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Norwegian firms in Non-EU ETS- sectors' use of Voluntary Carbon Markets:

Extent, determinants, and alignment
with national emission reduction
targets

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Abstract

Corporate actors within non-EU ETS sectors will likely play a significant role in reaching Norway's target of reducing greenhouse gas emissions by at least 55% by 2030 compared to emissions levels in 1990, as a crucial part of reaching the national targets hinges on significant emissions reduction within these sectors. However, the systems surrounding these firms' practices and determinants on emissions reduction and removal measures such as the purchase of voluntary carbon credits [VCCs] from voluntary carbon markets [VCMs] appears misaligned with both the emissions reduction targets set on the national level and the non-EU ETS sector-level.

This thesis aims to understand the extent and determinants of Norwegian non-EU ETS sector actors' participation in VCM through the form of VCC purchases and attempts to assess and address the need for system adaptations ensuring alignment of these practices with reaching national emissions reduction targets by 2030. Using a mixed-methods approach through an online questionnaire and semi-structured interviews with respectively 74 and six (6) respondents from firms in non-EU ETS sectors, the following three research questions were addressed: 1. *How and to what extent do firms within Norwegian non-EU ETS sectors participate in the purchase of voluntary carbon credits?*; 2. *Which determinants influence the voluntary carbon credit practices of firms within Norwegian non-EU ETS sectors?*; and 3. *Which system adaptations might facilitate alignment between practices of Norwegian firms in non-EU ETS sectors purchasing or hypothetically purchasing VCCs, and Norway's target of reducing national emissions by at least 55% of 1990-levels by 2030?*

Very low levels of VCM participation were identified among the studied firms, with only two firms reporting to currently purchase VCCs. Meanwhile, a number of firms reported hypothetically considering purchasing VCCs in the future. The purchasing and hypothetically purchasing firms' type of VCM participation was mostly characteristic of inclination towards VCCs from carbon capture and storage [CCS] projects for the sake of climate financing or compensating for remaining emissions, with some reference to forest and land projects for carbon removal, and climate reduction projects in developing countries. The firms exhibit a clear tendency of prioritising reducing their own emissions before hypothetically purchasing VCCs, and display a clear preference for credible, measurable, and sector-relevant measures. In analysing determinants of current and hypothetical VCM participation through a thematic analysis, four main themes of determining factors were identified, namely 1. *timing and priority of actions*, 2. *firms' conditions for financial stability and profitability*, 3. *firms' incentives and motivations in assessment of VCM participation*, and 4. *firms' knowledge and preferences regarding corporate social responsibility [CSR], VCMs and VCCs*. The firms current and hypothetical VCM participation display a clear tendency to be dominated by strategic considerations of upholding stakeholder accountability and legitimacy for financial survival, with discussable elements of altruism in choices *not* to engage in VCMs since they do not want to buy their way out of the responsibility of reducing their own emissions. Furthermore, they exhibit clear tendencies of dependence on customer demand and industry peers in adapting to altered conditions for competition and a lack of consensus on how to meet emissions reduction demands.

Proposed system adaptations for increased alignment between non-EU ETS sector firms' currently purchasing or considering purchasing VCCs and Norway's emissions reduction targets pertain to *strengthening the role of civil society in forming sector-relevant policy and regulation in line with national circumstances*.

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Table of Abbreviations

CCS	Carbon capture and storage	ESRS	European Sustainability Reporting Standards
CEU	The Council of the European Union	EU	
CPR	Common Pool Resources	ETS	European Union Emissions Trading System
CSR	Corporate Social Responsibility	IPCC	Intergovernmental Panel on Climate Change
CSRD	The Corporate Sustainability Reporting Directive	NMCE	Norwegian Ministry of Climate and Environment (Klima- og miljødepartementet)
EC	European Commission	NOUs	Norges offentlige utredninger (Official Norwegian Reports)
EGD	The European Green Deal	SMEs	Small and medium enterprises
EP	European Parliament	TEU	Treaty on European Union
ES	Earth System	NMCE	Norwegian Ministry of Climate and Environment (Klima- og miljødepartementet)
ESG	Environmental, social and corporate governance	VCC	Voluntary Carbon Credit
		VCM	Voluntary Carbon Market

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1. Introduction

Corporate actors within non-European Union Emissions Trading System [EU ETS] sectors will likely play a significant role in reaching Norway's target of reducing greenhouse gas emissions by at least 55% by 2030 compared to emissions levels in 1990, as a crucial part of reaching the national targets hinges on significant emissions reduction within these sectors. However, the systems surrounding these firms' practices and determinants on emissions reduction and removal measures such as the purchase of voluntary carbon credits [VCCs] from voluntary carbon markets [VCMs] appears misaligned with both the emissions reduction targets set on the national level and the non-EU ETS sector-level. This thesis explores the three core research questions pertaining to type and extent of participation in VCMs, determinants of VCC purchase or hypothetical purchase, and possible system adaptations for increased alignment with Norway's emissions reduction goals. The thesis is written with a theoretical focus on profit maximisation at the core of firm motivation, though with perspectives from legitimacy and stakeholder considerations, and elements of motivation pertaining to altruism.

