2, first section). Although the Brundtland report set out directions for sustainable development, organizations and private companies continue to frame new trajectories for sustainable development, which they present through ESG reports (Euronext, 2020). Many companies strive to become more sustainable and environmental-friendly, and there are many motivational factors for doing so. Responsibility reputation is seen as an important factor as it attracts and retains customers seeing it as an essential value (Adams & Frost, 2008). Workers also increasingly direct focus on ethical issues when choosing companies to work for, therefore companies need to deliver on these values to be attractive to the most qualified workers (Adams & Frost, 2008). Evidence indicates that sustainability-related issues are increasingly in focus for shareholder value, which illustrates the relevance for investors and management (Reboredo et al., 2017). They need to act towards pressure from the landscape promoting companies towards sustainable action (Geels, 2014). In sum, one could argue that the most involved stakeholders in companies are increasingly involved in sustainability related issues, and thus should have more knowledge regarding sustainability (Adams & Frost, 2008). Further, ESG reports are documents presented by companies to address issues related to sustainability, both on status and progress (Euronext, 2020).

ESG reporting might sound technical and stiff at first glance. Not surprisingly, many companies and investors find it hard to maneuver in the jungle of different reporting schemes (Kocmanova et al., 2012). There are many ways of presenting ESG reports, and a result might be unclarity regarding what they contain and further how companies deliver on sustainability-related performance. Hopefully, this thesis will give some clarification and enhance the general knowledge on ESG reporting. Clarification is essential to enabling quality analytics of ESG reports, which can help relevant actors make better sustainable decisions, whether they are investors, managers, costumers, workers, politicians, or environmental activists. By presenting challenges and opportunities through the related theory on sustainability, it is possible to address issues that should be considered to enhance understanding and analysis of ESG reports. By examining the relevance of well-established theory as holistic indicators of sustainability, opportunities and challenges emerge. Findings are relevant for actors with a special interest in sustainability, or as subjects for further research on the topic. The next chapter will introduce ESG reporting in more depth to unpack the term before presenting the problem statement.

1.3 ESG reporting

Companies expose their targets and goals through ESG reports (Euronext, 2022b). More specifically, ESG represents environment, social, and governance, and it is a collective designation of these concepts (Matos, 2020). The reports are accessible for transparency and information to the public (Euronext, 2022c)[2]. However, it is hard for actors to understand what the reports expose as every company has its framing with different contents (Goby, 2022)[3]. Commonly used frameworks to measures to measure ESG performance are:

- GRESB
- SASB
- CDP
- UNPRI
- GRI
- TCFD
- SAM Corporate Sustainability Assessment

(Goby, 2022). The description of these measurements will not be elaborated, as the point is to illustrate the jungle of frameworks presented and how this might be complicated for people interested in enhancing the quality of ESG reporting. This thesis intends to make it easier to understand considerations in ESG reports. Common objectives for producing ESG reports is to get better access to capital, increase profitability and growth, adequate compliance and risk management, secure sustainable information flow, enhance the reputation of the company,

[2] https://live.euronext.com/nb/markets/oslo/equities/list#pageFilters
[3] https://www.gobyinc.com/esg-solutions/the-esg-reporting-matrix/

and make strategies within ESG measurable (Euronext, 2020)[4]. There are many interesting aspects to examine regarding sustainability. Investigating how companies frame sustainability in their ESG reports is at the core of the research, or more precisely, examining the influence of established sustainability-related theories and concepts in large Norwegian companies listed on Oslo stock exchange. The latter is essential to enabling analysis and enhancement of ESG reporting in a way that is understandable and effective.

1.4 Problem statement

There are indications that sustainability is a rather complex concept, and there are many ways to frame its meaning (Chang et al., 2017). Further, sustainability is an essential concept within ESG reporting as it is the foundation for the content of these reports (Kocmanova et al., 2012; Wilkinson et al., 2001). Further, large Norwegian companies defined by turnover present their targets and goals for sustainability through ESG reports (Euronext, 2020, 2022b; Sentralbyrå, 2014).

The problem the thesis intends to investigate is how the concept of sustainability is framed by large Norwegian companies, and how knowledge on the topic can enhance sustainable performance. To illuminate this research question, one must investigate how seemingly well-structured and analytical ESG reports cope with the complexity and diversity of sustainability, as their overarching objective is to present company sustainability with reduced complexity in a way that stakeholders understand. Further, how do companies cope with increasing pressure to present sustainability performance in a concrete, measurable way when sustainability is hard to measure (Matos, 2020)? Can it be illuminated by examining the appliance of sustainability in ESG reports and how it is anchored in the established research field of sustainability? More specifically, can knowledge on the topic enhance sustainable performance by applying relevant tools, such as sustainable theory, frameworks, and measurement tools for large Norwegian companies listed on Oslo stock exchange?

Investigating the problem matters as there is an urgent need to change towards a sustainable trajectory, and companies need to be part of the sustainable transition to meet requirements on these issues (Stoknes, 2020). If we are going to meet the goals of limiting global warming to well below 2°C and enhance sustainable performance, companies need to present activities

[4] https://www.Oslo stock exchange.com/nb/node/1129361

that embrace the complexity of sustainability understandably and concretely to ensure that the right considerations are made to enhance sustainability (Nations, 2015a, 2015b). Enhancing knowledge on the topic by detecting gaps could highlight improvement potential, while positive findings could be used as follow-ups.

With this introduction, the following problem statement is presented:

- ***How is the concept of sustainability framed by large Norwegian companies, and how can knowledge on the topic improve their sustainable performance?***

The problem statement will be examined by examining relevant literature on the topic of sustainability to build knowledge to make better considerations and assumptions later in the research. Further, relevant data will be collected to highlight the problem statement and detect gaps in examined ESG reports. The latter will be conducted by semi-structured interviews of experts on sustainability and by document analysis of relevant ESG reports. The data will be presented and analyzed together with relevant findings from theory to assess the data basis. Following this, a discussion section will try to highlight the most relevant and applicable findings to answer the problem statement. At last, a conclusion will be drawn upon assumptions settled after the conducted research.

As the problem statement is comprehensive, it seems necessary to narrow down the scope of the investigation by adding additional sub-questions applicable for illuminating the problem statement in greater depth. These are coupled with the main theories, concepts, and analytical frameworks detected in the literature review. The sub-questions are:

- *What is company sustainability?*
- *How are theories and concepts within company sustainability relevant to large Norwegian companies listed on Oslo stock exchange?*
- *How can large Norwegian companies listed on Oslo stock exchange become more sustainable?*

The questions were applied through the research and helped keep a red line when maneuvering trough complex theories, concepts, frameworks, ESG reports and interviews which all represented possible solutions, as well as confusion. The latter was mitigated by applying these sub-questions to narrow the scope of the research.

2 Theory

The concept of sustainability is broad as it covers complex issues (Wilkinson et al., 2001). In this regard, many experts and scholars are divided on how it should be framed (Chang et al., 2017). However, the general definition in the final report from the Brundtland commission states it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, pp. chapter two, first section). The definition sets the direction for further examination of the concept. It is useful when investigating relevant literature regarding how sustainability performance can be enhanced for companies running the economy. There are many applicable frameworks, theories, and analytical tools that can be applied to examine sustainable company activities. However, the ones presented are chosen to cover a broad range of theories to enhance the validity and reliability of this thesis (Kirk et al., 1986). Highlighting existing research on the topic with relevant knowledge is the main objective of this chapter. Further to discuss and critically evaluate findings to consider its relevance. The objective is not to reproduce already known knowledge as a report but to detect strengths and gaps in the existing literature. There is an increasing database available for general knowledge-enhancement on sustainability, but the selected chosen for the task are relevant to investigating company sustainability. The concepts and theories presented will be applied when conducting semi-structured interviews and analyzing ESG reports on sustainability later in this study.

The concept of sustainability will be presented first before discussing some well-known concepts and theories aimed at the crossing between economy and sustainability to build a theoretical framework applicable for examining the research question and sub-questions (Blaikie & Priest, 2019) These are green economics, negative and positive externalities, corporate social responsibility, stakeholder theory, EU taxonomy, and the UN sustainable development goals.

2.1 The concept of sustainability

According to charts from the world in our data, the planet we live on will inhabit approximately 7.95 billion people by 2022 (Roser, 2013). According to the same data, the world's population was 2.54 billion people in 1950. This rapid increase in the world's population sets the planet under pressure (Brundtland, 1987). Sustaining planetary boundaries and life for people and animals is one of our most significant challenges (Brundtland, 1987; Steffen et al., 2015). The increased focus on sustainability has led scholars, scientists, politicians, and others to come up with different interpretations of sustainability as a covering concept. The concept of sustainability is presented in different ways in literature, but in general terms, it is mentioned in the Brundtland report as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, pp. chapter 2, first section). On the one hand, this is a rather vague definition, but it implies the complexity of the concept, and further, over 300 definitions of the concept of sustainability are present in literature (Chang et al., 2017). In this regard, a general definition like the one referred to in the Brundtland report is suitable as a backdrop before deepening issues within the complexity of sustainability (Brundtland, 1987).

The conceptualization of the idea that the earth has limits regarding resources and endurance is a relatively modern phenomenon (Stokey, 1998). Modern referring to the time scope of the industrialized world (Pack, 1988). As the world has economically developed drastically the last hundred years, the materialization of deforestation, pollution, drought, and environmental degradation has been highlighted because of this rapid growth in both industry and population (Nasrollahi et al., 2020). This has led the planet to push its planetary limits much further than ever before considering the rapid timeframe (Nasrollahi et al., 2020; Steffen et al., 2015). The concept of sustainability includes planetary boundaries, and the conceptualization of sustainability investigates different aspects of the planet's boundaries that can sustain a safe environment for humans (Steffen et al., 2015). This view makes it easier to understand planetary health at the present state and further help prioritize the human effort to mitigate possible severe consequences of continued human activity (Steffen et al., 2015). Planetary boundaries illustrate sustainability as the planet's limits to sustain status quo (Steffen et al., 2015). However, it only covers the planetary aspect of sustainability and not the human-related issues that should be considered when discussing sustainability in a holistic view. Human-related issues like basic needs also have to be addressed if sustainable development is going to be achieved, especially the needs of the poor (Brundtland, 1987). The general conceptualization of sustainability often focuses on the ecological and planetary perspective as outlined above (Steffen et al., 2015). Although there are clear connections between planetary boundaries and human-related issues, the connection often lacks focus in the sustainability discourse (Wilkinson et al., 2001). Examples of issues that should be addressed are reducing poverty, enhancing education, reducing gender inequality, reducing economic inequalities, and strengthening institutions to mention some (Global Reporting Initiative, 2017). With this in mind, the focus will be further conceptualization of sustainability by examining human-related values and related issues.

In many ways basic human rights are knit together with human value and integrity (Freeman, 2022). Fundamental human rights have complex relations to social sciences in similar ways to sustainability (Freeman, 2022). As the concept is given different meanings depending on a person's assumptions, it can be hard to pinpoint precisely what the concept captures. However, the modern consensus is influenced by the United Nations declaration, hereafter referred to as UN, constructed after the second world war, and on the 10th of December 1948 the UN General Assembly adopted the Universal Declaration of Human Rights (Freeman, 2022). The goal was to lay a foundation for fundamental human-like dignity and worth, without discrimination such as status, property, birth, social origin, political opinion, race, sex, or color (Freeman, 2022). The reason for drawing a parallel between the concept of sustainability and the concept of basic human rights is that the objectives for promoting them are primarily the same for promoting human-related challenges addressed by the SDGs (Nations, 2015a). It offers new ways of conceptualizing sustainability in a way that include people to sustain and develop. There is a need to capture both planetary and human aspects under the umbrella of sustainability to understand both the technical and non-technical aspects. However, umbrella simplifications made to grasp the whole complexity of sustainability can result in a vague effort to act. The concept makes it hard for companies and people to pinpoint how and where a potential challenge lies. Theories, concepts, and frameworks that help us understand phenomena are helpful tools when analyzing the concept of sustainability in large Norwegian companies more precisely, and the latter will be outlined in the following chapters.

2.2 Green economics

Green economics is relevant when investigating sustainable economic development. The concept looks at the economy in new ways decoupled from traditional resource and environmental parameters, and green economics investigates the possibility of generating economic growth without degrading the planet (Hannel, 2014; Stoknes, 2020). According to green economists, it is possible to achieve this by using untraditional parameters when measuring economic growth (Stoknes, 2020). Green economics pave the way for continued economic growth with the idea that one can decouple growth from environmental pressure if the proper considerations are taken (Bank, 2012; Stoknes, 2020). Traditional economists tend to focus on short and medium-term concerns, while green economics works towards mitigating foreseeable long-term effects on the planet and the economy (Kennet & Heinemann, 2006). Green economics is more aligned with natural sciences, and the result is more focus on planetary effects (Kennet & Heinemann, 2006; Steffen et al., 2015). Green economics investigates how economic activity can affect the planet but also how a healthy planet can support economic growth (Kennet & Heinemann, 2006). Critical theories in green economics investigate pathways to achieving economic sustainability and at the same time, achieving planetary sustainability.

A fundamental theory presented by Stoknes illustrates green growth possibilities as a staircase model with six steps to implement healthy and green growth for companies that wish to become sustainable (Stoknes, 2020). The first step investigates external actions like donations, sponsorship, and buying CO_2 quotas. The second step examines the company's possibilities to become greener, like recycling, upgrading own buildings, better gender balance, vegetarian canteen, and utilizing existing building structures to produce renewable energy. Step three looks at companies purchasing, like choosing sustainable materials from their suppliers that last longer and have better quality or ensuring fair trade as a prerequisite for orders. Step four examines opportunities within own operation, like production, services, and deliveries, to enhance resource productivity. Step five investigates opportunities for companies to get rid of products that are resource-intensive by using innovation to make new products that repla old destructive ones. At last, step six investigates opportunities for companies to adjust business models towards dematerialized or circular model that increases added value for companies. These concrete measures meet sustainability targets by increasing economic growth without compromising for planetary boundaries or human-related value (Stoknes, 2020).

Green economics might be holistic and long-term strategic, but critics argue it is impossible to decouple economic growth from planetary pressure (Parrique, 2019). Studies show a causal relationship between CO_2 emissions and economic growth, strengthening the critics argument towards green economics (Han et al., 2018). On the other hand, green economists argue that the problem is that we define economic growth as unsustainable today (Stoknes, 2020). Growth in quality products, leisure time, and improved health are examples of things that could be measured to reflect green growth to enhance life quality and economic growth, but without necessarily increasing the use of resource-scarce materials (Stoknes, 2020). However, Critics argue that one must move away from continued economic growth to mitigate severe consequences like climate change (Parrique, 2019). Adding the view of green economics is necessary when investigating sustainability in a holistic view, and traditional economic theory would not consider sustainability as outlined. The latter relates directly to ESG reporting as companies assumingly strive to present their effort on sustainability measures in symbiosis with financial performance. Green economics can be a platform to both analyze and achieve this.

2.3 Negative and positive externalities

When a company conducts an activity, it will have spillover effects besides what was intended, and these effects can be both positive and negative (Laffont, 1989). A typical example is pollution from a factory that negatively affects actors living nearby the factory (Laffont, 1989). Bad air quality, noise, and health issues are just some of the adverse effects that could be an issue for people living close to a polluting factory (Kampa & Castanas, 2008). In a wider sense, one could argue that all people in a global perspective are negatively affected as it contributes to global warming and climate change, which negatively impacts stakeholders outside a company's primary business (Houghton, 2005). A substantial challenge could be that companies contributing to negative externalities do not pay the total price for their adverse spillover effects, and as a result, they might continue to conduct unsustainable activities. On the other hand, there are efforts to mitigate the latter, and the concept of the social cost of carbon, hereafter referred to as SCC, is one example (Nordhaus, 2017). It is intended to explain how companies like the ones outlined could pay a "fair share" for polluting activities which ultimately is a question of how much each unit of released CO_2 costs society, and the SCC is just one indicator that is especially aimed at mitigating the increased level of CO_2 in the atmosphere by using policy instruments as a tool (Nordhaus, 2017). Further, this implies that estimates of SCC are not absolute, and estimations may vary as research on damage of CO_2 evolves. Therefore, there will probably never be 100% consensus regarding the correct pricing of SCC. When that said, it does not make mitigating measures less important, and it highlights pressure on companies, and one could argue that policy measures like SCC pressure companies towards change (Geels, 2014). Negative externalities could also be mitigated by motivating companies to change their trajectories towards more sustainable ones by using market valuation as a tool for change (Brooks & Oikonomou, 2018). There is a link between increased market valuation and ESG disclosure, and companies might be motivated to enhance the quality of their ESG measures to increase valuation (Brooks & Oikonomou, 2018). Companies might be willing to invest more effort into mitigating negative externalities, regardless of their stance toward a general ESG focus, as they want to increase the valuation of their company (Brooks & Oikonomou, 2018).

Positive externalities are the opposite of negative externalities (Laffont, 1989). Individual actors or stakeholders could receive positive externalities and gain something for free (Laffont, 1989). For example, a company could build a road for business purposes but still make it accessible for the public. As outlined, the concept of externalities examines side-effects outside the primary company activity. The latter is an increasing focus for companies and the public (Wilkinson et al., 2001).

The coupling between economy and sustainability is getting more in focus. There is an increasingly pressure from investors, actors, and governments to change the way the economy works to enable sustainable company activities (Markard et al., 2016). The concept of externalities states responsibility for companies conducting different activities, which makes it relevant as there is a tight coupling between companies running the economy and sustainability (Claeys et al., 2019). It clarifies why one must focus on minimizing negative impacts while clarifying the complexity of externalities. Pinpointing responsible actors could be important to reduce negative spillover effects for society, and further revealing negative externalities is essential to understand the need for positive externalities. The latter can be seen as a market opportunity within sustainable solutions (Schaltegger et al., 2011). However, the concept does not focus much on positive externalities, and there are growing opportunities for companies to present products and services that directly intent to have a positive effect on sustainability (Schaltegger et al., 2011). Finally, this outlines the concept's relevance when analyzing ESG reports to determine sustainability performance better.

2.4 Stakeholder theory and corporate social responsibility

Corporate social responsibility, hereafter referred to as CSR, is mentioned initially together with stakeholder theory as they are knit together. The concept of CSR generally copes with the same challenges as stakeholder theory, like business actions outside the direct economic activity, although stakeholder theory also has a clear focus on actors with economic interest in the company (Freeman et al., 2010). The primary focus of CSR is to build up credibility and trust in the company by focusing on sustainability to make the company attractive for employees, investors, and consumers, setting sustainability high on their priority (Habisch et al., 2004). CSR is concerned with different kinds of issues, like environmental issues, ethical issues, and social issues that all vary across countries and cultural backgrounds (Habisch et al., 2004). The core of CSRs is to connect sustainability issues with companies to enable better sustainable development, and it can be defined as "a way of doing business which contributes to sustainable development, reinforcing competitiveness, social cohesion and environmental protection" (Habisch et al., 2004, p. 7). CSR has in recent years influenced European companies, including companies from Norway, as the debate regarding sustainability and company responsibility has gotten increased attention from a wide range of actors influenced or directly part of a business structure (Habisch et al., 2004). However, monitoring and evaluating CSR is a challenging task as there are few sufficient values measuring CSR performance. Therefore it is a challenging task to hold organizations, companies, and individuals responsible for meeting targets on sustainability (Habisch et al., 2004). When that said, it is relevant for investigating issues related to a company's focus on sustainability as it investigates "how we are forced to have a fundamental dialogue concerning the reconfiguration of the relations and balance between institutions that together make up our society. The embedded core issue is the challenge to question the role of business in contemporary society" (Habisch et al., 2004, p. 1). CSR is also important to understand stakeholder theory which is more specific and arguably more applicable when examining ESG reports (Freeman et al., 2010).