1.1 Research Gaps

The subject of voluntary carbon offsetting among corporate actors remains a relatively understudied field of research, presenting several knowledge gaps. With the expected growing role of VCMs (Klimautvalget 2050, 2023) the dynamics surrounding voluntary corporate carbon offsetting among non-EU ETS sector actors in relation to the role they play in reaching ambitious national goals for emissions reduction presents ample room for investigation.

Existing literature on this topic has addressed various conditions of participation and dynamics of corporate voluntary carbon offsetting. Andonova and Sun explore the issue within the context of developing countries, and the effect of factors relating to the access to international institutions, and interdependencies of international institutions and domestic priorities and jurisdictions (2019).

With an increase in corporate pledges to net zero emission strategies (Black et al. 2021) (PwC & Miljøstiftelsen ZERO, 2022), an increasingly prominent feature of corporate actor's emission reduction strategies include requirements of similar net zero emissions from their partners and suppliers. In reviewing the existing literature on determinants of corporate participation in voluntary carbon markets, these types of stakeholder influence appear

relatively unaddressed, resulting in a research gap. In an attempt to address the aforementioned research gaps, we formulate the following research questions.

1.2 Research Questions

In addressing the aforementioned research gaps and problem statement, the following research questions [RQs] have been formulated.

Research Question 1 [RQ1]: How and to what extent do firms within Norwegian non-EU ETS sectors participate in the purchase of voluntary carbon credits?

Research Question 2 [RQ2]: Which determinants influence the voluntary carbon credit practices of firms within Norwegian non-EU ETS sectors?

Research Question 3 [RQ3]: Which system adaptations might facilitate alignment between Norwegian firms in non-EU ETS sectors purchasing or hypothetically purchasing VCCs, and Norway's target of reducing national emissions by at least 55% of 1990-levels by 2030?

As the relation to firms' purchase of VCCs from VCMs is the only form of VCM participation this thesis addresses, firms' practices surrounding the purchase of VCCs will henceforth be referred to as *VCM participation*, which is not to be confused with other practices encompassing selling or offering VCCs through VCMs, or other possible types of participation in VCMs.

1. Background

2.1 Entering the Anthropocene: Economic growth at the core of economic policy-making

Human activity in relation to its environment is now in what many scholars of environmental governance informally refer to as the Anthropocene (Crutzen, 2002). The term, deriving from the Ancient Greek terms “anhtropo-”, meaning “human”, and “-cene”, meaning “new”, is simply meant to address the present time period in which humans have become “a global geophysical force” (Steffen et al., 2007 p. 614) during the past three centuries, specifically in addressing expansive development and natural resource consumption, and their effects on the global environment (Crutzen, 2002). Throughout the past few decades, such limits, and the

effects surpassing them has on the Earth System [ES], has been increasingly addressed by research communities across disciplines such as environmental sciences and governance.

The latest assessment report from the Intergovernmental Panel on Climate Change [IPCC], AR6, draws on peer-reviewed publications from recent scientific, socio-economic and technical literature from across the international landscape (2023). The report cements humans as core drivers of the transgression of several planetary boundaries, chiefly due to practices prompting heavy emission of greenhouse gases [GHGs] and unsustainable use and consumption of natural resources (IPCC, 2023 p. 42).

A notable and structural challenge in shaping sustainable economies is that of economic growth as a “core value underlying economic policy” (Anderson et al., 2022b p. 192). Vast bodies of empirical evidence such as that of the latest IPCC assessment report (2023) point to extensive adverse effects on the environment as a consequence of rapid economic expansion. As such effects grew increasingly visible from the early 1960s with the emergence of the field of environmental policy around 1970 (Anderson et al., 2022a p. 194), the interconnectedness and inseparability between economic growth and the surrounding earth system with its biophysical constraints (Rockström et al., 2009; Steffen et al., 2015) were well established by the time *Our Common Future* (commonly known as the Brundtland Report) was published in 1987. The publication promoted the discussion of development within the constraints of the environment, and sought to address the challenge of depletion and deterioration of global resources (World Commission on Environment and Development, 1987), which brings forth the issue of common-pool resources and the governance thereof, as later discussed by Ostrom (1990). The report emphasised the need for *decoupling* economic growth from degradation of the environment in order to achieve *sustainable development*, which the report defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987 para. 27).

2.1.1 The win-win paradigm in policy-making for sustainable development

Although the interdependent relationship between socio-economic growth and rapid deterioration of natural resources has been widely addressed, the core motivation of economic growth continues to underlie much of the dominant policies, conventions and agreements at national, regional and global levels to this day (Anderson et al., 2022b p. 195). This win-win paradigm has been an evident element in environmental policymaking throughout the past decades, and is even evident in the Brundtland Report’s confident assertion that “we have the

power to reconcile human affairs with natural laws and to thrive in the process” (World Commission on Environment and Development, 1987 para. 2).

For example, the 17 Sustainable Development Goals [SDGs] as adopted by all member states of the United Nations [UN] through the global 2030 Agenda for Sustainable Development in 2015, hinge upon the principles of ambitious action for growth and development, and concurrently harmonising and strengthening the human, planetary and economic (United Nations, 2015 p. 2). Today, the concept of economic growth as harmonious with, and even advantageous to, the protection and quality of environmental resources is upheld through an array of instruments like the Paris Agreement (United Nations Framework Convention on Climate Change, 2015) and a continued focus on the SDGs.

In December 2019, the European Green Deal was presented by the European Commission [EC] as the latest growth strategy for a sustainable transformation of the EU’s economy, and a roadmap for a “just and inclusive” transition thereof (paras. 2-3). The aim of the strategy is a “modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use” (EC, 2019 para. 2). In relation to this idea of decoupled economic growth, ideas of “green growth”, “circular economy” and “climate finance” have dominated national strategies and policy responses throughout the past decade or so (Hickel & Kallis, 2020).

2.2 Norway’s emissions reduction targets and strategy as committed to the Paris Agreement

As one of 194 signatories of the Paris Agreement, Norway has adopted a national emissions reduction strategy based on the emission reduction goal committed to the Agreement, where the strategy aims at “strengthening and further developing the transition of the whole economy so Norway can become a low-emission society” (Klima- og miljødepartementet, 2022 p. 3). Norway’s current emission reduction targets as committed through the Paris Agreement state the goal of limiting emissions by at least 55% by 2030, as compared to the rate of emissions in 1990 (Regjeringen, 2022).

An amendment to the Climate Change Act (Klima- og miljødepartementet, 2018 §2; §3) corresponding to the latest commitment to the Paris Agreement was adopted by the Norwegian Parliament on the December 15th 2023, which included corresponding adjustment to the goals for emissions reductions in non-EU ETS sectors from 40% to 50% compared to the levels of emissions in these industries in 2005 (Klima- og miljødepartementet, 2023 pps.

4-7). The amendment was approved on the condition that the Norwegian Government would report back with concrete suggestions for how these emissions reduction targets would be reached (Stortinget, 2023), including specified suggestions regarding the emissions reduction targets in non-EU ETS sectors.

2.3 The Corporate Sustainability Reporting Directive [CSRD] and European sustainability reporting standards [ESRS]

As of January 5th of 2023, amended rules of the Corporate Sustainability Reporting Directive [CSRD] of the EP and the Council of the European Union [CEU] became operative. The CSRD is intended to be a facilitative instrument of transforming the European economy as part of the European Green Deal, in adherence with the SDGs, introducing requirements for most large companies and listed small and medium enterprises [SMEs] to begin reporting and disclosing information based on set sustainability measures (2022). The CSRD addresses the issue of lack in accessible sustainability information between “users and undertakings”, that lead to an “accountability deficit” which the EP and CEU worry will grow without the existence of clear policy action, and ultimately result in decreased citizen trust in businesses and deficient functioning of the social market economy (EP & CEU, 2019 para. 14).

The law is intended to provide a “consistent basis for sustainability reporting standards” that can improve “dialogue and communication between undertakings and their stakeholders (...)” (EP & CEU, 2022 para. 12). It refers to establishing mandatory European sustainability reporting standards [ESRS] as a necessary measure to reach “a situation in which sustainability information has a status comparable to that of financial information” (EP & CEU, 2022, para. 37). Essentially, the ESRS and the CSRD are strongly linked in that ESRS constitutes a standard for reporting used to fulfil the requirements set out in the CSRD. Both the ESRS and CSRD are legally binding, providing companies of a certain size¹ within

¹With regards to defining companies by size, the EP and the CEU (2024) (with amendment in December 2023 to adjust sizes in accordance with inflation (2023)) categorise undertakings’ sizes as such:

Small when *not exceeding* the boundaries of at least two of the following:

- (a) Balance sheet total of EUR 5 000 000
- (b) Net turnover of EUR 10 000 000
- (c) Average of 50 employees during the financial year

Medium-sized when they *do not exceed* the boundaries of at least two of the following:

- (a) Balance sheet total of EUR 25 000 000
- (b) Net turnover of EUR 50 000 000
- (c) Average of 250 employees during the financial year

Large when they *do exceed* the boundaries of at least two of the following:

- (a) Balance sheet total of EUR 25 000 000
- (b) Net turnover of EUR 50 000 000
- (c) Average of 250 employees during the financial year

the EU and EEC (including Norwegian companies) with requirements for sustainability reporting. The amended rules of the CSRD state that:

“Large undertakings, and small and medium-sized undertakings, except micro-undertakings, which are public-interest entities (...) shall include in the management report information necessary to understand the undertakings’ impacts on sustainability matters, and information necessary to understand how sustainability matters affect the undertaking’s development, performance and position.”