Digging deeper into the concept of CSR, stakeholder theory evolves as a more specific theory that defines how CSR can be investigated by looking at specific actors connected directly or indirectly to company business (Freeman et al., 2010). Stakeholder theory investigates issues related to internal and external company stakeholders that have a “stake” in a company’s activities (Laplume et al., 2008). Internal stakeholders refer to customers, suppliers, employees, and owners, while external stakeholders refer to environmentalists, media, governments, competitors, and consumer advocates, generally all actors affected by company activities and thus should be considered in management (Laplume et al., 2008). Stakeholder theory is interesting view of sustainability as it considers stakeholders outside the core of a company’s business and the “original” stakeholders in a company like shareholders and management (Freeman et al., 2010). The given stakeholders could vary depending on the business area, geographical, and cultural setting where a company is positioned, but the main branches of internal and external stakeholders are the same considerations (Freeman et al., 2010; Laplume et al., 2008). Stakeholder theory is seen as a counterpart to traditional economic theory insinuates that a company’s responsibility is to earn money for its stakeholders (Freeman et al., 2010; Friedman, 1970). However, opponents argue that stakeholder theory is “compatible with the main ideas of stakeholder theory” (Freeman et al., 2010, p. 3). In other words, this theory is not applicable because of its controversies but rather because of how it contributes towards better business strategy where complex aspects of sustainability are being addressed. It is supposed to counter existing, yet decreasing fundamental assumptions where “most ideas about business assumed the dominance of a kind of economics that assumed that questions of values and ethics were at best “extra-theoretic if not downright irrelevant” (Freeman et al., 2010, p. 4). Stakeholder theory captures a more holistic view of how a company should run their business and examines the relation between all groups having a stake in a business, to ensure that overall health and stake of all stakeholders inside the company is moving roughly in the same direction (Freeman et al., 2010). It is an interesting theory in terms of sustainability, as it outlines a social alarm system where those not interested in continuing at a current trajectory have the possibility to raise a hand and get noticed. Relevant theory is helpful to illustrate that a company is not just a fabric. It consists of many people and interest groups that should be taken into consideration by management (Laplume et al., 2008). Summed up, CSR is well established within the concept of sustainability. However, the content is somewhat vague. Stakeholder theory complements the lack of concrete measures in CSR, and together they contribute to an enhanced understanding of the concept of sustainability.

2.5 The EU Taxonomy

Most companies have open-source data on their sustainability targets, but this has not always been the case (Montiel et al., 2014). References to corporate sustainability, has had an exponential increase in almost every area of society, and companies making up the economy is no exception. However, there is no clear consensus regarding what company sustainability is (Montiel et al., 2014). The European union, hereafter referred to as EU, addressed the issue by developing a system to classify sustainable company activities through the EU taxonomy (Lucarelli et al., 2020). The first part of the taxonomy aims at mitigating climate change and enhancing climate change adaption (EU, 2021b). The rest of the taxonomy regulation has not entered into force, so only the latter is examined in this research. The taxonomy clarifies sustainable company activities through technical screening criteria, also referred to as delegated acts (EU, 2021a). The EU presented the taxonomy and the delegated acts as a response to increasing demand to meet sustainable requirements, and the objective of the taxonomy is to classify sustainable environmental activities in line with the EU green deal, which is an example of how important the topic of sustainability is on the international agenda (Claeys et al., 2019). The delegated acts are part of the overarching taxonomy to direct finance towards sustainable company activities (EU, 2021b). Hopefully, clear criteria will make it easier for companies to understand specific measures and further focus on these targets. The taxonomy intends to enhance sustainable development in the EU in the coming years (EU, 2021b; Nations, 2015c).

However, there are reasons for questioning the taxonomy as the best way to enhance sustainable development. The delegated acts are purely technical in character, and do not embrace the holistic approach that includes human intangible values. The UN states the importance of including social development when discussing sustainability (Brundtland, 1987). The taxonomy is applicable when examining technical sustainability measures, but not social measures.

2.6 The sustainable development goals

In 2015 the UN presented a set of goals to fulfill the targets of the 2030 Agenda for Sustainable Development, which was a plan for prosperity, the planet, and people (Nations, 2015c). These goals represent a wide variety of challenges covering both planetary and societal challenges that should be addressed to achieve sustainable development for the planet and people living on it (Nations, 2015a). The sustainable development goals, hereafter referred to as SDGs, are designed by the UN to outline specific areas that should be addressed to achieve the objective of a sustainable planet for future generations (Nations, 2015a). The goals describe different focus areas that should be in focus when companies are working with sustainability-related issues (Global Reporting Initiative, 2017). All the 17 SDGs are listed in the table below to give an overview.

Table 1: Sustainable development goals.

Sustainable Development Goal	**Description**
SDG nr. 1: No poverty.	Ending extreme poverty for all everywhere. The current measuring tool is income below 1.25 dollars a day (Global Reporting Initiative, 2017, p. 1; Nations, 2015a)[5].
SDG nr. 2: Zero hunger.	End hunger and ensure safe and nutritious food for everyone (Global Reporting Initiative, 2017, p. 1; Nations, 2015a).
SDG nr. 3: Good health and well-being.	Ensure good health and well-being on a universal scale, including financial risk protection to make good health achievable for everyone (Global Reporting Initiative, 2017, p. 2; Nations, 2015a).
SDG nr. 4: Quality education.	Ensure free and applicable quality education for all (Global Reporting Initiative, 2017, p. 2; Nations, 2015a).
SDG nr. 5: Gender equality.	End discrimination against women, and ensure the same rights and recognition in work life and in private life (Global Reporting Initiative, 2017, p. 2; Nations, 2015a).

[5] https://www.globalreporting.org/media/v5milwee/gri_ungc_business-reporting-on-sdgs_analysis-of-goals-and-targets.pdf

SDG nr. 6: Clean water and sanitation.	Ensure access to clean and affordable drinking water and sanitation (Global Reporting Initiative, 2017, p. 3; Nations, 2015a).
SDG nr. 7: Affordable and clean energy.	Ensure clean and affordable energy for everyone and increase the share of renewables in the world's energy mix (Global Reporting Initiative, 2017, p. 3; Nations, 2015a).
SDG nr. 8: Decent work and economic growth.	Enhance economic growth with focus on poor countries, and ensure decent work opportunities for everyone, including youth and people with disabilities (Global Reporting Initiative, 2017, p. 3; Nations, 2015a).
SDG nr. 9: Industry innovation and infrastructure.	Ensure reliable and effective infrastructure that is affordable for everyone (Global Reporting Initiative, 2017, p. 4; Nations, 2015a).
SDG nr. 10: Reduced inequalities.	Ensure a higher rate of income for the people with the lowest income, and a higher percentage rate than the average (Global Reporting Initiative, 2017, p. 4; Nations, 2015a).
SDG nr. 11: Sustainable cities and communities.	Ensure quality living standards in cities and communities, including basic services, housing, transport, green spaces, and more (Global Reporting Initiative, 2017, p. 4; Nations, 2015a).
SDG nr. 12: Responsible consumption and production.	Ensure responsible consumption and production by lowering waste, increasing recycling, reducing the release of chemicals

	and more (Global Reporting Initiative, 2017, p. 5; Nations, 2015a).
SDG nr. 13: Climate action.	Ensure climate change adaptation and mitigation measures to fight climate change (Global Reporting Initiative, 2017, p. 5; Nations, 2015a).
SDG nr. 14: Life below water.	Reduce and prevent marine pollution. Regulate overfishing and help restore coastal ecosystems (Global Reporting Initiative, 2017, p. 5; Nations, 2015c).
SDG nr. 15: Life on land.	Protect forests and enhance biodiversity on a universal scale, and help restore the latter if already threatened (Global Reporting Initiative, 2017, p. 6; Nations, 2015a).
SDG nr. 16: Peace, justice, and strong institutions.	End exploitation, trafficking, and reduce violence and related death tolls all over the planet. Combat crime, reduce corruption, and ensure fundamental freedom to all in line with national and international legislations (Global Reporting Initiative, 2017, p. 6; Nations, 2015a).
SDG nr. 17: Partnerships for the goals.	Strengthen the partnerships for the goals by ensuring coherency in policymaking toward the SDGs (Global Reporting Initiative, 2017, p. 7; Nations, 2015a).

The UN and its SDGs might help companies examine and prioritize sustainability efforts (Nations, 2015a). Companies should be a part of sustainable growth in a way that makes them fulfill the SDGs (Stoknes, 2020). The SDGs make it easier to understand the concept of sustainability by presenting categories (Nations, 2015a). Although sustainable performance on the SDGs is hard to measure, they still contribute to a holistic view on sustainability (Ordaz, 2019).

3 Research strategy and method

3.1 Research strategy and method

This chapter will elaborate on the logic of inquiry for applied research methods and strategy (Blaikie & Priest, 2019). The rationale for choosing the given strategy was the relevance for answering the current problem statement and sub-questions given the time frame and resources available. Inductive reasoning was applied to establish descriptions of characteristics and patterns through generalization of the collected and analyzed data (Blaikie & Priest, 2019). The research was conducted using a qualitative research approach, although one could argue that the research strategy chosen was a mixed method (Creswell, 1999). A substantial part of the research was conducted as document analysis, explicitly investigating ESG reports. Secondly, the execution and analysis of data from semi-structured interviews were considered a substantial part of the data gathering and analysis process. A qualitative research approach had specific characteristics applicable to the problem question raised, and further to reveal complexity within the examined data (Esterberg, 2002). Although document analysis and semi-structured interviews were methods used to gather data for the same objective, they revealed different data types that needed to be considered (Bowen, 2009; Qu et al., 2011). The document analysis was the most substantial part of this research. It required time to examine the documents for data carefully, and further analyze it in a context-specific setting. The ESG reports contained valuable information for the research if proper considerations were taken while gathering and processing the data. However, by conducting semi-structured interviews, more and different data added depth to answer the research problem with enhanced reliability and validity (Golafshani, 2003; Kirk et al., 1986). The interview participants, referred to as interviewees, provided inside information and unpolished data. The informants had good insight into the topic of sustainability. They were interviewed with the premise of not collecting and presenting personal data, and they are therefore anonymous presented. Their answers were therefore considered more unpolished as a result of reduced pressure to answer "politically correct" for conformity reasons (Hewson et al., 1996). The data gathered from semi-structured interviews were analyzed together with data from the document analysis to give an overall understanding of the complexity. Applying different research methods while gathering data worked as triangulation by applying different angles or sources of data to achieve better validity and reliability (Carter et al., 2014; Kirk et al., 1986). The effort to apply triangulation throughout the research was conducted by using different methods, theories, and ways of analyzing the data to get different perspectives to reduce bias and increase the chances of making relevant scientific discoveries (Brewer & Hunter, 1989; Carter et al., 2014; Tversky & Kahneman, 1974). Presentation and analysis of data were conducted by placing data in tables and dividing them into categories from interviews, ESG reports, theory, and assessment. The tables were applied to systematically analyze and categorize data to enhance understanding of the retrieved material in context with data from other sources, and already conducted research on sustainability (Blaikie & Priest, 2019; Esterberg, 2002). The analytical process can be examined further by looking at the referred tables 6-13 in the attachments.

The research conducted can be regarded as basic research (Miller, 2002). Basic research has both strengths and weaknesses that should be addressed briefly. According to Miller, basic research is curious and explorative of nature. Although it generates new knowledge, the weakness is that it does not necessarily give a solution to the problem examined. However, basic research can be a ground layer for further understanding of how applied research should be conducted to effectively achieve its objectives (Miller, 2002). Research methods applied in this research were considered anchored in grounded theory (Dey, 2004; Strauss & Corbin, 1997). Grounded theory seeks to produce knowledge through the collection of data before producing theory. The objective was to better understand the phenomena's examined (Day, 2004; Silverman, 2020). Both ESG reports and interviews contained data with complex structure and layout when considering underlying meaning. However, a grounded theory approach was suitable for the task.

A minor part of the research was conducted by quantifying categories under the coding process and therefore the research is considered a mixed method (Creswell, 1999). Applying a mixed method enabled detections that would be hard to detect or resource-intensive without analyzing numbers (Creswell, 1999; Watson, 2015). For example, when coding categories, the research detected a gap in specific categories compared to other categories. As listed in figure. 1 and table. 4 under the coding section, there is divergency in matching certain key words representing categories. It would be possible to detect mismatch using a purely qualitative method too, but on the specific task, it was more efficient to quantify findings by applying numerical methods (Sukamolson, 2007; Watson, 2015). Although the chosen methodology was considered well for the task at hand, there were limitations to the research conducted. The latter will be highlighted in the next chapter.

3.2 Methodological criticism

To ensure the quality and validity of the research, it is essential to critically assess the applied research methods used to investigate the research problem (Kirk et al., 1986). It is important to raise awareness that many methods and strategies are suitable for addressing the issues. It is essential to have this in mind when conducting research to minimize the risk of bias or self-affirmation (Tversky & Kahneman, 1974). The research conducted was qualitative to detect details and complexity in greater depth (Silverman, 2020). However, methods applied in this research does not reveal extraordinary depth. For example, a semi-structured interview was applied instead of an in-depth interview (Guion et al., 2001). Further, the qualitative research approach could not investigate a large amount of data like a quantitative method (Watson, 2015). The qualitative research approach did not have the same ability to investigate audience segmentation, numerical change, quantifying opinions, or testing phenomenon that need a numerical structure (Sukamolson, 2007; Watson, 2015). For this a quantitative research approach would be more applicable. Even though a minor part of the research has been conducted using a quantitative approach, the research can be considered a mixed method if not pure qualitative (Blaikie & Priest, 2019; Creswell, 1999; Silverman, 2020). To sum up, this research falls somewhere between, with following limited precision. However, the research covers a substantial area, and hopefully the pros outweigh the cons.

Criticism is not only raised towards applied methods, but also towards the researcher of the thesis. As a human being, it is practically inevitable to avoid mistakes. These mistakes are often referred to as human error in academic terms (Reason, 1990). The researcher behind this thesis is no different, and even though human error is known to most people, it is vital to state awareness of the researchers' limitations. Every researcher is to some extent affected by their experiences, beliefs, and motivations (Tversky & Kahneman, 1974). When that said, the intended goal was to present the conducted research as objective as possible to ensure reliability and validity of the research, and there were no private interests in the research except the interest for sustainability in general (Golafshani, 2003). At last, some awareness should be directed towards the literature review.

A literature review was conducted in advance of the data collection to specify the research area investigated as relevant for the intended research (Dunne, 2011). This is not necessarily aligned with a grounded theory approach. Grounded theory purists argue that all literature review and theory investigation should be conducted after the data collection is done to ensure that focus is not affected by existing theory on the research area as the researcher could be colored by prerequisites (Dunne, 2011).

3.3 Rationale for selected ESG reports

This section will explain the rationale for the selected ESG reports presented in the research and elaborate on the collection steps applied when gathering data from the examined sectors. The elaboration will focus on the rationale for chosen sectors listed on Oslo stock exchange and explain how the reports were found, and explain what type of reports they are, and how they were analyzed by coding, scanning, and traditional reading to detect relevant information.

3.3.1 Selection and distribution

When gathering data appropriate for answering the research question, a challenging task is to gather reliable and valid data (Golafshani, 2003). This chapter presents rationale for selecting and distributing gathered data retrieved from ESG reports.

The first step was to find the relevant data suitable for illuminating the problem statement. The focus was directed at large Norwegian companies. There are many companies listed on Oslo stock exchange, but the examined companies have higher quality in their reporting, and these companies are on the main list, named Oslo stock exchange. The main list has higher requirements than the easier accessible “Oslo stock exchange growth” and “Oslo stock exchange access” lists, and this research only investigates companies on the main list (Euronext, 2022a)[6]. Oslo stock exchange is regulated for highly structured companies that are well established, and these companies have the financial depth that meets the requirements of large global investors (Euronext, 2022a). Even with a reduction, there are still many companies on Oslo stock exchange, and the analytical resources required to analyze all the companies would be overwhelming considering the limited time frame of the research conducted. The quality of data could be improved by reducing the number of potential companies in the largest sectors of the Norwegian economy (Namey et al., 2008). There are

[6] https://www.Oslo stock exchange.com/en/raise-capital/how-go-public/choosing-market

several ways to measure the size of a sector. One way is to calculate the size by taking the value created minus the cost of creating it, also referred to as profit (Sentralbyrå, 2021)[7]. Nevertheless, the latter example does not necessarily show the complete picture regarding which sectors reflect the highest activity. The latter is what is being examined, and then it is more relevant to measure how much a sector generates capital, without considering the cost of earning it. To find these sectors, turnover is a better measurement tool (Leksikon, 2022)[8]. The industry sector, oil and gas sector, and the building and construction sector stood out when searching for the top three sectors in Norway in terms of turnover (Sentralbyrå, 2014)[9]. This information was applied to a search tool that can be found on the official website of Oslo stock exchange (Euronext, 2022c)[10]. The systematic approach was to apply the top three sectors mentioned to the search tool, presenting a handful of companies within that scope. At last, one sector was investigated outside the mentioned top three sectors in Norway due to their focus on sustainability transition and political discourse. The sector referred to are renewable energy and energy storage. The latter sector is commonly referred to as a critical brick in the transition towards sustainable development, and the European Commission has referred to this sector as essential to achieving the objective of the Green Deal (Commission, 2019)[11]. The Green Deal is a strategy set out by the EU to transform the economy to meet their obligations to reduce greenhouse gas emissions and become climate neutral by 2050, so investigating companies within this sector is highly relevant for the issue at hand (Commission, 2019). Companies from the different sectors are presented in the table below to overview their main activities and which sectors they are categorized.

Table 2: Examined companies.

Sector	**Company**	**Main activity**
Industry	Hydro	Hydro is a power and aluminum producer (Hydro, 2022)[12].