(EP & CEU, 2022, Article 19a (para. 1))

2.3.1 Implementation of the CSRD and ESRS in Norway

For the CSRD to come into effect across Europe, legal directives for their implementation must be formulated on a national level. The Official Norwegian Report (Norges offentlige utredninger [NOU] NOU 2023:15), which was presented by an appointed committee to the Norwegian Finance Department on the 22nd of May 2023, laid the groundwork for the implementation of the CSRD in Norwegian legislation (Verdipapirlovutvalget, 2023). The NOU’s suggestions for legislative amendments was later supplemented with suggestions from the Ministry of Finance in mid-March 2024, proposing (among other things) that large state-owned enterprises should be subject to the same requirements of sustainability reporting (2024a). Based on the suggestions of the NOU 2023: 15, the Ministry of Finance puts forward a step-by-step implementation of the CSRD in Norway, with the new requirements counting for Norwegian companies as follows:

*“- From the financial year of 2024 (reporting in 2025), the new requirements shall apply for enterprises of general interest (banks, insurance companies and listed enterprises) with **over 500 employees**, which also meet the conditions to be considered large enterprises according to the accounting directive.*
*- From the financial year of 2025, the rules shall apply to **all large enterprises**.*
*- From the financial year of 2026, the rules will also apply to **small and medium-sized listed companies**, but these will have simpler reporting requirements and simplified reporting standards.”*

(2024a, para. 8) (Translated)

As the inflation adjusted size categorisations result in a lower number of undertakings being categorised as large, a changed number of undertakings will be initially subject to the legal

implementation of CSRD in Norway as initially put forward by Verdipapirlovutvalget (2023). As of May 14th 2024, the Ministry of Finance's proposal for legal amendments to the Accounting Act (Lov om årsregnskap m.v. (regnskapsloven), (2024b) in line with the CSRD is still in the process of consideration by the Norwegian Parliament's Finance Committee. Norwegian companies subject to legislation on sustainability reporting following the possible approval of the proposed legal amendments will be required to provide reports including (but not limited to) necessary information "to understand the undertaking's impact on sustainability considerations, and how sustainability considerations impact the undertaking's development, positioning and results" (translated from the Ministry of Finance, 2024b).

Although non-listed SMEs are not directly subject to sustainability reporting requirements insofar put forward in the CSRD nor in the Ministry of Finance's proposed amendments to the Accounting Act, they will likely still experience second-hand effects thereof through the form of new demands from stakeholders legally required to report on their entire value chain (The Ministry of Finance, 2024b, p. 73). The Ministry of Finance therefore notes the possibility of considering an expansion of the legal requirements for sustainability for *unlisted* SMEs, based upon the experiences from the primary introduction to large companies and listed SMEs (2024b, p. 73). Development of European standards for voluntary sustainability reporting for non-listed SMEs [VSME] is also underway, lead by the European Financial Reporting Advisory Group [EFRAG] (2024).

2.4 Corporate actors' role in climate change mitigation

2.4.1 Corporate social responsibility

The concept of corporations' role in mitigating the effects of climate change has been a central topic in the past few decades, among practitioners and academics (Babiak & Trendafilova, 2011; Bhattacharya et al., 2021), in governmental and intergovernmental instruments (IPCC, 2023 p. 107, p. 110), and across members of the public (Anderson et al., 2022a p. 87). Due to a rise of public awareness around the effects of climate change (IPCC, 2023 p. 52), among other factors, consumers and other civil society actors increasingly place pressure on firms to act more environmentally friendly (Perez-Batres et al., 2012). According to Anderson et al. (2022a), this has "delegitimized the one-sided focus on monetary instrumental values by corporations," producing the concept termed corporate social responsibility [CSR] "to enhance business legitimacy" (p. 87). The CSR concept is dominant in much of the contemporary literature on organisational management and strategy, wherein

companies “integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis” (European Commission, 2006 p. 2).

2.4.2 Emission types: Scope 1, 2 and 3 emissions

In addressing various direct or indirect sources of greenhouse gas [GHG] emissions in targets, policies and reporting, the Greenhouse Gas Protocol (2004) provides a useful division of emission types into Scope 1, Scope 2, and Scope 3 emissions. In short, Scope 1 emissions refer to direct GHG emissions derived from “sources that are owned or controlled by the company,” such as “emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc. (...)” (Greenhouse Gas Protocol, 2004 p. 25). Meanwhile, Scope 2 emissions include “GHG emissions from the generation of purchased electricity consumed by the company,” which “physically occur occur at the facility where electricity is generated” (Greenhouse Gas Protocol, 2004 p. 25). Lastly, Scope 3 emissions cover all remaining indirect GHG emissions, which are “a consequence of the activities of the company, but occur from sources not owned or controlled by the company,” such as “transportation of purchased fuels, and use of sold products and services” (Greenhouse Gas Protocol, 2004 p. 25).

2.4.3 Corporate challenges to sustainability

2.4.3.1 *Free-riding and ‘the tragedy of the commons’*

Following the assumptions of the economic man model, which will be elaborated on in chapter 3, *free-riding* is an assumed preference for firms (Vatn, 2021). Ostrom points to the free-rider phenomenon in metaphorical instances where “whenever one person cannot be excluded from the benefits that others provide, each person is motivated not to contribute to the joint effort, but to free-ride on the effort of others” (1990, p. 6).

With reference to group theory and the management of common-pool resources [CPR], Ostrom (1990) relates the phenomenon to concepts such as the prisoner’s dilemma and the logic of collective action (p. 6). Meanwhile, she challenges the pessimistic notion of ‘the tragedy of the commons’ (Hardin, 1968), highlighting instances where CPRs have been managed successfully, and produces a list of “design principles illustrated by long-enduring CPR institutions”, with emphasis on measures such as establishing distinct limits, rules for resource use consistent with local circumstances, and inclusive decision-making processes

(Ostrom, 1990 p. 90). Notably, Ostrom (1990) points out the danger of metaphorically assuming free-riding as a foundation for policy-making:

“As long as individuals are viewed as prisoners, policy prescriptions will address this metaphor. I would rather address the question of how to enhance the capabilities of those involved to change the constraining rules of the game to lead to outcomes other than remorseless tragedies.” (p. 6).

2.4.3.2 Greenwashing

Anderson et al. (2022a) find that “genuine corporate protection of the diverse values of nature is more the exception than the rule” (p. 87). The phenomenon of corporate *greenwashing* remains a prominent topic of debate both in the public sphere, and across fields such as environmental governance, business management and strategy, and ecological economics. Delmas and Burbano (2011) define greenwashing as “the intersection of two firm behaviors: poor environmental performance and positive communication about environmental performance» (p. 4).

Corporate greenwashing poses a complex and ethically challenging threat. Most notably, firms engaging in greenwashing, whether deliberate or unintentional, may profit from conducting and upholding practices producing environmentally or socially harmful effects. Scholars have observed how pressures for firms to prove their sustainability and offer “greener” solutions, products and services, have increased greenwashing among corporations (de Freitas Netto et al., 2020; Delmas & Burbano, 2011). Selective reporting and disclosure regarding firm activities may ultimately produce information asymmetries, affecting decision-making among stakeholders (Lashitew, 2021). The continued trade and consumption of greenwashed products and services may in turn generate further demand thereof, thus exacerbating and furthering harmful effects overall. Furthermore, claims and allegations of corporate greenwashing may have detrimental effects on stakeholder trust in not only the specific firm in question, but also in other actors offering similar products and services, affecting the legitimacy of markets they operate within too (Delmas & Burbano, 2011).

While firms’ actual practices and impacts on the environment may not only strongly misalign with their communication and advertising, they may also misalign with the objectives of national and global initiatives and agreements on climate change mitigation. Another challenge lies in the possibility that the firm’s practices and communicated impact may unintentionally misalign with their own emission reduction strategies, due to internal or external factors such as lack of market knowledge.

2.5 EU ETS sectors and non-EU ETS sectors and emissions

The table below summarises the GHG emissions covered and not covered by the EU Emissions Trading System [EU ETS], which is a compliance-based emissions trading market applying to certain sectors and emissions within all EU Member States and countries in the European Free Trade Association (thus including Norway) (European Commission, n.d.).

Table 1: EU ETS sectors and non-EU ETS sectors

EU ETS sectors and emissions	Non-EU ETS sectors and emissions
<ul style="list-style-type: none"> - Greenhouse gas emissions from mainland industry - Oil and gas operations - Aviation (within the EEA area) 	<ul style="list-style-type: none"> - Transport - Agriculture - Waste and sewage - Building and construction - Emissions from industry and petroleum operations not defined as ETS-obligated

The table is adjusted based on what is determined on the national level to be covered by the system, and not directly in the scope of the EU ETS at large. Most importantly for this thesis, non-ETS sectors include those mainly relating to transport, agriculture, construction and waste, in addition to emissions from industry and petroleum operations that are not defined as ETS-obligated nor covered by this as an instrument in relation to their emissions reductions (Regjeringen).