[7] https://www.ssb.no/nasjonalregnskap-og-konjunkturer/faktaside/norsk-naeringsliv
[8] https://snl.no/omsetning
[9] https://www.ssb.no/217891/produksjon-etter-hovedn%C3%A6ring-i-basisverdi.millioner-kroner
[10] https://live.Oslo stock exchange.com/nb/markets/oslo/equities/list#pageFilters
[11] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
[12] https://www.hydro.com/no-NO/

Industry	Norske Skog	Norske skog is a paper producer aimed at the newspapers, magazines, and packaging (Skog, 2022)[13].
Oil, gas, and service related	Equinor	Oil and gas producer with an increasing production of renewable energy production as part of their energy mix, but still considered mainly an oil and gas company (Equinor, 2022)[14].
Oil, gas, and service related.	Aker Carbon Capture	Carbon capture and storage. Defined as an oil and gas service company by Oslo stock exchange search tool[15], but their activity includes services to remove CO_2 from cement production, bio and waste to energy solutions, blue hydrogen solutions, and gas to power solutions (Capture, 2022)[16].
Building and construction	AF Gruppen	Construction and building of real estate and other facilities. Also involved in energy and environment business, offshore business, but building and construction considered their

[13] https://www.norskeskog.com/about-norske-skog
[14] https://www.equinor.com/en/about-us.html
[15] https://live.Oslo stock exchange.com/nb/markets/oslo/equities/list#pageFilters
[16] https://akercarboncapture.com/about-us/

		main activity (Group, 2022)[17].
Building and construction	Veidekke	Construction and building. Building and maintenance of roads (Veidekke, 2022)[18].
Renewable energy and energy storage	Scatec Solar	Planning, building, owning, and drifting solar power facilities. The company also has activities in wind and hydropower (Scatec, 2022)[19].
Renewable energy and energy storage	Nel	Production of hydrogen production components and hydrogen filling facilities (Nel, 2022)[20].

The companies outlined in the table are all available public companies as they are listed on Oslo stock exchange (Euronext, 2022c). Information regarding activities can be found on their official websites under investor relations and reports or Oslo stock exchange official website (Euronext, 2022c)[21]. The reports were retrieved from the official websites of each company. It should be mentioned that ESG reports were an integrated part of the company's annual reports. The reports used in this research are on the surface referred to as annual reports, although the ESG reports are within these documents. The latter did not apply for Equinor and AF Gruppen as they produced independent sustainability reports[22][23]. The total amount of documents analyzed were eight ESG reports, but technically referred to as six integrated reports and two external ESG reports. Two reports were retrieved from each sector, so a total of four sectors were examined.

[17] https://afgruppen.no/om-oss/
[18] https://www.veidekke.com/about-veidekke/
[19] https://scatec.com/about/about-us/
[20] https://nelhydrogen.com/about/
[21] https://www.Oslo stock exchange.com/nb/markets/oslo
[22] https://afgruppen.no/om-oss/
[23] https://www.equinor.com/no/investors/annual-reports.html

3.4 Coding ESG reports

This section will explain how the reports were examined and how the reports were coded to retrieve data suitable for comparing, structuring, and further analysis (Auerbach & Silverstein, 2003). Coding in qualitative research is a way of breaking down the data into sections or labels to structure the data for further analysis and reduce the data by categorization (Miles & Huberman, 1994). Before starting the coding process, it was necessary to connect the strategy to the overall research methodology grounded theory, meaning that further theorization and interpretation of the retrieved data happen after the coding (Dey, 2004; Strauss & Corbin, 1997). It was necessary to structure the coding towards the main topic of interest, also referred to as framework analysis (Furber & health, 2010). The latter refers to the concepts and theories presented in the theory chapter. The structure was general, and the explorative nature of the process made it compatible with the grounded theory approach (Strauss & Corbin, 1997). This meant structuring coding towards the overarching themes, but further analysis was explorative (Furber & health, 2010; Strauss & Corbin, 1997). The coding presented had the objective of scratching the surface of the data to detect information of interest. The information retrieved from this process was further coupled to the problem statement and problem question later under “presentation of data” and “discussion.” Following is the table presenting search words used for each category.

Table 3: Search words applied for coding ESG reports.

Sustainable development goals	Sustainable development goal, SDG.
Stakeholders	Stakeholder.
Sustainability	Sustainability, sustainable.
Green economics	Green economics, green economy.
Negative and positive externalities	Externalities, externality.
Corporate social responsibility	Corporate social responsibility, CSR.
EU taxonomy	Taxonomy, delegated act.

Table 3 is an explanation of the material examined, but synonyms were also used to detect dark numbers. For example, both “green economics and “green economy” were applied as search words, but only green economics is listed as it covers both words. The coding was conducted by applying the standard search tool from Microsoft, and the words of interest were inserted as codes when searching through the ESG reports. The ESG reports were downloaded as PDF files to enable effective search, this could also be done manually, but it would require more time than searching digitally.

3.5 Rationale for semi-structured interviews

Semi-structured interviews are a data collection method within social studies to gather qualitative data from informants suitable for answering questions on a certain topic, or areas of interest (Kallio et al., 2016). This research has a defined scope within sustainability, and the method is suitable for the task at hand.

Informants suitable for answering or reflecting on the main themes within this study was applied. The latter was a prerequisite to proceeding with the method. Two professional and skilled individuals with expertise in sustainability-related issues were interviewed. On a general basis, informants could be unwilling to join an interview or interested in contributing to research for several reasons. The latter could result from variables like strict company regulations, time strain, and stress, to mention some. Some might understandingly not be able to mention company secrets, strategies, or other company sensitive information, and therefore some see it best to avoid participating in interviews. The informants in this research were not mentioned in a way that can put them in conflict of interest as outlined above. Therefore, the informants were informed about this in advance. Upon request they were informed that there would not be questions connecting them directly or indirectly to them as individuals or the companies/organizations they represented. Further, anonymizing persons and organizations might have positive effects on enhanced quality of the research as data could be less affected by factors like conformity and demand factors, and can encourage interaction, cooperation, and honesty from the informants (Hewson et al., 1996). If the data received was going to be considered reliable, the answers from the informants needed to be honest.

A professional connection within the finance sector set up with two people within the crossing between finance and sustainability. The latter was well suited for the task at hand as they had expertise within areas highlighted in this research. The interviewees expertise was obtained from academia, courses, work experience, and several years of knowledge-enhancement and engagement. Further, the informants had solid responsibility in their own organization on the topic of sustainability, which resulted in opportunities to influence their own organizations/companies, and other organizations/companies. These characteristics made them applicable for the task at hand.

3.5.1 Interview guide

Before the interview was conducted, an interview guide was produced and is placed at the end of the thesis under “attachments”. The process for constructing the semi-structured interview guide followed the framework for constructing an interview guide by Kallio (Kallio et al., 2016). The framework outlines five stages when constructing an interview guide. First identify prerequisites for applying semi-structured interviews, second to retrieve previously knowledge on the topic one intends to investigate, third is to construct the interview guide, fourth is to test the guide, and at last present the interview guide as intended to use in the forthcoming interview (Kallio et al., 2016, p. 2961). When constructing the interview guide, it was essential to apply questions and categories relevant for highlighting the problem statement to receive relevant and reliable answers (Rachlew et al., 2020). The latter was vital, as unreliable answers could lead to inefficiency and consequential error resulting in reduced reliability and validity of the data (Kirk et al., 1986; Rachlew et al., 2020).

This section explains the interview guide used for the semi-structured interviews. The categories are the same categories presented under the document analysis as these are the ones connected to the theory chapter. Further, similar categories were presented to each interviewee to conduct the interviews as systematic as possible to ease comparing and analyzing data. The latter also goes for the individual questions presented under each category, although there were some differences. The main objective of the semi-structured interviews was to give some guidance, but without leading the interviewees in a pre-determined direction, although categories were determined (Kallio et al., 2016; Rachlew et al., 2020). The interviewees spoke freely without interruptions, which further enabled better data as the specific answers within each category was open (Rachlew et al., 2020). The guide was used as a guide in both interviews. However, the interview guide was as the name indicates, a guide, so some questions took another direction than expected. The latter was a challenging, yet positive experience as it gave surprising new insight. The interview guide is presented to enable transparency to research methods used under the research to enable readers to evaluate the process critically. Further, the interviews were intended to last approximately one hour, although the result was closer to one and a half in both interviews. After the interviews were finished, data from each interview was placed into a table under categories examined in ESG reports. Moreover, as mentioned earlier under the coding of ESG reports, these categories were coupled to the theories and concepts presented in chapter 2. The data from the interviews were analyzed together with data from the ESG reports and relevant theory to triangulate the assessment and enhance the objectivity and validity of the research (Carter et al., 2014; Douglas, 2011; Golafshani, 2003). As part of the premise to not treat personal data, notes were taken manually without recording, as this was the formal requirement from the Norwegian center for research data, commonly known as NSD (NSD, 2022)[24].

[24] https://www.nsd.no/

4. Results

Following is an overview of the coded data from ESG reports. There were two main objectives in the process. The first was to quantify categories to look for patterns in ESG reports (Sukamolson, 2007). The second objective was to detect where words were placed in reports to enable qualitative analysis of the context (Silverman, 2020). The overall objective of both methods was to make the initiating data gathering and analysis more effective to prioritize specific sections of the reports and help compare ESG reports against each other. Although the research conducted in this thesis is considered qualitative, a mixed methods approach was used in the data gathering process (Creswell, 1999). The mixed methods approach was conducted using a qualitative research approach to better understand the complexity of the data (Silverman, 2020). In contrast the quantitative approach was helpful in investigating where data was placed, how the ESG reports differed, and also by examining patterns of interest by quantifying data (Watson, 2015). The approach had the objective of reducing bias by applying several lenses to detect data of interest (Tversky & Kahneman, 1974). The method helped prioritize resources toward relevant sections in the reports (Brewer & Hunter, 1989). To summarize, the quantitative approach was conducted by using simple charts and numbers to statistical analyze topics and themes through quantifying given categorizations and finding them. The qualitative approach was used when analyzing the context of the words, and ultimately to better interpret the data (Brewer & Hunter, 1989).

The data retrieved from the document analysis is presented using excel as a visualization and overview tool. Excel is a standard visualization and spreadsheet provided by Microsoft (Microsoft, 2022)[25]. Following is a table with an overview of matches on categories in examined ESG reports.

Table 4: Coding results from ESG reports.

	A	B	C	D	E	F	G	H	I
2	Total pages examined	315	144	80	129	203	167	179	156
3	Referance to sustainable development goals	9	126	12	12	3	15	9	24
4	Referance to stakeholders	69	43	23	29	2	22	28	19
5	Referance to sustainability	165	154	162	278	20	438	43	79
6	Referance to green economics	0	0	0	0	0	0	0	0
7	Referance to negative and positive externalities	0	0	0	0	0	0	0	0
8	Referance to corporate social responsibility	11	3	0	0	33	2	0	2
9	Referance to the EU taxonomy	10	11	2	111	3	30	13	10

[25] https://www.microsoft.com/nb-no/microsoft-365/excel

Following is an overview of the same data as presented above, illustrated as a diagram.

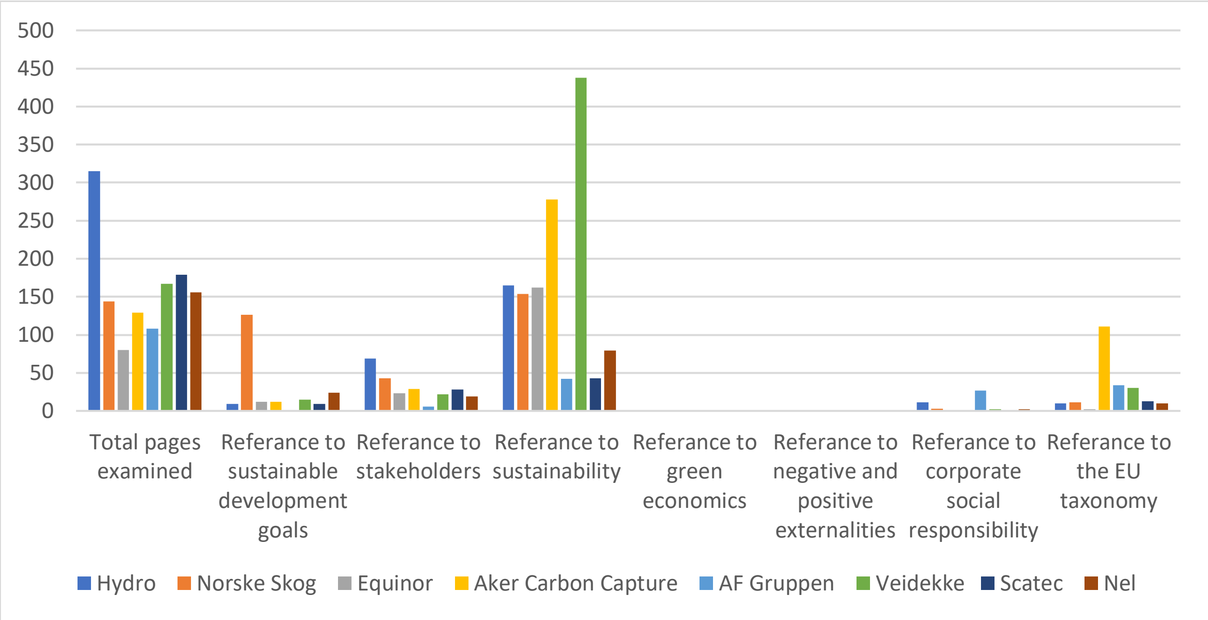

Figure 1: Diagram of coding results from ESG reports.

The gathered data was put in connection with other data in the research to give meaning and better interpret all data retrieved in the research process, including the data from the semi-structured interviews.

The listed words in the table are coupled to the thesis's theory section. To couple the theory chapter with the main research question, there was a need to examine these categories further. Although the categories were narrowed down, the potential complexity of the findings was unknown. The first finding of interest emerged by listing up matches in a spreadsheet, and specific categories stood out by lack of matches. No matches occurred on nr. 6 "Reference to green economics" and nr. 7 references to negative and positive externalities. There were no matches on either words or synonyms, which was the case for all companies across all sectors. The second thing of interest was the absence of matches on "corporate social responsibility." These companies were Equinor[26], Aker Carbon Capture[27] and Scatec[28].

[26] https://www.equinor.com/
[27] https://akercarboncapture.com/
[28] https://scatec.com/

Places where categories emerged in ESG reports, were read carefully to interpret the context where they were applied. Data retrieved from both interviews and ESG reports will be described below to present main findings. Data are presented in tables to couple them to categories presented in the theory section. Data from interviews are personal thoughts, questions, and elaborations suitable to enlighten different perspectives than those presented in the document analysis and theory chapter. The presentation of data is not exhaustive, as the intention is to present the main findings. Highlights and main points are presented. However, more elaboration and discussion will follow in the discussion chapter to deepen the understanding.

Data from interviews were retrieved from two informants, "interviewee 1" and "interviewee 2". They were both interviewed for approximately one and a half hours, and the data presented from the two interviews were collected in these sessions.

Table 5: Semi-structured interviews.

Interviewee:	**Date:**	**Location:**	**Sector:**
Interviewee 1	25.04.2022	Oslo	Finance
Interviewee 2	27.04.2022	Stavanger	Finance

The main findings are presented in the next chapters, although the presentation of data is not exhaustive as the dataset would be too large for the scope of this thesis. The latter would require hundreds of pages. However, the method was a practical tool to investigate complex issues with greater overview and understanding. The presentation is analytical, meaning that language and sentence structure is straightforward and repetitive. This is an intended method to enhance clarity and ease comparison between different categorize, although it might be somewhat less reader friendly. The process can be examined further by looking at table 6-13 in attachments.

4.1 Sustainability

4.1.1 What is the content of sustainability?

Interviewee 1 presents "sustainability as a broad term that captures a wide range of sustainability-related issues. It covers many aspects outside the well-established climate discourse, like the economy, technology, renovation, material use, and non-material human values". Further, ESG reports indicate the content of sustainability to be broad, however, with focusing on specific categories. These are the planet, people, and climate. The content of sustainability is broad, even within the mentioned categories. More specifically ESG reports outline sustainability as getting to net zero in terms of climate gas emissions, protecting the environment, people and society, reducing climate and ecological footprint, focus on governance and transparency, prosperity, eliminating injuries, diversity, equality, decent work, health, safety, and security. Measuring sustainability performance is outsourced to other organizations working with materiality analysis, SDGs, corporate governance, GRI, GHG, science-based target initiative, global compact guiding principles, world economic forum stakeholder capitalism metrics, and UN guiding principles on business and human rights. The theory presented sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, pp. chapter 2, first section). Over 300 definitions of the concept sustainability were presented in the literature (Chang et al., 2017). Finally, assessed data from interviewees, ESG reports, and theory indicated similarities, although data from interviews and ESG reports was more concerned with specific definitions and categories rather than presenting holistic views of sustainability.

4.1.2 Is sustainability relevant to ESG reporting?

Interviewee 1 said, "sustainability is relevant towards ESG reporting as it is an essential part of a company. The latter means that a company needs to have influence outside traditional economic interests". Interviewee 2 said, "sustainability is something everyone needs to consider including companies who run the economy". Further, investigated ESG reports revealed that sustainability is the core of the reports, and the significant focus on sustainability is illustrated in figure 1. Although the term was applied differently in each report, all companies referred to sustainability as one of their main priorities. Theory indicated sustainability to be relevant to ESG reporting. The Brundtland report set out directions for sustainable development, organizations, and private companies continue to frame new trajectories for sustainable development, which they present through ESG reports (Brundtland, 1987; Euronext, 2020). ESG represents environment, social and governance, and it is a collective designation of these concepts (Matos, 2020). Finally, assessed data from interviews, ESG reports, and theory indicated common ground to the relevance of sustainability as a cornerstone in ESG reporting.

4.1.3 Is sustainability part of ESG reports produced by companies listed on Oslo stock Exchange?

Interviewee 1 said, "sustainability is considered a substantial part of ESG reports published by companies listed on Oslo stock exchange, although there might be some disagreement or lack of knowledge regarding the term sustainability." Interviewee 2 said, "yes, sustainability is a part of all ESG reports produced by companies listed on Oslo stock exchange." Further, data from ESG reports revealed sustainability to be a significant part of examined reports and was referred to both directly and as part of business strategy. Finally, data from interviews and ESG reports indicated sustainability as a substantial part of examined ESG reports.

4.1.4 Is there consensus regarding the use of sustainability in ESG reporting?

Interviewee 2 said "there might be some disagreement or lack of knowledge regarding the term sustainability." Interviewee 1 said "many companies apply different terms when presenting sustainability-related issues in ESG reports. There is little consensus regarding the use of sustainability, and there is a lack of good tools to measure sustainability. However, there has become more consensus in the last years because of increased focus and knowledge enhancement on the field of sustainability, and concept clarification due to the SDGs". Further, data from ESG reports revealed that there was no total consensus regarding the description of the concept. However, there was to a large extent, consensus regarding applicable standards and frameworks for defining sustainability performance. Theory insinuated a lack of consensus regarding the term and understanding of the term sustainability, and over 300 definitions of the concept of sustainability are present in literature (Chang et al., 2017). Finally, assessed data from interviews, ESG reports, and theory indicated a low degree of consensus regarding the content of sustainability. However, there was an increasing degree of consensus regarding applicable standards for defining sustainability like the SDGs and EU taxonomy[29][30].