2.6 Voluntary carbon markets

Although multilateral agreements like the Paris Agreement don't directly affect corporations' emissions reduction strategies, the adoption of the Agreement in 2015 appeared to produce a global increase in pledges to achieve net zero emissions from countries, regional actors, cities and major companies (Blaufelder et al., 2021 p. 2; Hale et al., 2022 p. 18). Such pledges likely necessitate some means or level of compensation for remaining non-reduced emissions, which might in turn drive demand for offsetting through voluntary carbon markets [VCMs] (Kreibich & Hermwille, 2021). One voluntary carbon credit [VCC] purchased from projects through VCMs produces a certificate that "shows you have paid for reduced emissions or increased absorption elsewhere" (Klimautvalget 2050, 2023 p. 43) and although one VCC at

the core is intended to represent the removal or absorption of one metric tonne of CO₂ (Ihenacho & Verpe, 2023), their credibility and measurability may be questionable (PwC & Miljøstiftelsen ZERO, 2022 p. 10).

VCMs differ from compliance carbon markets such as the EU ETS in a number of ways. First and foremost, emissions reduction measures through VCMs are purchased in the form of voluntary carbon credits [VCCs] on a voluntary basis, as opposed to the emissions allowances traded for compliance purposes in compliance carbon markets like the EU ETS. Secondly, VCMs are unregulated, as opposed to compliance carbon markets. The below table further outlines the most crucial differences between VCMs and regulated compliance-based carbon markets.

Table 2: Distinguishing voluntary carbon markets and compliance-based carbon markets

	Voluntary carbon markets [VCMs]	Compliance-based carbon markets
Unit of trade or purchase	Voluntary carbon credits [VCCs]	Emissions allowances
Main Participants	Actors wishing to voluntarily compensate for their own emissions	Emissions-intensive organisations <i>required</i> to reduce own emissions
Level of regulation	No direct regulation from centrally responsible organ of authority	Regulation of market through centrally responsible organ of authority on national and/or regional level

The table is based on distinctions presented in a report by PwC and Miljøstiftelsen ZERO (2022 p. 8), yet simplified and adapted to suit the scope of this thesis.

VCCs may be purchased from various projects, such as nature-based projects, projects related to the avoidance of deforestation, or projects supporting technology development of carbon capture and storage. Furthermore, they are generally issued and quality-assessed through means of various independent standards such as Gold Standard (n.d.) and the Verified Gold Standard through Verra (n.d.), which assess the quality and credibility of different VCCs based on varying measurements and attributes relating to additionality, permanence and exclusivity of reduced or removed emissions.

2.6.1 Core challenges and critiques of VCMs and VCCs

VCMs as centrally unregulated market-based instruments appear characterised by challenges of information asymmetry, lack of consensus and standardisation, and most importantly, highly questionable effects of VCC purchases in terms of the credibility and measurability of their emissions reduction (Kreibich & Hermwille, 2021; Merger & Pistorius, 2011). Lacking direction and regulation combined with the many different standards and instruments for quality-assurance and verification also appears difficult for firms' to navigate (Merger & Pistorius, 2011 p. 12).

Kreibich and Hermwille (2021) point out that VCMs seemingly are yet to find “a way to align itself with the new legal architecture of the Paris Agreement in a credible and legitimate way; it seems to be caught inbetween credibility and feasibility” (p. 940). They further point out the “risk that the current discursive stalemate turns into a race to the bottom in which the voluntary carbon market undermines the objectives of the Paris Agreement instead of supporting the required transformational change” (Kreibich & Hermwille, 2021 p. 940). A similar statement is shared in a publication by Norges Bank Investment Management [NBIM], where concern is expressed that “using carbon credits may distract from companies' efforts to reduce their own emissions, and direct investments away from necessary and measurable emission reductions in energy and industry» (Ihenacho & Verpe, 2023 para. 8)

2.6.2 The use of VCMs in Norway

The use of VCMs is as an instrument for corporate climate change mitigation and achieving net zero emissions is widely accepted, often even incentivised, in Norway. As of September 2023, Norges Bank Investment Management [NBIM] released the following statement on their view of corporate use of voluntary carbon credits:

“Well-functioning VCMs that are transparent and credible could direct funds to cost-effective mitigation and sequestration opportunities, particularly in markets and sectors where financing is needed. They could also incentivise investments in critical technologies that will be required to achieve net zero pathways in emission-intensive industries.”