4.1.5 How can companies listed on the Oslo stock exchange be more sustainable?

Interviewee 1 said, "companies could enhance their sustainability performance if better quantified frameworks, and measurement tools were available. Tools that clarified what, why, and how the companies could perform better in a concrete, measurable way. The taxonomy will probably mitigate some of these issues. However, numbers are not bulletproof. They could be tricked with in statistics and analytics as they do not easily show the whole picture within sustainability." Interviewee 2 said, "it is hard to be good at everything, including sustainability. Therefore, it could be good for a company's sustainability performance to outsource sustainability-related issues to specialists on the topic to increase the quality and objectivity of ESG reports." Further, examined ESG reports indicated enhanced sustainable performance by applying SDGs and the EU taxonomy to the reports. They helped prioritize sustainable categories and suggested concrete measures to achieve targets for sustainable performance. The theory presented suggestions for companies to become more sustainable. The most significant highlights were considering SDGs as holistic guidelines, while the taxonomy was presented as technical guidelines to enhance sustainability performance (EU, 2021b; Nations, 2015a)[31][32]. Finally, data from interviews, ESG reports, and examined theory suggested applying SDGs in ESG reports enhancing priority and understanding of categories related to sustainability. The EU taxonomy could implement concrete measures to enhance sustainability performance related to measurable technical issues by applying screening criteria presented by the delegated acts.

[29] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R2139

[30] https://sdgs.un.org/goals

[31] https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

[32] https://sdgs.un.org/goals

4.1.6 Does sustainability in ESG reporting influence company activities?

Interviewee 1 said, "sustainability in ESG reports has little effect on organizations presenting reports if the content is not taken seriously by the whole organization, from leaders to people with special responsibility on sustainability-related matters." Interviewee 2 said a general focus on sustainability is good. However, it is difficult to conclude whether applying sustainability in ESG reports influence company activities." Further, examined ESG reports indicated little connection between applying the term sustainability in ESG reports and sustainable company activities. However, this referred to primary activities and not necessarily secondary activities. One example was Equinor's increasing focus on renewables and carbon capture and storage. Equinor also had a relatively high focus on sustainability compared with the total pages examined. However, it was hard to draw upon assumptions whether this was connected to greenwashing as the overall activities of the company were considered inadequate in terms of mitigating climate change (Xingqiang, 2015). The theory did not point directly at the use of sustainability as a term, instead the framing of sustainability was important to attract investors, a qualified workforce, and costumers (Adams & Frost, 2008; Reboredo et al., 2017). Finally, assessed data from interviews, ESG reports, and examined theory indicated a minor connection between reference to sustainability in ESG reports and sustainable secondary activities. If taken seriously by the whole organization, focusing on sustainability could affect company activities.

4.2 ESG reporting

4.2.1 Do ESG reports show a realistic picture of sustainable company activities?

Interviewee 1 said, "ESG reports nowadays show a relatively realistic picture of a company's activities, although it is hard to be completely honest regarding the content presented in these reports. Selection of words and overall rhetoric often show a polished picture of the company's activities although there has been substantial progress in this area in recent years". Interviewee 2 said, "I think they show a relatively realistic picture of a company's activities. However, it is hard to produce good quality in ESG reports when the area of sustainability covers a wide range of areas. The latter could be mitigated by distributing or outsourcing work on specific areas within sustainability to people or organizations with deficient expertise in a specific field. The latter could also increase objectivity and quality of the reports". Further, examined ESG reports indicated a realistic picture of company activities, however with extra focus on positive contributions to stakeholders and society. ESG reports did not show a realistic picture of mitigating negative externalities. Finally, assessed data from interviews and ESG reports indicated that examined companies presented a relatively realistic picture of their activities. However, by referring to the observation that companies tend to focus on their positive contributions and little on their negative contributions towards sustainability.

4.2.2 Do companies listed on the Oslo stock exchange produce ESG reports?

Interviewee 1 said, "companies listed on the Oslo stock exchange probably publish ESG reports but with different quality. The latter refers to the observation that few companies publish where they make a big difference, or more precisely where they mitigate negative impacts of their activities". Interviewee 2 said, "I would assume most listed companies produce ESG reports." Further, all eight companies analyzed produced ESG reports, either individual ESG reports, or integrated reports. The theory indicated several standards for reporting on sustainability (Goby, 2022). Theory also indicated enhanced benefits for companies with high sustainability performance (Adams & Frost, 2008). Oslo stock exchange presented guidelines for producing ESG reports (Euronext, 2020). Finally, assessed data from interviews, ESG reports, and examined theory indicated that companies listed on the Oslo stock exchange produce ESG reports.

4.2.3 Is there consensus regarding how to report on ESG-related measures?

Interviewee 1 said, "there is starting to be a consensus regarding how to report on ESG. The latter can largely be attributed to the appliance of materiality analysis, SDGs and the taxonomy. However, all companies can and should be better at reporting on negative effects of their activities". Further, ESG reports indicate medium consensus regarding how to report on ESG-related measures. Many companies applied the same standards when measuring sustainability performance. However, it was not totally unified. Theory indicated lack of consensus regarding how to report on ESG-related measures (Goby, 2022). There was information regarding what the content of ESG reporting should include, but there was a jungle of indicators. On the contrary, the Oslo stock exchange presented guidelines for companies reporting in ESG-related measures, and the SDGs and the taxonomy presented categories to make it easier to achieve consensus (Euronext, 2020; Global Reporting Initiative, 2017). Finally, assessed data from interviews, ESG reports, and examined theory indicated a lack of consensus regarding priorities within sustainability, measuring and framing sustainability, although materiality analysis, SDGs and the taxonomy has increased consensus.

4.2.4 Do ESG reporting influence company activities?

Interviewee 2 said, "ESG reports could positively affect company activities if the goals set in the reports are taken seriously by the whole organization, including management and leaders". Interviewee 1 said, "it is hard to conclude if ESG reporting has a positive effect on company activities, or just the general focus towards sustainability in society that affects the companies". Further, there were few indications that ESG reports affected company activities for so-called green companies like the solar company Scatec and the hydrogen company Nel. There were indications that companies within the oil and gas industry and the building and construction industry focused on enhancing their sustainability performance. However, it was difficult to draw assumptions to whether ESG reports played a vital role in guiding companies to conduct sustainable activities, or whether companies felt pressure to promote sustainable contributions also referred to as greenwashing (Xingqiang, 2015). Finally, assessed data from interviews and ESG reports indicated little indications of ESG reporting influencing company activities isolated. However, focusing on sustainability throughout the whole organization could affect company activities.

4.3 Sustainable development goals

4.3.1 Are SDGs relevant to ESG reporting?

Interviewee 1 said, "the sustainable developments goals frame sustainability by defining what should be considered sustainable. The latter can reduce conceptual confusion as it points out categories that should be focused on to achieve sustainability, and this makes it easier to choose areas of priority within a company". Interviewee 2 said, "a company choosing its SDGs to prioritize is not necessarily the best for objectivity and sustainability. The latter could be mitigated by outsourcing the job of prioritizing and deciding which SDGs to focus on to ensure objectivity and quality in this process". Further, ESG reports indicated SDGs to be relevant as they categorized focus areas within sustainability that was easy to present and understand. However, they were not applied to negative impacts. Theory indicated that SDGs were relevant towards ESG reporting as they covered aspects of sustainability to grasp both human values and aspects related to planetary boundaries (Nations, 2015a; Steffen et al., 2015). Target 12.6 specifically addressed the need for adopting good sustainability practices in reporting cycles and the global reporting initiative presented SDGs as suitable for the task (Global Reporting Initiative, 2017). Finally, assessed data from interviews, ESG reports, and examined theory indicated SDGs to be relevant to ESG reporting (Nations, 2015a). However, they could focus more on negative impacts to increase sustainability performance. SDGs were not applied to present negative impacts of company activities at the current moment and should be considered to mitigate the severe consequences of unsustainable company activities. Assessment towards the SDGs should also be considered outsourced to neutral parties outside the company to increase objectivity and quality.

4.3.2 Are SDGs applied in ESG reports by companies listed on the Oslo stock exchange?

Interviewee 1 said, "the SDGs are probably applied in ESG reporting by companies listed on Oslo stock exchange, however, with varying approaches." Further, SDGs were applied in examined ESG reports. They were applied by internal assessment and priority on sustainability-related issues. They focused on SDGs, and more specifically the company's SDGs contributed to enhanced sustainable performance and not towards mitigating negative externalities. Theory outlined that the SDGs were recommended by the global reporting initiative, which many companies on the Oslo stock exchange report to (Global Reporting Initiative, 2017; Nations, 2015a)[33]. Finally, assessed data from interviews, ESG reports, and examined theory indicated that SDGs were applied in ESG reports underlining positive contributions towards sustainability. SDGs were not applied to present negative impacts on

[33] https://www.globalreporting.org/

company activities. Few companies focused on human-related values in the SDGs, however the reason for this was not apparent.

4.3.3 Is there consensus regarding the appliance of SDGs in ESG reporting?

Interviewee 2 said, “SDGs make it easier to achieve consensus regarding sustainability.” Interviewee 1 said “many probably apply the SDGs to show how good they are at sustainability performance instead of choosing or using the SDGs they can make a greater impact with.” Further, ESG reports indicated consensus regarding the appliance of SDGs as focus areas within sustainability where companies contributed positively to enhancing sustainability performance. The theory presented SDGs as an option to help define a common framework and understanding of the concept of sustainability (Global Reporting Initiative, 2017; Nations, 2015a). Finally, assessed data from interviews, ESG reports, and examined theory indicated consensus regarding the appliance of SDGs as categories used to present positive contributions towards sustainability. However, interviewees suggested more focus on applying SDGs to illuminate negative impacts, with the objective to enhance reliability and sustainability performance.

4.3.4 Does applying SDGs in ESG reports influence company activities?

Interviewee 2 said, “companies can be better at using the SDGs to screen which goals they perform badly against to present a realistic picture. The latter is necessary to improve sustainability performance”. Interviewee 1 said, “it is hard to know if the SDGs have an effect on companies’ sustainability performance or if it is just the general focus towards sustainability that affects companies towards sustainable action.” Further, it was challenging to draw assumptions about whether applying SDGs in ESG reports influenced company activities or the other way around. An interesting observation was the lack of focus on SDGs where companies performed poorly toward sustainability performance. The theory presented SGDs as tools to achieve enhanced sustainability performance (Global Reporting Initiative, 2017; Nations, 2015a). However, the theory indicates that it is challenging to measure the effects of the SDGs (Ordaz, 2019). Finally, assessed data from interviews, ESG reports, and examined theory indicated that the SDGs fulfills an existing gap to enable better implementation and categorization of sustainability performance (Global Reporting Initiative, 2017; Nations, 2015a). Focusing more on the negative effects of company activities, could pressure companies to increase effort towards unsustainable activities. The latter could reduce greenwashing and enhance sustainability performance (Meadowcroft et al., 2019; Xingqiang, 2015).

4.4 Stakeholders

4.4.1 Are stakeholders relevant to ESG reporting?

Interviewee 1 said, "yes, stakeholders are relevant as they are the ones we report for. They have been a part of corporate governance for a long time, even before sustainability was high on the societal agenda. There are many stakeholder groups that must be considered, like customers, suppliers, and stakeholders within value chains. The latter is an increasing focus for companies. Stakeholder analyses are typically conducted through questionaries and having good communication towards customers, employees, and external societal organizations.". Interviewee 2 said, "stakeholders are important as they represent different views on sustainability and what should be prioritized in that regard. This is important to get a holistic view and understanding of sustainability. Relevant stakeholders can be customers, suppliers and others in the value chains". ESG reports indicated stakeholders as a substantial part of examined reports. However, marginalized stakeholder groups like indigenous people were less in focus (Derry, 2012). Theory illuminated stakeholders overall relevance towards sustainable company activities and relevant actors, including indigenous people (Derry, 2012; Freeman et al., 2010; Laplume et al., 2008). Finally, assessed data from interviews, ESG reports, and examined literature indicated stakeholders to be relevant towards ESG reporting as reports were intended to address them. However, more focus should include marginalized stakeholder groups in ESG reporting to enhance sustainability performance.

4.4.2 Are stakeholders applied in ESG reports by companies listed on Oslo stock Exchange?

Interviewee 2 said, "all companies on Oslo stock exchange probably refer to stakeholders in their ESG reports." Interviewee 1 said, "companies on Oslo stock exchange are likely to report towards stakeholders as they are relevant for companies whether or not sustainability is the main objective, and therefore companies want to have a relationship to stakeholders." Further, stakeholders were applied in ESG reports by all companies examined. Finally, assessed data from interviews and ESG reports indicated that stakeholders were applied in ESG reports produced by companies listed on the Oslo stock exchange.

4.4.3 Is there consensus regarding stakeholders in ESG reports?

Interviewee 1 said, "there is a large degree of consensus regarding appliance of stakeholder as there has been a lot of focus on them, on the contrary to the claim of Friedman[34]". Further, ESG reports indicated consensus regarding defining stakeholder groups. However, some companies focused more on active engagement towards stakeholder groups in ESG reports than others. The theory was aligned when referring to stakeholder groups as internal and external stakeholders (Freeman et al., 2010; Laplume et al., 2008). However, theory had little focus on marginalized stakeholder groups in society that might not have a direct stake in company, but might have a stake in the environment or society where business is conducted (Derry, 2012). Finally, assessed data from interviews, ESG reports, and examined literature indicated consensus regarding the content of stakeholder groups, but few addressed marginalized stakeholder groups.

4.4.4 Does the use of stakeholders influence company activities?

Interviewee 2 said, "focus on stakeholders in ESG reports gives a better understanding of sustainability in a holistic view." Interviewee 1 said, "use of the stakeholder concept in ESG reporting affects company activities. However, this is not a new phenomenon. What is new is the focus on the broad layer of stakeholders, not only those with a financial interest in a company". Further, examined ESG reports indicated some effect towards a general focus on

[34] Friedman, M. (1970). The social responsibility of business is to maximise its profits. *New York Times Magazine*, *13*, 33.

sustainable activities that could be connected to human-related values like inclusion, gender equality, and decent work. The theory presented stakeholders as groups of people or individuals that should be considered when addressing sustainable issues to enable broad thinking on sustainability-related issues, and stakeholder theory is essential to grasp the complexity of sustainable company business (Freeman et al., 2010; Laplume et al., 2008). When implemented in a company, effective appliance of stakeholder theory could affect primary business and stakeholders outside primary business activities. However, marginalized stakeholder groups should be given more attention in theory (Derry, 2012; Freeman et al., 2010; Laplume et al., 2008). Finally, assessed data from interviews, ESG reports, and examined theory indicated that focus on stakeholders in ESG reports could affect sustainable company activities. However, there was a lack of focus on marginalized stakeholder groups. The latter is important to enhance sustainable performance as stakeholders could pressure or motivate companies to enhance sustainable activities.

4.5 Green economics

4.5.1 Is green economics relevant to ESG reporting?

Interviewee 2 said, “in general it is important to increase the level of green investments to achieve a sustainable economy, so I would say it is relevant as ESG reports frame sustainability.” Interviewee 1 said, “green economics is relevant for ESG reporting as it is a central part of the reports. It is important to show how company products and services are important to transition the economy to a sustainable economy”. Further, examined ESG reports did not refer green economics as a term within the concept of sustainability. However, there were indications that the concept of green economics was relevant and applied in ESG reports by examining reports more carefully. For example, could “energy transition” be coupled to the concept of renewable energy systems. Theory indicated green economics to be relevant to ESG reporting. It outlined the urgent need to shift the economy in a sustainable direction without compromising on opportunities for continued economic growth, and applying green economics could help focus on opportunities within sustainability to generate new business models (Hannel, 2014; Stoknes, 2020). Finally, assessed data from interviews, ESG reports, and examined theory indicated green economics to be relevant towards ESG reporting as it supported the need for economic growth and sustainability at the same time.

However, examined ESG reports did not refer to the concept, although synonyms or sub-categories of green economics were present. This implied that the concept was relevant but not consciously applied in ESG reports.

4.5.2 Is green economics applied in ESG reports by companies listed on the Oslo stock exchange?

Interviewee 1 said, “it is difficult to claim that green economy is a concept widely applied in ESG report by companies on Oslo stock exchange. It is most relevant for companies conducting activities within renewable energy or other sustainable activities aimed at transitioning the economy towards a green economy. However, it seems clear that these companies already conduct activities connected to the green economy, so the term might not be applied in their ESG reports”. Further, the term was not applied in examined ESG reports. However, there were indications that green economics was a part of the reports under alternative framings. Finally, assessed data from interviews and ESG reports indicated that the concept might be present to a minor extent, however by referring to sub-categories or by the appliance of different terminology.

4.5.3 Is there consensus regarding green economics in ESG reports?

Interviewee 1 said, “there is a low grade of consensus regarding the appliance of this term as there is confusion regarding the concept of green economics.” Further, there was no consensus regarding the content of green economics, and the specific term was not applied in examined ESG reports. However, there was somewhat consensus regarding the need to transition the economy to a more sustainable one without compromising growth opportunities. There was consensus in examined theory regarding issues that needed to be addressed to enable a sustainable economy (Hannel, 2014; Stoknes, 2020). However, decoupling of economic growth and the sustainable impact was debated (Parrique, 2019). Finally, data from interviews and ESG reports indicated a low degree of consensus regarding green economics in ESG reports, and this could be a result of confusion regarding the content of the term. However, there was consensus among interviewees and theory regarding the need to transition the economy to a sustainable one to grasp business opportunities. Theory was aligned regarding the content of the concept, although a decoupling between sustainability and economic growth was debated. The concept of green economics was relevant in theory, but not consciously applied in ESG reports.

4.5.4 Does applying green economics in ESG reports influence company activities?

Interviewee 1 said, "It probably does not affect activities as companies already applying green economics in ESG reports already conduct activities that can be considered green". Further, there were indications that companies were increasingly focusing on green economics when examining sub-categories related to green economics. Companies focused on a "low-carbon society" or "energy transition" tended to have concrete strategies to achieve the intended objective. The theory outlined new ways of framing economy and sustainability, which meant that companies had to change or enhance their ongoing activities to meet sustainability requirements, without compromising on opportunities for economic growth (Hannel, 2014; Stoknes, 2020). Finally, assessed data from interviews indicated little influence on company activities when applying the concept of green economics in ESG reports. On the other hand, examined ESG reports, and theory indicated relevance when applied as part of business strategy.

4.6 Negative and positive externalities

4.6.1 Are externalities relevant to ESG reporting?

Interviewee 2 said, "externalities are relevant towards ESG-reporting, however not when using the given terminology. Companies must work toward identifying and considering risks related to ESG, both positive and negative. It is important to frame ESG reports honestly to enable good sustainable performance. More companies should focus on negative externalities in ESG reports". Interviewee 1 said, "it is relevant towards ESG reporting although the terminology is somewhat unfamiliar. It reminds of impact analysis, which has the objective of examining how a company contributes negatively or positively to society with their activities which is relevant". ESG reports indicated relevance for companies, however by applying different terminology. Companies were aware of the unintended side-effects of their activities, both positive and negative. The theory outlined the relevance of externalities towards company activities, but not so much towards negative externalities (Laffont, 1989). Negative impacts of conducted company business are relevant for highlighting focus areas that should be mitigated to enhance sustainable performance. Finally, assessed data from interviews, ESG reports, and examined theory indicated the relevance of both positive and negative externalities towards ESG reporting. However, theory focused more on the relevance of negative externalities while ESG reports focused on positive externalities. Interviewees were balanced regarding the importance on both positive and negative externalities, although there should be more focus on negative externalities.

4.6.2 Are externalities applied in ESG reports by companies listed on Oslo stock exchange?

Interviewee 1 said, "externalities are probably not referred to in ESG reports by companies listed on Oslo stock exchange when referring to that wording. However, the negative and positive impacts could be applied in ESG reports". Further, externalities were applied in examined ESG reports by applying different terminology. Companies tended to focus on positive externalities by applying SDGs as framing tools. Negative externalities were also referred to in examined companies to a minor extent, but not by applying SDGs. Finally, assessed data from interviews and ESG reports indicated appliance of externalities in ESG reports by applying different terminology. There was little focus on negative externalities in examined ESG reports.

4.6.3 Is there consensus regarding the use of externalities in ESG reports?

Interviewee 1 said, "there is a lack of consensus regarding the wording, however there is consensus regarding the content of externalities". Further, ESG reports indicated a lack of consensus regarding the applied terminology of the concept. However, there was somewhat consensus regarding the content. Theory indicated consensus regarding the overall meaning of positive and negative externalities (Laffont, 1989). Finally, assessed data from interviews, ESG reports, and examined theory indicated consensus regarding the content of the concept, but not regarding the terminology.

4.6.4 Does applying externalities in ESG reports influence company activities?

Interviewee 2 said, “it is likely that externalities influence company activities as pointing out negative effects of company activities make it more important to act on the matters underlined as problematic. The latter is considered important to enhance the quality on sustainability performance”. Interviewee 1 said, “I would think so, as illuminating negative effects of company activities shows where the effort on sustainability-related issues should be prioritized. Further, ESG reports indicated a correlation between positive externalities and sustainable company activities. However, it was difficult to draw upon the assumption whether the focus on externalities influenced sustainable performance. Theory indicated a need to address positive and negative side-effects of company business to refocus activities to be aligned with high sustainable performance, both in mitigation and adaptation (Laffont, 1989). Finally, assessed data from interviews, ESG reports, and examined theory indicated that focusing on externalities in ESG report could enhance sustainability performance.

4.7 Corporate social responsibility

4.7.1 Is corporate social responsibility relevant to ESG reporting?

Interviewee 1 said, “the concept of corporate social responsibility is diluted. It would be better just to use the word sustainability or corporate responsibility as corporate social responsibility implies that the social aspect is a secondary priority that comes after other priorities within sustainability”. Further, ESG reports indicated corporate social responsibility to be relevant to certain companies. However, the concept could be replaced by other terms and concepts. Theory indicated relevance towards sustainability on an overarching level. However, the concept of corporate social responsibility has in recent years been integrated into other theories and concepts of sustainability (Habisch et al., 2004; Montiel et al., 2014). Finally, assessed data from interviews, ESG reports, and examined theory indicated some relevance of the concept, although other evolved theories and concepts of sustainability cover the content of corporate social responsibility better.

4.7.2 Is corporate social responsibility applied in ESG?

Interviewee 1 said, "corporate social responsibility is an essential part of ESG reporting. However, it should be an integrated part of sustainability rather than a diluted separate category. Corporate social responsibility is probably still being applied in ESG reports by some companies on Oslo stock exchange due to hangtime in the system, although the term is outdated". Further, corporate social responsibility is applied in examined ESG reports to a small extent. Finally, data from interviews and ESG reports indicated that corporate social responsibility was applied in ESG reports to a minor extent.

4.7.3 Is there consensus regarding corporate social responsibility in ESG reports?

Interviewee 1 said, "the SDGs have clarified the concept of sustainability as intended, and therefore the need for corporate social responsibility as an individual concept is unnecessary. There is no consensus regarding corporate social responsibility because there are better ways of defining the concept or sub-concepts of sustainability". Further, ESG reports indicated little consensus regarding the appliance of the term. There seemed to be confusion regarding the difference between the term and other terms within the concept of sustainability. Theory indicated a lack of consensus regarding the content of corporate social responsibility, and more specific details on what it entails is illuminated in other concepts such as stakeholder theory (Freeman et al., 2010; Habisch et al., 2004; Montiel et al., 2014). Finally, assessed data from interviews, ESG reports, and examined theory indicated little consensus regarding the content of CSR.

4.7.4 Does corporate social responsibility influence company activities?

Interviewee 1 said, "the appliance of corporate social responsibility in ESG reporting probably has little effect on company activities isolated if not taken seriously by the whole organization. Parallels can be drawn from sustainability". Further, examined ESG reports indicated little influence on the general focus on sustainability for companies referring to corporate social responsibility in their ESG reports. Theory on the topic was general. However, branches of this concept have been essential to affect company activities in a sustainable direction so one might argue that it was a pioneering concept to motivate and pressure companies to enhance sustainable performance (Habisch et al., 2004; Montiel et al., 2014). Finally, assessed data from interviews, ESG reports, and theory indicated little influence on enhanced sustainable activity for companies applying the concept in ESG reports. However, it can be argued to be a pioneer concept within sustainability and probably has influenced the overarching focus on sustainability.

4.8 EU taxonomy

4.8.1 Is the EU taxonomy relevant to ESG reporting?

Interviewee 1 said, “the taxonomy is relevant for ESG reporting as it presents a specific framework for considering what should be labeled as sustainable activities, which complements the lack of concrete measures in the SDGs. An extreme example could be a coal plant defining its activity as sustainable as it fulfills SDG nr. 1 and 8, ending poverty and promoting sustained economic growth. The latter example would not be categorized as sustainable by the taxonomy”. Further, considering the limited time since the taxonomy entered into force, there were clear indications that the taxonomy was relevant towards ESG reporting and will be increasingly so in the future. However, the relevance of the taxonomy towards Norwegian companies differed as some companies referred to the taxonomy and some only to a minor extent. Theory indicated the taxonomy as increasingly relevant in the coming years, especially for companies conducting business inside the EU as juridical requirements from the union will take effect (EU, 2021b; Lucarelli et al., 2020). Finally, assessed data from interviews, ESG reports, and examined theory indicated the taxonomy to be relevant to ESG reporting although it was not juridically binding for Norwegian companies at the current moment. However, it will probably be implemented into Norwegian law in the future (Regjeringen, 2021)[35].

[35] https://www.regjeringen.no/no/aktuelt/nye-regler-om-barekraftig-finans-vil-ikke-tre-i-kraft-fra-nyttar/id2892207/

4.8.2 Is the taxonomy applied by companies listed on Oslo stock exchange?

Interviewee 1 said, “companies on Oslo stock exchange are probably starting to use the taxonomy for guidance towards ESG reporting, at least the most prominent companies. It will be increasingly important as the taxonomy takes juridically effect”. Further, ESG reports indicated that the taxonomy was applied as guidelines, although examined ESG reports represented Norwegian companies. They had no legal obligations to address the issues in the taxonomy, but they probably will be in the future (Regjeringen, 2021). Finally, assessed data from interviews and ESG reports indicated that the taxonomy was being implemented in ESG reports for certain companies. However, there were no legal obligations for Norwegian companies at the current moment. It could be an attempt to increase sustainability reputation or simply because the taxonomy is likely to be implemented into Norwegian law soon.

4.8.3 Is there consensus regarding the use of the taxonomy in ESG reports?

Interviewee 1 said, “there is already consensus regarding the appliance of the taxonomy in ESG reporting as it is a clear set of regulations that is hard to misunderstand.” Further, ESG reports indicated consensus regarding the content of the taxonomy but not necessarily on how to report on it. The theory presented the taxonomy by the delegated acts is a set of rules and guidelines with clear rules for considering sustainable company activities and there is only one way of fulfilling the obligations of the taxonomy (EU, 2021b; Lucarelli et al., 2020). Finally, assessed data from interviews, ESG reports, and examined theory indicated consensus regarding the content of the taxonomy. On the other hand, there might be some confusion regarding the relevance for Norwegian companies as they are not a part of the EU. However, the taxonomy is considered implemented into Norwegian law in the future (Regjeringen, 2021).

4.8.4 Does applying the taxonomy in ESG reporting affect company activities?

Interviewee 1 said, “applying the taxonomy is ESG reporting is likely to influence company activities, as achieving regulations set by the taxonomy can enable favorable green loans and ease capital raise. The economic incentives push companies in a sustainable direction”.

Further, there were indications from ESG reports that companies considered necessary for the green transition more frequently referred to the taxonomy and the delegated acts. However, it was difficult to draw upon assumptions whether they applied the taxonomy to show how sustainable they were, or whether the taxonomy represented sustainable business opportunities for these companies. Theory implied direct and measurable effects on company activities to pressure and motivate companies to conduct business towards a sustainable trajectory (EU, 2021b; Lucarelli et al., 2020; Stefano, 2022). Companies complying with the taxonomy could gain better support from banks and regulators, resulting in increased commercial benefit (Esposito et al., 2022). Finally, assessed data from interviews ESG reports, and examined theory indicated the taxonomy to be effective in pressuring and motivate companies to conduct sustainable activities. Companies complying with the taxonomy could gain commercial benefit, and therefore it is likely that the taxonomy affects company activities.

4.8.5 Is there more to add on the topic of the taxonomy?

Interviewee 1 said, "the taxonomy with the delegated acts is central for many organizations as clear definitions and guidelines for sustainable activities are formalized. The taxonomy defines sustainable company activities which is good in terms of enhanced clarification and consensus of sustainability. However, the taxonomy does not consider human-related values at the current moment. When that said, the benefits of implantation of the taxonomy outweigh the downsides as outlined". Further, ESG reports indicated an increased focus on the taxonomy. Examined ESG reports indicated that companies put the effort into meeting potential future obligations. The theory presented the taxonomy by the delegated acts as a set of rules and guidelines with clear rules for considering sustainable company activities (EU, 2021b; Lucarelli et al., 2020; Stefano, 2022). The taxonomy did not take human values and immaterial considerations which is an essential part of the concept of sustainability (Wilkinson et al., 2001). Finally, assessed data from interviews, ESG reports, and examined theory indicated the relevance of the taxonomy as a tool to enhance sustainability performance for Norwegian companies. The EU taxonomy fulfills an existing gap to enable better implementation and measurement of sustainability performance. However, it should not be considered "a holy grail" for measuring sustainable company performance as it lacks the ability to measure human-related values.

5 Discussion

Before diving into a discussion regarding different categories, a summary of the main findings will be presented. The SDGs and the EU taxonomy stood out as the frameworks with the highest potential to influence company activities in a sustainable direction (EU, 2021b; Nations, 2015a). Existing literature, interviews, and the investigation together drew on this conclusion. They filled existing gaps by enhancing the quality of sustainable company activities for several reasons. First, they made sustainability easier to understand (Wilkinson et al., 2001). Second, they grasped both the technical and human-related values needed to see sustainability in a holistic view. Third, the taxonomy made certain aspects of sustainability measurable by introducing technical screening criteria that defined sustainable company activities (EU, 2021b). By applying these frameworks, it is more likely to understand how large Norwegian companies frame the concept of sustainability, and further increase sustainable performance.

The presented data outlined an overview by assessing findings relevant to investigating the underlying meaning, suitable for producing new theory (Bentley, 2015). The following chapter will highlight relevant observations and land initial questions to illuminate the research problem and underlying research sub-questions. As outlined at the beginning of the thesis, the concept of sustainability needed clarification to increase the quality of ESG reporting (Chang et al., 2017; Wilkinson et al., 2001). However, there are probably as many thoughts on how it could be achieved as there were experts in the field of ESG. When that said, this research detected recurring challenges "gaps" in the examined material suitable for highlighting challenges with the potential to increase clarification and performance on sustainability-related measures. By detecting and discussing them, it is possible to present possible solutions to enhance sustainable performance for large Norwegian companies. Data presentation and assessment highlighted gaps in every category, however the discussion will focus on the most important categories to enhance sustainable performance.

Initially, it is relevant to briefly elaborate on the search words applied when analyzing ESG reports. Table. 4, and figure. 1 illuminated that the coding lacked references to externalities and green economics (Laffont, 1989; Stoknes, 2020). This was interesting as the taxonomy and the SDGs were presented in theory as the most applicable frameworks to enhance sustainable performance on these categories (EU, 2021b; Nations, 2015a). This indicates that these frameworks might be able to fill these gaps and should be considered applied by large Norwegian companies.

Moving to the presentation and analysis of the qualitative data, it was evident that the first category illuminated a lack of consensus regarding the content of the concept of sustainability itself. ESG reports and theory strived to present sustainability understandably (Chang et al., 2017; Wilkinson et al., 2001). Interviewees had unique ideas of sustainability, although they highlighted the need for knowledge-enhancement regarding certain sub-categories related to sustainability. Further, interviewees highlighted the need for concrete measures to define sustainable company activities. This could imply that the concept of sustainability was so broad that it confused. Confusion could result in a lack of sustainable action from companies, even though they could be willing to act if given concrete tools to increase sustainability performance. The latter could be improved by presenting concrete measures to improve sustainability-related issues. Interviewees also emphasized the need for concrete tools to identify and implement sustainable strategies for companies on Oslo stock exchange. Further, research detected a lack of focus on human-related values (Freeman, 2022). However, the most practical tools for enhancing sustainability performance were considered SDGs and the EU taxonomy combined. They grasped both the human-related and technical measures demanded to mitigate outlined gaps detected in this research.

Examined theory underlined the interpretations from interviewees regarding the concept of sustainability to be vague. Theory highlighted the importance of companies reporting on sustainable activities and the SDGs as useful tools for this purpose (Global Reporting Initiative, 2017). The SDGs presented categories to help prioritize the effort to enhance sustainable performance, and it grasped a holistic view of sustainability, including human-related values (Freeman, 2022). The UN presents the SDGs as part of coping with unclarities regarding what should be labeled as sustainable priorities (Nations, 2015a). These goals could be applied to clarify sustainable priorities in ESG reporting. The UN encourages companies to include sustainable practices in their reporting, and this was explicitly specified in the SDG nr. 12.6 (Global Reporting Initiative, 2017). Many companies have already applied SDGs to label their activities and future targets, making it easier for actors to find sustainability information. SDGs were intuitively easy to understand as they added a general description of sustainable topics that were more complex (Nations, 2015a). Although companies, organizations and politicians adopted the SDGs, voices of criticism pointed fingers towards the SDGs for being hard to measure with single indicators (Ordaz, 2019). Alternatively, big data were suggested to measure specific aspects of the SDGs, but utilizing big data had limitations as not all people would necessarily be aware of their data being re-used for monitoring purposes (MacFeely, 2019). In other words, the SDGs were not indicators without faults when measuring sustainability performance as this is difficult, but considering pros and cons, they grasped the holistic aspect of sustainability. However, the taxonomy arrived as a "new solution" to meet challenges that the SDGs strived to address, like how to measure a company's sustainable performance in these categories (Lucarelli et al., 2020).

Technical screening criteria were presented through the taxonomy and its delegated acts, which ultimately concretized how company activities should be conducted to be classified as sustainable (EU, 2021b). The theory presented the taxonomy as a helping tool to enhance sustainable performance for companies running the economy (Esposito et al., 2022; Lucarelli et al., 2020). On an overarching level, the objective of the EU taxonomy was to direct investments in a sustainable direction to meet the objectives of the EU green deal with the intended target of decoupling economic growth from resource use and lowering greenhouse gas emissions (EU, 2019). Doing this, "should create security for investors, protect private investors from greenwashing, help companies to become more climate-friendly, mitigate market fragmentation and help shift investments where they are most needed" (EU, 2021b, pp. 1, chapter 3). This is a long-awaited tool for enhancing sustainable performance as the concept of sustainability is vague as elaborated in this thesis. However, the taxonomy did not include human-related values like the SDGs (Nations, 2015a).

The SDGs covered a wide range of issues that should be addressed, including non-material challenges like human value and integrity. It arguably widened the scope of sustainability. Conceptualizing sustainability in a wider scope was not sufficiently covered by measurement tools that were technical. Further, there were reasons for questioning technical measurement tools as the "holy grail" for enhancing sustainable development. The taxonomy was technical in character, and could not embrace the holistic approach that included intangible human values (EU, 2021b). These values could be better included by applying SDGs as measurement tools to grasp the complexity of non-technical characteristics in sustainable reporting (Nations, 2015a).

Together, the taxonomy and the SDGs narrowed the most substantial gaps detected in this research. Further, they seemed to fulfill each other's weakness by presenting solutions where it was needed. They also mitigated gaps detected connected to sub-categories on sustainability. The latter is best explained by their contribution to mitigating gaps on sub-categories of sustainability like; lack of focus on marginalized stakeholder groups, lack of implantation of green economics, need for increased focus towards negative externalities, and need for replacing the concept of CSR. Following are some examples where both the taxonomy and the SDGs could be applied to enhance sustainable performance.

Marginalized stakeholder groups ware given little focus in stakeholder theory than other stakeholder groups with higher impact on company business (Derry, 2012). “By confronting and rethinking the foundational assumptions of stakeholder theory, business and society scholars can identify and pursue research questions that more effectively address contemporary social challenges” (Derry, 2012, p. 1). By focusing on SDG nr. 5 gender equality, SDG nr. 8 decent work and economic growth, and SDG nr. 10 reduced inequalities, the SDGs can increase the focus on marginalized stakeholder groups to include a broader range of stakeholders with a higher focus on sustainability (Nations, 2015a). This gap is best addressed by applying SDGs to company strategy to narrow the gap outlined. The taxonomy would be too technical for the task (EU, 2021b). However, the taxonomy was relevant when examining the lack of implementation of green economics in companies as the taxonomy facilitates sustainable company activities and pressures companies to follow the staircase model presented by Stoknes (EU, 2021b; Stoknes, 2020). Green economics outlined a need for concrete, measurable action to lower greenhouse gas emissions, and enhance resource productivity (Stoknes, 2020). Therefore, the taxonomy was applicable to pressure companies to focus more on green economics in their business strategy and thus narrow this gap. Other gaps detected could be closed or narrowed by applying both frameworks. For example, the research illuminated a lack of focus on negative externalities in companies (Laffont, 1989). The SDGs could be applied by presenting SDGs they perform poorly against instead of those they perform well (Nations, 2015a). The latter could increase sustainability performance as it directs pressure to mitigate the most destructive activities of a company, and reduce greenwashing (Xingqiang, 2015). The taxonomy through the delegated acts was addressed to mitigate these activities, although it did not address human-related values (EU, 2021b; Freeman, 2022). However, the combination of the two could significantly increase sustainability performance if companies are willing to expose their most harmful impacts through ESG reporting. However, the willingness to expose negative impacts is not examined in this research but is highly relevant for further investigation to ensure the implementation of the latter suggestion. At last, the SDGs and the taxonomy concretize the unclear concept of corporate social responsibility by the focus on categorization and implementation of sustainable company activities, both in the technical and human-related aspects (Global Reporting Initiative, 2017; Habisch et al., 2004; Lucarelli et al., 2020).