(Ihenacho & Verpe, 2023 para. 6)

NBIM notably believe “carbon removals will be needed by many companies seeking to achieve net zero emissions by 2050” (Ihenacho & Verpe, 2023). This is also exemplified in a

joint report released by PricewaterhouseCoopers [PwC] and Miljøstiftelsen ZERO in 2022: the report found that 48% of the Norwegian companies they surveyed bought credits, while 16% stated they planned to do so in the future (2022). NBIM does however voice that voluntary carbon credits should be used “only as a supplement to signal high climate ambitions”, and that this should involve caution regarding the array of concerns surrounding the legitimacy of such use (Ihenacho & Verpe, 2023). Similar concerns are also raised in an NOU report presented by Klimautvalget 2050 to the Norwegian Ministry of Climate and Environment, expressing concern that Norwegian firms’ use of VCMs are seemingly prominent in strategies to reach ambitious goals such as net zero or net neutrality operations (2023 p. 299). This issue is also raised in the report by PwC and Miljøstiftelsen ZERO (2022).

2.6.3 The role of VCMs and other instruments in future policy-making for sustainability

With a steady increase of commitment in firms’ emissions reduction targets, there is an anticipated growth in the use of measures such as VCCs in meeting them (Klimautvalget 2050, 2023 p. 299; PwC & Miljøstiftelsen ZERO, 2022 p. 3), especially among actors in sectors where sufficiently reducing emissions seems «unfeasible given today’s technologies» (Ihenacho & Verpe, 2023 para. 2). Furthermore, the European Commission have announced the planned introduction of a second emissions trading system, ETS2, planned to be fully operational in 2027 (European Commission, 2024 para. 3). This is set to cover and address the emissions from small industry insofar not covered by the EU ETS, including buildings and road transport (European Commission, 2024 para. 1), which makes up a core portion of the very population for this thesis.

The emission reduction targets of Norway’s current climate strategy will require major transformations across the greater majority of Norwegian society (Klima- og miljødepartementet, 2022 p. 3). Considering further legally determined goals of Norway becoming a low-emission society by 2050 (Klima- og miljødepartementet, 2018), Klimautvalget 2050 (2023) points to the importance of future adaptation through measures such as legal instruments with predictability for actors, and financial support for emissions-reducing measures (p. 301). Overall, the latest IPCC Synthesis Report poignantly asserts that adaptation for “effective climate action requires political commitment, well-aligned multi-level governance and institutional frameworks, laws, policies and strategies. It needs clear goals, adequate finance and financing tools, coordination across multiple policy domains, and inclusive governance processes» (2023, p. 110). As relevant to the problem statement of this

thesis, they also point to “adaptation and mitigation finance (...) to address rising climate risks and to accelerate investments in emissions reduction” (2023, p. 111).

2. Theory and conceptual framework

The theoretical and conceptual stage of a research process reference the core ideas that underlie the research process and “shed light on the interpretation of the resulting findings”, which in turn contribute to the ideas (Bryman, 2015 p. 12).

Theoretical and empirical studies that have insofar addressed corporate use of VCCs have applied theory from several disciplines, implementing mostly system-oriented theories drawing on legitimacy theory and stakeholder theory. Core elements also relate to profit maximisation in light of neoclassical economics, and perspectives on altruism. An element of considerable significance both to this chapter and thesis, is the importance of expecting some nuance in firm motivation, thereby avoiding theoretical treatment of the corporate community as a homogenous or uniform entity without variations in context or preference, and assuming it functions as what Falkner (2009) refers to as a ‘monolithic bloc’.

The following section will include a short summary on the concept and role of institutions in decision-making, followed by theoretical inclinations beyond neoclassical assumptions on profit maximisation as a core priority for firms, theorising motivation for VCM participation as largely grounded in strategic considerations based on legitimacy and stakeholder theory, with reference to possible elements of altruism.

3.1 The role of institutions in decision-making

An institutional view would suggest that firms’ decision-making cannot be separated from the institutions within which they exist and function, and that economic processes are largely defined by institutional structures. Through conventions, norms and formal rules, institutional contexts shape our preferences, values and actions, and “constrain and enable behavior” (Hodgson, 2006). Institutional economists do not view the free market as an ideal institution, but rather emphasise chosen *institutional structures* as defining for what is ultimately deemed efficient and rational to do (and which type of *rationality* to base one's decisions upon) (Vatn, 2021). Vatn (2021) puts forward a framework which conceptualises a mutually interdependent relationship between the formation and legitimacy of institutions and the actors and institutions that depend upon them.

With regards to analysis of the formation of preferences and values, (Sen) argues against assessing motivation or behaviour through either egoism or some form of “universalised

morality” (1977). He also opposes the dismissal or acceptance of one over another, asserting that “(...) between the claims of oneself and the claims of all lie the claims of a variety of groups – for example, families, friends, local communities, peer groups, and economic and social classes” (Sen, 1977). Such an understanding leads us in the direction that our preferences and values are *multi-rational*: they are context-dependent, and guided by *institutions* that surround us, which tell us which rationality is applicable to the given situation. Firms are, at their core, can be understood as institutionally shaped to maximise profits, as is elaborated upon in the next section.