As exemplified, the taxonomy and the SDGs are applicable tools to enhance company sustainable performance (EU, 2021b; Nations, 2015a). The taxonomy and SDGs enhanced the overall quality and transparency of ESG reporting for large Norwegian companies listed on Oslo stock exchange Euronext (EU, 2021b; Euronext, 2020; Global Reporting Initiative, 2017). Strengths towards findings are outlined as a contribution to enhancing company sustainable performance. However, three gaps detected in this research was not sufficiently answered and will be briefly elaborated.

The SDGs are applicable to categorize and redirect focus on human-related values (Freeman, 2022; Nations, 2015a). However, SDGs are not applicable to measure performance on human-related values. It is hard, if not impossible, to measure accurately. Nonetheless, it would be suitable for sustainable development if such a measurement tool was available. Further, it would be helpful to understand the seeming resistance from companies to present negative impacts of their company activities to come up with potential solutions to this challenge (Laffont, 1989). Finally, it would be helpful to examine if results from this study are transferrable to other companies given other premises. The suggestions for further research could lead to significant results for enhanced sustainable performance and transparency for large Norwegian companies.

At last, there are limitations to the findings that should be mentioned. First, the research conducted is not peer-reviewed by other scientists, which would be helpful in detecting weakness in the conducted research (Tennant, 2018). Second, findings could differ if conducted under other circumstances like examining other ESG reports, interviewing other informants, and applying different theories to illuminate the problem statement. The latter would probably lead to a different result, but hopefully close to the main findings from this research. However, the conducted research should be helpful for people and companies interested in enhancing sustainable performance and contributing toward a sustainable trajectory at present and in the future. If applied, SDGs and the taxonomy make sustainability more concrete, more precise, easier to understand, easier to implement, and easier to measure, with the ultimate result of enhanced quality in ESG reporting and sustainable performance (EU, 2021b; Kocmanova et al., 2012; Nations, 2015a).

6 Conclusion

- ***How is the concept of sustainability framed by large Norwegian companies, and how can knowledge on the topic improve their sustainable performance?***

The outlined research question was the foundation for the conducted research. To illuminate the research question, it was necessary to examine relevant established theory on the topic of sustainability to investigate issues anchored to the problem statement effectively. A conducted literature review presented the concept of sustainability to be diluted and difficult to understand. Therefore, theories and concepts enhancing the understanding of sustainability were examined in greater depth. Sustainability, ESG reporting, SDGs, stakeholder theory, green economics, negative and positive externalities, corporate social responsibility, and the EU taxonomy were examined. These categories laid the foundation for further research questions to illuminate the main problem statement. Underlying research sub-questions were:

- *What is company sustainability?*
- *How are theories and concepts within company sustainability relevant to large Norwegian companies listed on Oslo stock exchange?*
- *How can large Norwegian companies listed on Oslo stock exchange become more sustainable?*

These sub-questions were applied to conducted research strategy and research methods. Semi-structured interviews, document analysis, and existing research on the topic revealed several interesting gaps that should be addressed to answer the main research question.

The first underlying research sub-question intended to clarify understanding of the concept of sustainability. This research presented sustainability to be broad and complex. Confusion regarding the overarching concept could lead to wrong assumptions and further inadequate measures to enhance sustainable performance. The second research question underlined the relevance of presented theories and concepts for large Norwegian companies as it detected gaps where substantial effort should be made to enhance sustainability performance. Further, all theories and concepts were applied in ESG reports, excluding green economics and positive and negative externalities. The latter revealed a lack of focus towards important categories that were highlighted by interviewees and theory. However, the SDGs and the taxonomy were considered applicable to direct more focus on all the presented categories, including green economics and externalities to close the mentioned gaps. By examining common understanding in large Norwegian companies, the SDGs and the taxonomy were also the ones with the highest consensus. Highlighting this research question revealed these frameworks as applicable and understandable. The latter was necessary for suggesting pragmatic steps to enhance sustainability performance. The third underlying sub-question highlighted SGDs and the EU taxonomy as suitable to categorize, implement and measure areas of priority within sustainability, and they also stood out as the frameworks with highest potential to influence company activities in a sustainable direction. Existing research on the topic, interviews, and document analysis together drew on this conclusion.

Finally, by applying SDGs and the EU taxonomy it is more likely to understand how the concept of sustainability is framed by large Norwegian companies and improve their sustainability performance.

7 Proposals for further research

Suggestions for further research are briefly presented to highlight areas of interest that this research managed to illuminate but not answer. The methodological approach applied in this research was suitable for enhancing understanding regarding the framing of sustainability in large Norwegian companies and highlighting some suggestions to enhance sustainable company performance. However, the research had limitations regarding the ability to examine in greater depth, and as a result, some areas of interest that emerged under the research remain unanswered. The first area of interest pointed at companies' resistance to focus on negative externalities as part of their ESG reporting. The second area of interest pointed at the challenge of measuring human-related values. Finally, it would be useful to examine if findings from this research is transferrable to other companies given other premises. Three research questions are presented as suggestions for further research:

- *Why is there seemingly resistance to present negative impacts of company activities?*
- *How can human-related values presented by the SDGs be measured?*
- *Are results from this research relevant to other companies given other premises?*

The proposals for further research are only one step further on a never-ending path to ensure scientific progress in necessary fields to enhance sustainability and prosperity for humankind, now and in the future. Hopefully, this research has contributed to a better understanding of the complex concept of sustainability and ESG reporting, so that actors with interest have new tools to evaluate, prioritize, and implement strategies to enhance sustainable performance for large Norwegian companies on an overarching level by applying the SDGs and the EU taxonomy.

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Attachments

Tables

Table 1: Sustainable development goals.

Sustainable Development Goal	**Description**
SDG nr. 1: No poverty.	Ending extreme poverty for all, everywhere. The current measuring tool is income below 1.25 dollars a day (Global Reporting Initiative, 2017, p. 1; Nations, 2015a)[36].
SDG nr. 2: Zero hunger.	End hunger and ensure safe and nutritious food for everyone (Global Reporting Initiative, 2017, p. 1; Nations, 2015a).
SDG nr. 3: Good health and well-being.	Ensure good health and well-being on a universal scale, including financial risk protection to make good health achievable for everyone (Global Reporting Initiative, 2017, p. 2; Nations, 2015a).
SDG nr. 4: Quality education.	Ensure free and applicable quality education for all (Global Reporting Initiative, 2017, p. 2; Nations, 2015a).
SDG nr. 5: Gender equality.	End discrimination of women, and ensure same rights and recognition in work life as well as in private life (Global Reporting Initiative, 2017, p. 2; Nations, 2015a).
SDG nr. 6: Clean water and sanitation.	Ensure access to clean and affordable drinking water and sanitation for all (Global Reporting Initiative, 2017, p. 3; Nations, 2015a).
SDG nr. 7: Affordable and clean energy.	Ensure clean and affordable energy for everyone and increase the share of

[36] https://www.globalreporting.org/media/v5milwee/gri_ungc_business-reporting-on-sdgs_analysis-of-goals-and-targets.pdf

	renewables in the world's energy mix (Global Reporting Initiative, 2017, p. 3; Nations, 2015a).
SDG nr. 8: Decent work and economic growth.	Enhance economic growth with especially focus on poor countries, and ensure decent work opportunities for everyone, including youth and people with disabilities (Global Reporting Initiative, 2017, p. 3; Nations, 2015a).
SDG nr. 9: Industry innovation and infrastructure.	Ensure reliable and affective infrastructure that is affordable for everyone (Global Reporting Initiative, 2017, p. 4; Nations, 2015a).
SDG nr. 10: Reduced inequalities.	Ensure a higher rate of income for the people with lowest income, and a higher percentage rate than the average (Global Reporting Initiative, 2017, p. 4; Nations, 2015a).
SDG nr. 11: Sustainable cities and communities.	Ensure quality living standards in cities and communities including basic services, housing, transport, green spaces and more (Global Reporting Initiative, 2017, p. 4; Nations, 2015a).
SDG nr. 12: Responsible consumption and production.	Ensure responsible consumption and production by lowering waste, increasing recycling, reduce release of chemicals and more (Global Reporting Initiative, 2017, p. 5; Nations, 2015a).
SDG nr. 13: Climate action.	Ensure climate change adaptation and mitigation measures to fight climate change (Global Reporting Initiative, 2017, p. 5; Nations, 2015a).

SDG nr. 14: Life below water.	Reduce and prevent marine pollution. Regulate overfishing and help restore coastal ecosystems (Global Reporting Initiative, 2017, p. 5; Nations, 2015c).
SDG nr. 15: Life on land.	Protect forests and enhance biodiversity on universal scale, and help restore the latter if already threatened (Global Reporting Initiative, 2017, p. 6; Nations, 2015a).
SDG nr. 16: Peace, justice, and strong institutions.	End exploitation, trafficking and reduce violence and related death tolls all over the planet. Combat crime, and reduce corruption, as well as ensuring fundamental freedom to all in line with national and international legislations (Global Reporting Initiative, 2017, p. 6; Nations, 2015a).
SDG nr. 17: Partnerships for the goals.	Strengthen the partnerships for the goals by ensuring coherency in policymaking towards the SDG (Global Reporting Initiative, 2017, p. 7; Nations, 2015a).

Table 2: Examined companies.

Sector	**Company**	**Main activity**
Industry	Hydro	Hydro is a power and aluminum producer (Hydro, 2022)[37].
Industry	Norske Skog	Norske Skog is a paper producer aimed at the newspapers, magazines and packaging (Skog, 2022)[38].
Oil, gas, and service related	Equinor	Oil and gas producer with an increasing production of

[37] https://www.hydro.com/no-NO/
[38] https://www.norskeskog.com/about-norske-skog

		renewable energy production as part of their energy mix, but still considered mainly an oil and gas company (Equinor, 2022)[39].
Oil, gas, and service related	Aker Carbon Capture	Carbon capture and storage. Defined as oil and gas service company by Oslo stock exchange search tool[40], but their activity includes services to remove CO_2 from cement production, bio and waste to energy solutions, blue hydrogen solutions, and gas to power solutions (Capture, 2022)[41].
Building and construction	AF Gruppen	Construction and building of real estate and other facilities. Also involved in energy and environment business, offshore business, but building and construction considered their main activity (Group, 2022)[42].
Building and construction	Veidekke	Construction and building. Building and maintenance of roads (Veidekke, 2022)[43].
Renewable energy and energy storage	Scatec Solar	Planning, building, owning and drifting solar power

[39] https://www.equinor.com/en/about-us.html
[40] https://live.Oslo stock exchange.com/nb/markets/oslo/equities/list#pageFilters
[41] https://akercarboncapture.com/about-us/
[42] https://afgruppen.no/om-oss/
[43] https://www.veidekke.com/about-veidekke/

		facilities. The company also has activities within wind and hydro power (Scatec, 2022)[44].
Renewable energy and energy storage	Nel	Production of hydrogen production components and hydrogen filling facilities (Nel, 2022)[45].

Table 3: Search words applied for coding ESG reports.

Sustainable development goals	Sustainable development goal, SDG.
Stakeholders	Stakeholder.
Sustainability	Sustainability, sustainable.
Green economics	Green economics, green economy.
Negative and positive externalities	Externalities, externality.
Corporate social responsibility	Corporate social responsibility, CSR.
EU taxonomy	Taxonomy, delegated act.

Table 4: Coding results from ESG reports.

	A	B	C	D	E	F	G	H	I
2	Total pages examined	315	144	80	129	203	167	179	156
3	Referance to sustainable development goals	9	126	12	12	3	15	9	24
4	Referance to stakeholders	69	43	23	29	2	22	28	19
5	Referance to sustainability	165	154	162	278	20	438	43	79
6	Referance to green economics	0	0	0	0	0	0	0	0
7	Referance to negative and positive externalities	0	0	0	0	0	0	0	0
8	Referance to corporate social responsibility	11	3	0	0	33	2	0	2
9	Referance to the EU taxonomy	10	11	2	111	3	30	13	10

Table 5: Semi-structured interviews.

Interviewee:	**Date:**	**Location:**	**Sector:**
Interviewee 1	25.04.2022	Oslo	Finance
Interviewee 2	27.04.2022	Stavanger	Finance

[44] https://scatec.com/about/about-us/
[45] https://nelhydrogen.com/about/

Table 6: Analysis and presentation of qualitative data coupled to sustainability.

What is the content of sustainability?	
Data from Interviews	Interviewee 1 presents “sustainability as a broad term that captures a wide range of sustainability-related issues. It covers many aspects outside the well-established climate discourse, like economy, technology, renovation, material use and non-material human values”.
Data from ESG reports	ESG reports indicate the content of sustainability to be broad, however with a focus on certain categories. These are planet, people, and climate. The content of sustainability is broad even within the mentioned categories. More specifically ESG reports outline sustainability as getting to net zero in terms of climate gas emissions, protecting the environment, people, and society, reducing climate and ecological footprint, focus on governance and transparency, prosperity, eliminating injuries, diversity, equality, decent work, health, safety, and security. Measuring sustainability performance are outsourced to other organizations working with: -Materiality analysis -SDGs -Corporate governance -GRI -GHG -Science based target initiative -Global compact guiding principals

	-World economic forum stakeholder capitalism metrics -UN guiding principles on business and human rights.
Theory	Theory presents sustainability as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, pp. chapter 2, first section). Over 300 definitions of the concept of sustainability are presented in literature (Chang et al., 2017).
Assessment	Data from interviewees, ESG reports, and theory indicate similarities although data from interviews and ESG reports are more concerned with specific definitions and categories than presenting a holistic view of sustainability.
Is sustainability relevant towards ESG reporting?	
Data from interviews	Interviewee 1 says “sustainability is relevant towards ESG-reporting as it is an essential part of a company. By the latter meaning that a company needs to have influence outside traditional economic interests”. Interviewee 2 says “sustainability is something everyone needs to take into consideration including companies running the economy”.
Data from ESG reports	Sustainability is the core of the investigated ESG reports, and the significant focus sustainability is illustrated in figure 1. All companies refer to sustainability as one of

	their main priorities, although the term is applied somewhat different in each report.
Theory	Theory indicates sustainability to be relevant towards ESG reporting. The Brundtland report set out directions for sustainable development, organizations and private companies continue to frame new trajectories for sustainable development which they present through ESG reports (Euronext, 2020). ESG represents environment, social and governance, and it is a collective designation of these concepts (Matos, 2020).
Assessment	Data from interviews, ESG reports, and theory indicate common ground towards the relevance of sustainability as a cornerstone towards ESG reporting.
Is sustainability part of ESG reports produced by companies listed on Oslo stock exchange?	
Data from interviews	Interviewee 1 says "sustainability is considered a substantial part of ESG-reports published by companies listed on Oslo stock exchange, although there might be some disagreement or lack of knowledge regarding the term sustainability". Interviewee 2 says "yes, I recon it is a part of all ESG reports produced by companies listed on Oslo stock exchange".
Data from ESG reports	Sustainability is a significant part examined ESG reports and is referred to directly and applied in business strategy.
Theory	Theory is not intended to address the issue in terms of empirical research.

Assessment	Data from interviews and ESG reports indicate sustainability as a substantial part of examined ESG reports.
Is there consensus regarding use of sustainability in ESG reporting?	
Data from interviews	Interviewee 2 says “there might be some disagreement or lack of knowledge regarding the term sustainability”. Interviewee 1 says “many companies apply different terms when presenting sustainability-related issues in ESG-reports. There is little consensus regarding the use of sustainability, and there is lack of good tools to measure sustainability. However, there has become more consensus the last years because of increased focus and knowledge enhancement on the field of sustainability, as well as concept clarification due to the SDGs”.
Data from ESG reports	There is not fully consensus regarding description of the concept, however there is to a large extent consensus regarding applicable standards and frameworks for defining sustainability performance.
Theory	Theory insinuates lack of consensus regarding the term and understanding of the term sustainability, and one over 300 definitions of the concept of sustainability are present in literature (Chang et al., 2017).
Assessment	Data from interviews, ESG reports, and theory indicate a low degree of consensus regarding the content of sustainability, however there is increasing degree of consensus regarding applicable standards for

	defining sustainability like the SDGs and EU taxonomy (Chang et al., 2017; EU, 2021b; Nations, 2015a)[46][47].
How can companies listed on Oslo stock exchange be more sustainable?	
Data from interviews	Interviewee 1 says "companies could enhance their sustainability performance if better quantified frameworks and measurement tools were available. Tools that clarified what, why, and how the companies could perform better in a concrete way that is measurable. The taxonomy will probably mitigate some of these issues. However, numbers are not bulletproof as numbers could be tricked with in statistics and analytics as they do not easily show the whole picture within sustainability". Interviewee 2 says "it is hard to be good at everything, including sustainability. Therefore, it could be good for a company's sustainability performance to outsource sustainability related issues to specialists on the topic. This could increase the quality and objectivity of ESG reports".
Data from ESG reports	ESG reports indicate enhanced sustainable performance by applying SDGs and the EU taxonomy. They can help prioritize sustainable categories and further suggest concrete measures to achieve targets on sustainable performance.
Theory	Theory presents suggestions for companies to become more sustainable. Most

[46] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R2139

[47] https://sdgs.un.org/goals

	significant and pragmatic highlights are considering SDGs as holistic guidelines, while the taxonomy are presented as technical guidelines to enhance sustainability performance (EU, 2021b; Nations, 2015a)[48][49].
Assessment	Data from interviews, ESG reports and examined theory suggest applying SDGs in ESG reports to enhance priority and understanding of categories related to sustainability, while the EU taxonomy is suggested to implement concrete measures to enhance sustainability performance on non-human related issues by applying screening criteria presented by the delegated acts (EU, 2021b; Nations, 2015a).
Does applying sustainability in ESG reporting influence company activities?	
Data from interviews	Interviewee 1 says “sustainability in ESG-reports has little effect on organizations presenting reports if the content is not taken seriously by the whole organization, from leaders to people with special responsibility on sustainability-related matters”. Interviewee 2 says a general focus on sustainability is good, but it is difficult to conclude whether applying sustainability in ESG reports influence company activities”.
Data from ESG reports	Examined ESG reports indicate little connection between applying the term sustainability in ESG reports and actual sustainable company activities. It is

[48] https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en
[49] https://sdgs.un.org/goals

	important to underline that this goes for their primary activities, and it does not necessarily apply for secondary activities. One example is Equinor's increasing focus on renewables and carbon capture and storage. Equinor also had a relatively high focus on sustainability compared with total pages examined, although it was hard to draw upon assumptions whether this was connected to greenwashing as the overall activities of the company was considered bad in terms of mitigating climate change (Xingqiang, 2015).
Theory	Theory does not point directly at the use if sustainability as a term, but rather the framing of sustainability as important to attract investors, qualified workforce and costumers (Adams & Frost, 2008; Reboredo et al., 2017).
Assessment	Data from interviews, ESG reports, and examined theory indicate a minor connection between references to sustainability in ESG reports and sustainable secondary activities. If taken seriously by the whole organization sustainability could affect company activities.

Table 7: Analysis and presentation of qualitative data coupled to ESG reports.

Do ESG reports show a realistic picture of sustainable company activities?	
Data from interviews	Interviewee 1 says "ESG-reports nowadays show a relative realistic picture of a company's activities, although it is hard for the writers of the reports to be completely

	honest regarding the content presented in these reports. Selection of words and overall rhetoric often show a polished picture of the company's activities although there has been substantial progress on this area recent years". Interviewee 2 says "I think they show a relative realistic picture of a company's activities, however it is hard to produce good quality in ESG reports when the area of sustainability covers a wide range of areas. However, this could be mitigated by distribute or outsource work on specific areas within sustainability to people or organizations with expertise on a specific field that is deficient. The latter could also increase objectivity and quality of the reports".
Data from ESG reports	ESG reports indicate a realistic picture of a company's activities, however with extra focus on their positive contributions to stakeholders and society. ESG reports does not show a realistic picture of company's effort to mitigate their negative externalities.
Theory	A heuristic literature search was conducted towards the issue, but it did not lead to enhanced knowledge due to lack of relevant theory available.
Assessment	Data from interviews and ESG reports indicated that examined companies presented a relative realistic picture of their activities, however by referring to the observation that companies tend to focus on their positive contributions and little on their

	negative contributions towards sustainability.
Do companies listed on Oslo stock exchange produce ESG reports?	
Data from interviews	Interviewee 1 says "companies listed on Oslo stock exchange probably publish ESG-reports but with individual different quality. The latter referring to the observation that few companies actually publish were they make a big difference, or more precisely where they mitigate negative impacts of their activities". Interviewee 2 says "I would assume most listed companies produce ESG reports".
Data from ESG reports	All eight companies analyzed produced ESG reports either as individual ESG reports or as integrated reports.
Theory	Theory indicated several standards for reporting on sustainability (Goby, 2022). Theory also indicated enhanced benefits for companies with high sustainability performance (Adams & Frost, 2008). Oslo stock exchange presents guidelines for producing ESG reports (Euronext, 2020).
Assessment.	Data from interviews, ESG reports and examined theory indicated that companies listed on Oslo stock exchange produce ESG reports (Euronext, 2020).
Is there consensus regarding how to report on ESG related measures?	
	Interviewee 1 says "there is starting to be consensus regarding how to report on ESG. The latter can in large be attributed to the appliance of materiality analysis, however all companies can, and should be better at

	reporting on negative effects of their activities”.
Data from ESG reports	ESG reports indicate medium consensus regarding how to report on ESG-related measures. Many companies apply the same standards when measuring sustainability performance, however it is not totally unified.
Theory	Theory indicates lack of consensus regarding how to report on ESG related measures (Goby, 2022). There is information regarding what the content of ESG reporting should include, but there is a jungle of indicators. On the contrary Oslo stock exchange presents guidelines for companies reporting in ESG related measures, and the SDGs and the taxonomy make it easier to achieve somewhat consensus (EU, 2021b; Euronext, 2020; Global Reporting Initiative, 2017). The latter is however not discussed in theory.
Assessment	Data from interviews, ESG reports, and examined theory indicated lack of consensus regarding priorities within sustainability, measuring and framing of sustainability, however SDGs and the taxonomy are good frameworks to achieve consensus (EU, 2021b; Nations, 2015a).
Do you think ESG reporting influence company activities?	
Data from interviews	Interviewee 2 says “ESG reports could have a positive effect on company activities if the goals set in the reports are taken seriously by the whole organization including

	management and leaders”. Interviewee 1 says “It is hard to conclude if ESG-reporting has a positive effect on company activities, or if it is just the general focus towards sustainability in society that effects the companies”.
Data from ESG reports	There were few indications that ESG reports affected company activities for so-called green companies like the solar company Scatec, and the hydrogen company Nel. There were indications that companies within the oil and gas industry and the building and construction industry had extra focus on enhancing their sustainability performance. It is however difficult to draw assumptions to whether ESG reports played a vital role in guiding companies to conduct sustainable activities, or whether companies felt pressure to promote sustainable contributions also referred to as greenwashing (Xingqiang, 2015).
Theory	Theory does not present significant correlation between ESG reporting and sustainability effects. However, ESG reporting seem to have an effect on stakeholders both positive and negative (Freeman et al., 2010; Laplume et al., 2008)
Assessment	Data from interviews, ESG report, and examined theory showed little indications of ESG reporting influencing company activities isolated. However, focus on sustainability throughout the whole

	organization could affect company activities.

Table 8: Analysis and presentation of qualitative data coupled to SDGs.

Are SDGs relevant towards ESG reporting?	
Data from interviews	Interviewee 1 says “The sustainable developments goals frame sustainability by defining and labelling what should be considered sustainable. The latter can reduce conceptual confusion as it points out categories that should be focused on to achieve sustainability, and this makes it easier to choose areas of priority within a company”. Interviewee 2 says “a company choosing its own SDGs to prioritize is not necessarily the best for objectivity and sustainability. The latter could be mitigated by outsourcing the job of prioritizing and deciding which SDGs that should be focused on to ensure objectivity and quality in this process”.
Data from ESG reports	ESG reports indicate SDGs to be relevant as they categorize focus areas within sustainability that are easy to present and easy to understand for people reading the reports (Nations, 2015a). However, they are not applied towards their negative externalities (Laffont, 1989).
Theory	Theory indicated that SDGs are relevant towards ESG reporting as they cover aspects within sustainability that grasp both human values and aspects related to planetary

	boundaries (Nations, 2015a; Steffen et al., 2015). Target 12.6 specifically addresses the need for adopting good sustainability practices in their reporting cycles and the global reporting initiative presents the SDGs as suitable for this task (Global Reporting Initiative, 2017).
Assessment	Data from interviews, ESG reports, and examined theory indicated SDGs to be relevant towards ESG reporting(Nations, 2015a). They could however contribute more to illuminate negative impacts towards sustainability. SDGs are not applied to present negative externalities of company activities at the current moment and should be considered to focus on mitigating severe consequences of company activities (Laffont, 1989). Further assessment towards the SDGs should be considered outsourced to neutral part outside the company to increase objectivity and quality.
Are SDGs applied in ESG reports by companies listed on Oslo stock exchange?	
Data from interviews	Interviewee 1 says “the SDGs are probably used in ESG-reporting by companies listed on Oslo stock exchange, however with varying approaches.
Data from ESG reports	SDGs are applied in the examined ESG reports. It is conducted by internal assessment and priority on sustainability related issues. They focus on SDGs and more specifically the SDGs the company contributes to enhanced sustainable

	performance and not towards mitigating negative externalities.
Theory	Theory outlined that SDGs were developed by the UN[50] and recommended by the global reporting initiative[51] which many companies on Oslo stock exchange report to (Euronext, 2022c; Global Reporting Initiative, 2017).
Assessment	Data from interviews, ESG reports, and examined theory indicated that SDGs were applied in ESG reports to underline positive contributions towards sustainability, and SDGs were not applied to present negative externalities from company activities (Laffont, 1989; Nations, 2015a). There were few companies focusing on human-related values in the SDGs, however the reason for this was not clear.
Is there consensus regarding the use of SDGs in ESG reporting?	
Data from interviews	Interviewee 2 says "the SDGs make it easier to achieve consensus regarding sustainability". Interviewee 1 says "many probably apply the SDGs to show how good they are at sustainability performance instead of choosing or using the SDGs they can make a greater impact with".
Data from ESG reports	ESG reports indicate consensus regarding the use of SDGs as focus areas within sustainability where companies contribute positively to sustainability.
Theory	Theory presented SDGs as an option to help define a common framework and

[50] https://sdgs.un.org/goals
[51] https://www.globalreporting.org/

	understanding within sustainability (Global Reporting Initiative, 2017; Nations, 2015a).
Assessment	Data from interviews, ESG reports, and examined theory indicated consensus regarding the appliance of SDGs as categories used to present positive contributions towards sustainability, although interviewees suggest more focus on applying SDGs to negative impacts to enhance reliability and sustainability performance (Nations, 2015a)d.
Does applying SDGs in ESG reports influence company activities?	
Data from interviews	Interviewee 2 says "companies can be better at using the SDGs to screen which goals they perform bad against to present a realistic picture. The latter is necessary to improve sustainability performance". Interviewee 1 says "it is hard to know if the SDGs have an effect on companies' sustainability performance or if it is just the general focus towards sustainability in society that effects companies towards sustainable action".
Data from ESG reports	It is difficult to draw assumptions whether applying SDGs in ESG reports have an effect on company activities or if it is the other way around. An interesting observation is the lack of focus on SDGs where companies do not perform well.
Theory	Theory presents SGDs as tools to achieve enhanced sustainability performance (Nations, 2015a). However, theory indicated

	it was challenging to measure effects of the SDGs (Ordaz, 2019).
Assessment	Data from interviews, ESG reports, and examined theory indicated little effect towards sustainable company activities when applying SDGs in ESG reports (Nations, 2015a). However, this could be attributed to ineffective use of the SDGs according to data from interviews. By focusing more on negative effects, could pressure companies to increase effort towards activities that are the most unsustainable. The latter could reduce greenwashing (Xingqiang, 2015).

Table 9: Analysis and presentation of qualitative data coupled to stakeholders.

Are stakeholders relevant towards ESG reporting?	
Data from interviews	Interviewee 1 says “yes, stakeholders are relevant as they are the ones we report for. They have been a part of corporate governance for a long time, even before sustainability was high on the societal agenda. There are many stakeholder groups that must be considered like customers, suppliers, and stakeholders within value chains. The latter is an increasing focus for companies. Stakeholder analyses are typically conducted through questionaries and having good communication towards customers, employees, and external societal organizations.”. Interviewee 2 says stakeholder are important as they represent

	different views on sustainability and what should be prioritized in that regard. This is important to get a holistic view and understanding of sustainability. Relevant stakeholders can be customers, suppliers and others in the value chains”.
Data from ESG reports	ESG reports indicate stakeholders as a substantial part of examined reports. However, marginalized stakeholder groups like indigenous people were less in focus.
Theory	Theory illuminates the overall relevance towards sustainable company activities and relevant actors, including indigenous people (Derry, 2012; Freeman et al., 2010; Laplume et al., 2008).
Assessment	Data from interviews, ESG reports, and examined literature indicated stakeholders to be relevant towards ESG reporting as the reports are intended to address them (Freeman et al., 2010; Laplume et al., 2008). More focus should be aimed at including marginalized stakeholder groups in ESG reporting to enhance sustainability performance (Derry, 2012).
Are stakeholders applied in ESG reports by companies listed on Oslo stock exchange?	
Data from interviews	Interviewee 2 says all companies on Oslo stock exchange probably refer to stakeholders in their ESG reports”. Interviewee 1 says “companies on Oslo stock exchange are likely to report towards stakeholders as they are relevant for companies whether or not sustainability is

	the main objective, and therefore companies want to have a relationship to stakeholders”.
Data from ESG reports	Stakeholders are applied in ESG reports by all companies examined.
Theory	A heuristic literature search was conducted towards the issue, but it did not lead to enhanced knowledge due to lack of relevant theory available.
Assessment	Data from interviews and ESG reports indicated that stakeholders were applied in ESG reports produced by companies listed on Oslo stock exchange.
Is there consensus regarding stakeholders in ESG reports?	
Data from interviews	Interviewee 1 said “there is a large degree of consensus regarding us of the term stakeholder as there has been a lot of focus on the relevance of the topic, on the contrary to the claim of Friedman[52]”.
Data from ESG reports	ESG reports indicated consensus regarding defining stakeholder groups, however some companies focused more on active engagement towards stakeholder groups in their ESG reports than others.
Theory	Theory examined is aligned when referring to stakeholder groups as internal and external stakeholders (Freeman et al., 2010; Laplume et al., 2008). However, theory investigated has little focus towards marginalized groups in society that might not have a direct stake in company, but who

[52] Friedman, M. (1970). The social responsibility of business is to maximise its profits. *New York Times Magazine*, *13*, 33.

	has a stake in the environment or society where business is conducted (Derry, 2012).
Assessment	Data from interviews, ESG reports, and examined literature indicated consensus regarding the content of stakeholder groups, but few addressed marginalized stakeholder groups (Derry, 2012; Freeman et al., 2010; Laplume et al., 2008).
Does use of stakeholders influence company activities?	
Data from interviews	Interviewee 2 says “focus on stakeholders in ESG reports gives a better understanding of sustainability in a holistic view”. Interviewee 1 says “use of the stakeholder concept in ESG-reporting effects company activities, however this is not a new phenomenon. What is new is the focus on the broad layer of stakeholders, not only those with financial interest in a company”.
Data from ESG reports	Examined ESG reports indicated some affect towards a general focus on sustainable activities that can be connected to human related values like inclusion, gender equality and decent work.
Theory	Stakeholder theory presents groups of people or individuals that should be taken into consideration when addressing sustainable issues to enable broad thinking on sustainability related issues, and stakeholder theory is essential to grasp the complexity of sustainable company business (Freeman et al., 2010; Laplume et al., 2008). Effective appliance of stakeholder theory could affect primary business and

	stakeholders outside primary business activities when implemented in a company (Derry, 2012; Freeman et al., 2010; Laplume et al., 2008).
Assessment	Assessed data from interviews, ESG reports, and examined theory indicated that focus on stakeholders in ESG reports could have an effect on sustainable company activities (Freeman et al., 2010; Laplume et al., 2008). However, there was a lack of focus on marginalized stakeholder groups (Derry, 2012). The latter is important to enhance sustainable performance (Brundtland, 1987). Stakeholders could pressure or motivate companies to enhance sustainable activities.

Table 10: Analysis and presentation of qualitative data coupled to green economics.

Is green economics relevant towards ESG reporting?	
Data from interviews	Interviewee 2 says “in general it is important to increase the level of green investments to achieve a sustainable economy, so I would say it is relevant as ESG reports frame sustainability”. Interviewee 1 says “green economics is relevant for ESG-reporting as it is a central part of the reports. It is important to show how company products and services are important to transition the economy to a sustainable economy”.
Data from ESG reports	Examined ESG reports did not refer to green economy as a term within the concept of sustainability. However, there were indications that the concept of green

	economics was relevant and applied in ESG reports when examining the reports more carefully. For example, could “energy transition” be coupled to the concept when referring to renewable energy systems.
Theory	Theory indicates green economics as relevant towards ESG reporting. It outlines the urgent need to shift the economy in a sustainable direction, without compromising on opportunities for continued economic growth, and by referring to green economics companies can focus on opportunities within sustainability to generate new business models (Hannel, 2014; Stoknes, 2020).
Assessment	Data from interviews, ESG reports, and examined theory indicated green economics to be relevant towards ESG reporting as it supports the need for economic growth and sustainability at the same time (Hannel, 2014; Stoknes, 2020). However, examined ESG reports did not refer to the concept, although synonyms or sub-categories of green economics were present. This implied that the concept was relevant, but not extensively applied in ESG reports.
Is green economics applied in ESG reports by companies listed on Oslo stock exchange?	
Data from interviews	Interviewee 1 says “it is difficult to claim that green economics is a concept that is widely applied in ESG-report by companies on Oslo stock exchange. It is most relevant for companies conducting activities within renewable energy or other sustainable

	activities aimed at transitioning the economy towards a green economy. However, it seems clear that these companies already conduct activities that can be connected to green economy and so the term might not be applied in their ESG-reports".
Data from ESG reports	The term was not applied in examined ESG reports, however there were indications that green economics was a part of the reports under alternative framings.
Theory	A heuristic literature search was conducted towards the issue, but it did not lead to enhanced knowledge due to lack of relevant theory available.
Assessment	Data from interviews and ESG reports indicated that the concept might be present to a minor extent, however by referring to sub-categories or by appliance of different terminology.
Is there consensus regarding green economics in ESG reports?	
Data from interviews	Interviewee 1 says "there is low grade of consensus regarding the appliance of this term as there is confusion regarding the concept of green economics".
Data from ESG reports	There was not consensus regarding the content of green economics, and the specific term was not applied in examined ESG reports. However, there was somewhat consensus regarding the need to transition the economy to a more sustainable one without compromising on growth opportunities.

Theory	There is consensus in examined theory regarding issues that need to be addressed to enable a sustainable economy, but decoupling of economic growth and sustainable impact was debated (Hannel, 2014; Parrique, 2019; Stoknes, 2020).
Assessment	Date from interviews and ESG reports indicated a low degree of consensus regarding green economics in ESG reports, and this could be a result of confusion regarding the content of the term. There was however consensus regarding the need to transition the economy to a sustainable one, and grasp business opportunities, and theory was aligned regarding the outline of the concept, although a decoupling between sustainability and economic growth was debated (Hannel, 2014; Parrique, 2019; Stoknes, 2020).
Does applying green economics in ESG reports influence company activities?	
Data from interviews	Interviewee 1 says “it probably doesn’t affect activities as companies already applying green economics in ESG reports already conduct activities that can be considered green”.
Data from ESG reports	There were indications that companies are increasingly focusing on green economics when examining sub-categories with green economics. Companies focusing on a “low-carbon society” or “energy transition” tend to have concrete strategies on achieving the intended objective.

Theory	Theory outlines new ways of framing economy and sustainability together, which means that companies have to change or enhance their ongoing activities in order to meet requirements for a sustainable future, and at the same time achieve economic growth (Hannel, 2014; Stoknes, 2020).
Assessment	Data from interviews indicated influence low influence on company activities when applying the concept of green economics in ESG reports. On the other hand, examined ESG reports, and theory indicated that it is relevant if applied as a part of business strategy (Hannel, 2014; Stoknes, 2020).

Table 11: Analysis and presentation of qualitative data coupled to externalities.

Are externalities relevant towards ESG reporting?	
Data from interviews	Interviewee 2 says "externalities are relevant towards ESG-reporting, however not when using the given terminology. It is important that companies work towards identifying and considering risk related to ESG, both positive and negative. It is important to frame ESG reports honest to enable good sustainable performance. More companies should focus on negative externalities in ESG reports". Interviewee 1 says "it is relevant towards ESG reporting although the terminology is somewhat unfamiliar. It reminds of impact analysis, which has the objective of examining how a company contributes negatively or positively to

	society with their activities which is relevant".
Data from ESG reports	ESG reports indicate relevance of externalities for companies, however by applying different terminology. Companies are aware of their unintended side-effects of their activities.
Theory	Theory outlines relevance towards externalities but more towards negative externalities as negative impacts of conducted company business are relevant for highlighting focus areas that should be mitigated to enhance sustainable performance (Laffont, 1989).
Assessment	Data from interviews, ESG reports and examined theory indicated relevance of both positive and negative externalities towards ESG reporting although negative externalities are most applicable to enhance sustainable performance (Laffont, 1989).
Are externalities applied in ESG reports by companies listed on Oslo stock exchange?	
Data from interviews	Interviewee 1 says "externalities are probably not referred to in ESG-reports by companies listed on Oslo stock exchange when referring to that wording. However, negative and positive impact could be applied in ESG-reports".
Data from ESG reports	Externalities are applied in examined ESG reports, however by applying different terminology. Companies tend to focus on positive externalities by applying SDGs as framing tool. Negative externalities are also

	referred to in examined companies to a minor extent, but not by applying SDGs.
Theory	A heuristic literature search was conducted towards the issue but did not lead to enhanced knowledge due to lack of relevant theory available.
Assessment	Data from interviews and ESG reports indicated appliance of externalities in ESG reports although by different terminology. There was little focus on negative externalities in examined ESG reports.
Is there consensus regarding the use of externalities in ESG reports?	
Data from interviews	Interviewee 1 says “there is a lack of consensus regarding the wording, however there is starting to be consensus regarding the content of externalities”.
Data from ESG reports	ESG reports indicated a lack of consensus regarding applied terminology of the concept, however there was somewhat consensus regarding the content of externalities.
Theory	Theory indicates consensus regarding the overall meaning of positive and negative externalities (Laffont, 1989).
Assessment	Data from interviews, ESG reports and examined theory indicated consensus regarding the content of the concept, but not regarding the terminology (Laffont, 1989).
Does applying externalities in ESG reports influence company activities?	
Data from interviews	Interviewee 2 says “it is likely that externalities influence company activities as pointing out negative effects of company activities makes it more important to act on

	the matters underlined as problematic. The latter is considered important to enhance the quality on sustainability performance". Interviewee 1 says "I would think so, as illuminating negative effects of company activities shows where effort on sustainability related issues should be prioritized.
Data from ESG reports	ESG reports indicated correlation between positive externalities and sustainable company activities. However, it was difficult to draw upon assumption whether focus on externalities had effect towards sustainable performance.
Theory	Theory indicates the need to address positive and negative side-effects of company business to refocus activities to be aligned with high sustainable performance, both in terms of mitigation and adaptation (Laffont, 1989).
Assessment	Data from interviews, ESG reports and examined theory indicated that more focus on negative externalities in ESG report could enhance sustainability performance (Laffont, 1989).

Table 12: Analysis and presentation of qualitative data coupled to CSR.

Is corporate social responsibility relevant towards ESG reporting?	
Data from interviews	Interviewee 1 says "the concept of corporate social responsibility is diluted. It would be better to just use the word sustainability or corporate responsibility as corporate social

	responsibility implies that the social aspect is secondary priority that comes after other priorities within sustainability”.
Data from ESG reports	ESG reports indicated corporate social responsibility to be relevant towards ESG reports for certain companies. However, the concept could be replaced by other terms and concepts.
Theory	Theory indicates relevance towards sustainability on an overarching level, however the concept of corporate social responsibility has recent years been integrated into other theories and concepts of sustainability (Habisch et al., 2004; Montiel et al., 2014).
Assessment	Assessed data from interviews, ESG reports and examined theory indicated some relevance of the concept towards ESG reporting, although other evolved theories and concepts sustainability cover the content of corporate social responsibility (Habisch et al., 2004; Montiel et al., 2014).
Is corporate social responsibility applied in ESG reports?	
Data from interviews	Interviewee 1 says “corporate social responsibility is an essential part of ESG reporting. However it should as outlined be an integrated part of sustainability rather than a diluted separate category. Corporate social responsibility is probably still being applied in ESG-reports by some companies on Oslo stock exchange as a result of

	hangtime in the system although the term is outdated".
Data from ESG reports	Corporate social responsibility is applied in examined ESG reports but to a small extent.
Theory	A heuristic literature search was conducted towards the issue, but it did not lead to enhanced knowledge due to lack of relevant theory available.
Assessment	Data from interviews and ESG reports indicated that the concept was applied in ESG reports to a minor extent.
Is there consensus regarding the use of corporate social responsibility in ESG reports?	
Data from interviews	Interviewee 1 says "the SDGs has clarified the concept of sustainability as intended, and therefore the need for corporate social responsibility as an individual concept is unnecessary. Further, there is not consensus regarding the concept of corporate social responsibility because there are better ways of defining the concept or sub-concepts of sustainability".
Data from ESG reports	ESG reports indicated little consensus regarding appliance of the term, and there seemed to be confusion regarding the difference between the term and other terms within the concept of sustainability.
Theory	There is a lack of consensus regarding content of the concept of corporate social responsibility as more specific details on what it entails are illuminated in other concepts such as stakeholder theory (Freeman et al., 2010; Montiel et al., 2014).

Assessment	Data from interviews, ESG reports and examined theory indicated a low grade of consensus regarding the content of the concept (Freeman et al., 2010; Montiel et al., 2014).
Does applying corporate social responsibility in ESG reports influence company activities?	
Data from interviews	Interviewee 1 says "the appliance of corporate social responsibility in ESG-reporting probably has little effect on company activities isolated if not taken seriously by the whole organization. Parallels can be drawn from sustainability".
Data from ESG reports	Examined ESG reports indicate little influence on the general focus on sustainability for companies referring to corporate social responsibility in their ESG reports.
Theory	Theory on the topic is general, however branches of this concept is important to affect company activities in a sustainable direction so one might argue that it has been a pioneer concept to motivate and pressure companies to enhance sustainable performance (Freeman et al., 2010; Laplume et al., 2008).
Assessment	Assessed data from interviews, ESG reports, and theory indicated low degree of influence on enhanced sustainable activity for companies applying the concept in ESG reports. However, it was a pioneer concept within sustainability and probably has influenced on the overarching focus on

	sustainability (Freeman et al., 2010; Montiel et al., 2014).

Table 13: Analysis and presentation of qualitative data coupled to EU taxonomy.

Is the EU taxonomy relevant towards ESG reporting?	
Data from interviews	Interviewee 1 says "the taxonomy is relevant for ESG-reporting as it presents a specific framework for considering what should be labelled as sustainable activities, which complements the lack of concrete measures in the SDGs. An extreme example could be a coal plant defining their activity as sustainable as it fulfills SDG nr. 1 and 8, which is ending poverty and promoting sustained economic growth. The latter example would not be categorized as sustainable by the taxonomy".
Data from ESG reports	Considering the limited time period since the taxonomy entered into force there were clear indications that the taxonomy was relevant towards ESG reporting and will be increasingly so in the future. However, the relevance of the taxonomy towards Norwegian companies differed as some companies referred to the taxonomy and some only to a minor extent.
Theory	Theory indicates the taxonomy as increasingly relevant in the coming years, especially for companies conducting business inside the EU as juridical requirements from the union will take affect

	(EU, 2021b; Lucarelli et al., 2020; Stefano, 2022).
Assessment	Data from interviews, ESG reports and examined theory indicated the taxonomy to be relevant towards ESG reporting although it was not juridically binding for Norwegian companies at the current moment(EU, 2021b; Lucarelli et al., 2020; Stefano, 2022). However, it will probably be implemented into Norwegian law in the future (Regjeringen, 2021)[53].
Is the taxonomy being applied by companies listed on Oslo stock exchange?	
Data from interviews	Interviewee 1 says" companies on Oslo stock exchange are probably starting to use the taxonomy for guidance towards ESG-reporting, at least the largest companies. It is going to be increasingly important as the taxonomy takes juridically effect".
Data from ESG reports	ESG reports indicated that the taxonomy was being applied as guidelines although examined ESG reports represented Norwegian companies. They had no legal obligations to address the issues in the taxonomy, although they probably will be in the near future (Regjeringen, 2021).
Theory	A heuristic literature search was conducted towards the issue but did not lead to enhanced knowledge due to lack of relevant theory available.
Assessment	Data from interviews, ESG reports and examined theory indicated that the

[53] https://www.regjeringen.no/no/aktuelt/nye-regler-om-barekraftig-finans-vil-ikke-tre-i-kraft-fra-nyttar/id2892207/

	taxonomy was being implemented in ESG reports for certain companies although there were no legal obligations for Norwegian companies at the current moment. It could be attempt to increase sustainability reputation or simply because the taxonomy is likely to be implemented into Norwegian law in the near future (Regjeringen, 2021).
Is there consensus regarding the use of the taxonomy in ESG reports?	
Data from interviews	Interviewee 1 says “There is already consensus regarding the appliance of the taxonomy in ESG-reporting as it is a clear set of regulations that is hard to misunderstand”.
Data from ESG reports	ESG reports indicated consensus regarding the content of the taxonomy, but not necessarily on how to report on it.
Theory	The taxonomy by the delegated acts, is a set of rules and guidelines with clear rules for considering sustainable company activities, and as a result there is only one way of fulfilling the obligations of the taxonomy (EU, 2021b; Lucarelli et al., 2020; Stefano, 2022).
Assessment	Data from interviews, ESG reports and examined theory indicated consensus regarding the content of the taxonomy (EU, 2021b; Lucarelli et al., 2020; Stefano, 2022). On the other hand, there might be some confusion regarding the relevance for Norwegian companies as they are not a part of the EU. When that said, the taxonomy is

	considered implemented into Norwegian law in the near future (Regjeringen, 2021).
Does applying the taxonomy in ESG reporting affect company activities?	
Data from interviews	Interviewee 1 says “applying the taxonomy is ESG-reporting is likely to influence company activities, as achieving regulations set by the taxonomy can enable favorable green loans and ease capital raise. The economic incentives push companies in a sustainable direction”.
Data from ESG reports	There are indications from the ESG reports that companies considered important for the green transition more frequently refer to the taxonomy and the delegated acts. However, it is difficult to draw upon assumptions whether they use the taxonomy to show how sustainable they are, or whether the taxonomy represents sustainable business opportunities for these companies.
Theory	Theory implied direct and measurable effects on company activities to pressure and motivate companies to conduct business towards a sustainable trajectory (EU, 2021b; Lucarelli et al., 2020; Stefano, 2022).
Assessment	Data from interviews and examined theory indicated the taxonomy to be effective in terms of pressure and motivate companies to conduct sustainable activities (EU, 2021b; Lucarelli et al., 2020; Stefano, 2022). Companies complying with the taxonomy will gain better support from banks and regulators with increased commercial benefit (Esposito et al., 2022).

Is there more to add on the topic of the taxonomy?	
Data from interviews	Interviewee 1 says "the taxonomy with the delegated acts is central for many organizations as clear definitions and guidelines for sustainable activities are formalized. The taxonomy defines sustainable company activities. This is good in terms of enhanced clarification and consensus of sustainability. However, the taxonomy does not consider human-related values at the current moment. When that said, the benefits by implantation of the taxonomy outweighs the downsides as outlined".
Data from ESG reports	ESG reports indicated increasing focus on the taxonomy although it was not legally binding for Norwegian companies at the present moment (Regjeringen, 2021)[54]. Examined ESG reports indicated that companies lay effort in meeting potential future obligations.
Theory	The taxonomy by the delegated acts is a set of rules and guidelines with clear rules for considering sustainable company activities, and as a result there is only one way of fulfilling the obligations of the taxonomy (EU, 2021b). However, the taxonomy does not at the current moment take human values and immaterial considerations which is an essential part of the concept of sustainability (Wilkinson et al., 2001).

[54] https://www.regjeringen.no/no/aktuelt/nye-regler-om-barekraftig-finans-vil-ikke-tre-i-kraft-fra-nyttar/id2892207/

	Further, theory does not address the rationale for criteria set by the taxonomy.
Assessment	Assessed data from interviews, ESG reports, and examined theory indicated relevance of the taxonomy as a tool to enhance sustainability performance for Norwegian companies, and the EU taxonomy fulfills an existing gap to enable better implementation and measurement of sustainability performance (Esposito et al., 2022; EU, 2021b; Lucarelli et al., 2020; Stefano, 2022). However, it should not be considered "a holy grail" for measuring sustainable company performance as it lacks ability to measure human related values.

Figures

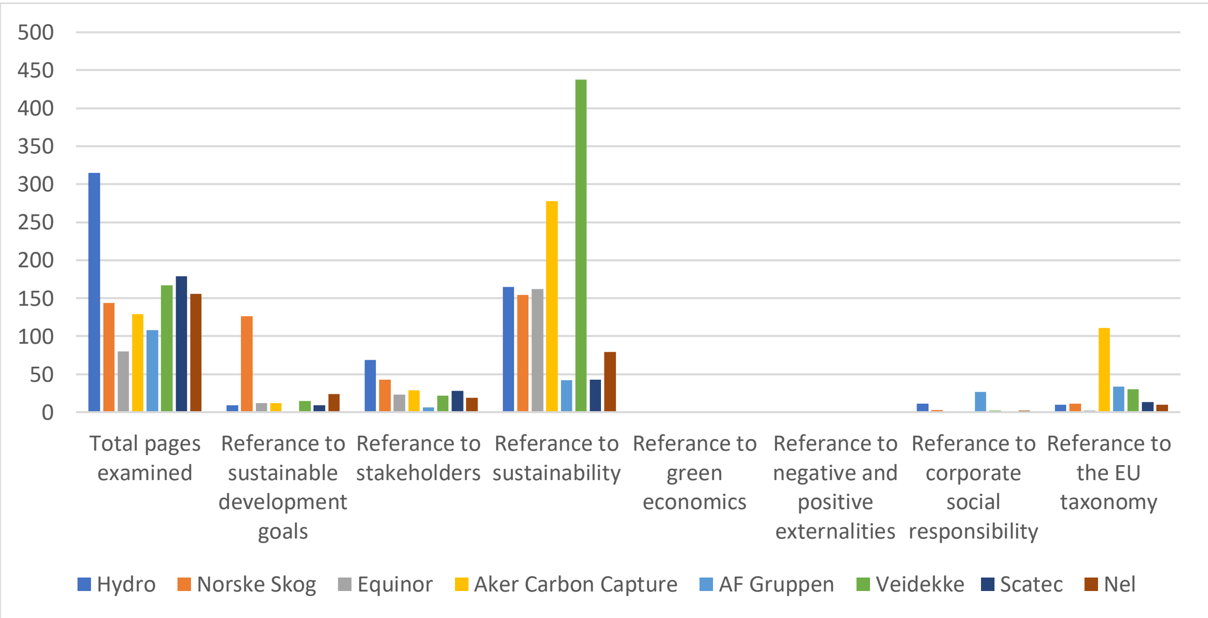

Figure 1: Diagram of coding results from ESG reports.

Interview guide

General information

What is your role in the business you work for?

How have you acquired competence on the area, what is your background?

Sustainability

Are you familiar with "sustainability"?

Do you think sustainability is relevant for ESG reporting?

Do you think sustainability is a part of ESG reports issued by companies listed on Oslo stock exchange main list?

Do you experience consensus regarding the use of sustainability in ESG reports?

How do you think companies listed on Oslo stock exchange can become more sustainable?

Do you think use of sustainability in ESG reports affects the companies' activities?

Do you have something you want to add on the topic of sustainability?

General follow-up questions:

- *Tell and describe.*
- *Why, how, when, and where?*
- *Exemplify.*
- *Specific/narrow questions at the end for clarification.*

ESG-reporting

Are you familiar with "ESG reporting"?

Do you think ESG reports represent a realistic picture of a company's activities?

Do you think companies listed on Oslo stock exchange produce ESG reports?

Do you experience consensus regarding the procedure for ESG reporting among different companies?

Do you think ES -reporting influence the company's activities?

Do you have something you want to add on the topic of sustainability?

General follow-up questions:

- *Tell and describe.*
- *Why, how, when, and where?*

- *Exemplify.*
- *Specific/narrow questions at the end for clarification.*

Sustainable development goals

Are you familiar with the "UN sustainability goals"? Hereafter referred to as SDGs.

Are the SDGs relevant for ESG reporting?

Do you think the SDGs is part of ESG reporting issued by companies on Oslo stock exchange?

Do you experience consensus regarding the use of SDGs in ESG reporting?

Do you think the use SDGs in ESG reporting influence the company's activities?

Do you have something you want to add on the topic of SDGs?

General follow-up questions:

- *Tell and describe.*
- *Why, how, when, and where?*
- *Exemplify.*
- *Specific/narrow questions at the end for clarification.*

Stakeholders

Are you familiar with "stakeholders"?

Do you think stakeholders are relevant for ESG reporting?

Do you think the stakeholders are part of ESG reporting issued by companies on Oslo stock exchange?

Do you experience consensus regarding the use of SDGs in ESG reporting?

Do you think the use of stakeholders influence the company's activities?

Do you have something you want to add on the topic of stakeholders?

General follow-up questions:

- *Tell and describe.*
- *Why, how, when, and where?*
- *Exemplify.*
- *Specific/narrow questions at the end for clarification.*

Green economics

Are you familiar with "green economics"?

Do you think green economics are relevant for ESG reporting?

Do you think green economics is part of ESG reporting issued by companies on Oslo stock exchange?

Do you experience consensus regarding use of green economics in ESG reporting?

Do you think use of green economics in ESG reporting affects the company's activities?

Do you have something you want to add on the topic of green economics?

General follow-up questions:

- *Tell and describe.*
- *Why, how, when, and where?*
- *Exemplify.*
- *Specific/narrow questions at the end for clarification.*

Negative and positive externalities

Are you familiar with "externalities"?

Do you think externalities are relevant for ESG reporting?

Do you think externalities is part of ESG reporting issued by companies on Oslo stock exchange?

Do you experience consensus regarding the use of externalities in ESG reporting?

Do you think use of externalities in ESG reports influence the company's activities?

Do you have something you want to add on the topic of externalities?

General follow-up questions:

- *Tell and describe.*
- *Why, how, when, and where?*
- *Exemplify.*
- *Specific/narrow questions at the end for clarification.*

Corporate social responsibility

Are you familiar with "corporate social responsibility"? Hereafter referred to as CSR.

Do you think CSR is relevant for ESG reporting?

Do you think CSR is part of ESG reporting issued by companies on Oslo stock exchange?

Do you experience consensus regarding use of CSR in ESG reporting?

Do you think use of CSR in ESG reporting affects the company's activities?

Do you have something you want to add on the topic of CSR?

General follow-up questions:

- *Tell and describe.*
- *Why, how, when, and where?*
- *Exemplify.*
- *Specific/narrow questions at the end for clarification.*

EU taxonomy

Are you familiar with the "EU taxonomy"?

Do you think the taxonomy is relevant for ESG reporting?

Do you think the taxonomy is a part of ESG reporting issued by companies on Oslo stock exchange?

Do you experience consensus regarding the use of the taxonomy in ESG reports?

Do you think the use of the taxonomy in ESG reports influence company's activities?

Do you have something you want to add on the topic of taxonomy?

General follow-up questions:

- *Tell and describe.*
- *Why, how, when, and where?*
- *Exemplify.*

Specific/narrow questions at the end for clarification.