3.2 Profit maximisation as fundamental in economic decision-making

In neoclassical theory, firms are assumed to maximise profits (Vatn, 2021 p. 125).

Adam Smith (widely regarded the father of modern economics for his fundamental work from 1776 on free markets, division of labour, and productivity) is widely credited for conceptualising “human beings as tirelessly fostering their respective self-interests” (Gerschlager, 2005). A decade later, Edgeworth (1881) similarly stated that “the first principle of economics is that every agent is actuated only by self-interest” (p. 16).

The economic man is “a person who maximises individual utility” (author’s translation of Vatn (2021)). In order to maximise individual utility, the agent needs to have rational preferences. Rationality is generally viewed as an instrumental concept, meaning an agent acts rationally “if – in the light of his goals (preferences) – the means chosen (actions) are appropriate; if not, the agent is irrational,” and standard models tend to consider “violations of the self-interest postulate” as “failures of rationality” (Gerschlager, 2005). In neoclassical economics, *utility* is mainly defined as based on the subjective preferences of different agents, reflecting their respective individual *needs* (Vatn, 2021). Furthermore, the view of the economic man is understood to entail the assumption that an economic agent as a self-seeking actor is unconstrained from acting *opportunistically*, which Williamson refers to as “self-interest seeking with guile,” which may (though rarely) occur as “more blatant forms, such as lying, stealing, and cheating,” but more often “involves subtle forms of deceit” (1985).

The classical assumption of profit maximisation based on self-interest would likely deem the purchase of VCCs as a voluntary and likely costly action for the good of others an entirely irrational behaviour for firms, given assumed ultimate goal of profit maximization. Voluntarily taking an additional cost for the sake of benefiting utility other than the firm’s own, would not, at least in the core sense, be deemed an act of profit maximisation, nor opportunism or free-riding, but rather quite the opposite. In and of itself, it seems unlikely that

a firm would find it instrumentally rational or within their individual preferences to purchase VCCs, without any form of influence from social processes or institutions. This leads us in the direction that corporate actions within this field most likely owe to explanations of motivation beyond purely simple profit maximization.

3.3. From simple profit maximisation to strategic stakeholder and legitimacy concern

Firms are dependent on legitimacy in society (Vatn, 2021 p. 126). It may be of more use to look to theories on stakeholder and legitimacy considerations for an understanding of firms' VCM participation as more respondent to institutional structures and pressures, since motivation grounded in simple profit maximisation seems an insufficient explanation. This section therefore points to strategically dominated motivation and decision-making, with grounds in elements from stakeholder and legitimacy theory. Overall, the section provides main elements of these two separately, but does not put forward a very clear delineation between these two as they are highly intertwined, and were assessed to be best addressed in combination.

For the sake of later use in the discussion of this thesis' findings, three main assumptions on firms' strategically determined decision-making are derived from this section. These encompass assumption 1. *decision-making grounded in stakeholder salience and legitimacy*; assumption 2. *desire to demonstrate, uphold and prevent threats to legitimacy*; and assumption 3. *strategic and social decision-making and behaviour with regards to stakeholder theory, with display of bounded and context-dependent rationality and multi-rationalism*.

3.3.1 Legitimacy theory: Legitimation as motivation

Strategically aligned legitimacy and stakeholder concerns are prominently referenced as mainstream theory in CSR literature. Dowling and Pfeffer (1975) define legitimacy as:

“(...) a condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity's legitimacy.” (p. 122)

In the context of firms as the entities, this would be understood in the sense that firms' survival depends on the continuation of legitimacy from those it needs legitimation from (O'Donovan, 2000), namely its *stakeholders*. Legitimacy theory thus suggests a form of social

contract (O'Donovan, 2000; Shocker & Sethi, 1973 p. 97), postulating that a corporation needs to act in accordance with the values and norms, or institutions, of the social system within which it exists and operates (Dowling & Pfeffer, 1975). To ensure legitimation by operating “within the bounds and norms of society” (Deegan, 2002), firms must keep up with the changes of these institutions.

With increased stakeholder pressure to adopt more sustainable strategies and practices, many firms may seek legitimation through adaptation related to VCM practices based on current or expected stakeholder demand, in order to display stakeholder accountability and uphold legitimacy to ultimately ensure the firm's continued survival. Within the context of upholding firm legitimacy, O'Donovan (2000) points to tendencies of firms to be more eager in disclosing information about environmentally related decisions or actions that would be positively received by stakeholders and present the firm “in a positive light”, than in disclosing practices that might be understood negatively by stakeholders, since the latter would jeopardise the firm's legitimacy (p. 354).

In the case of corporate engagement in the purchase of VCCs, as explored in this thesis, firms may ultimately display divided practice and potentially varying willingness to even engage with this thesis, as carbon offsetting in particular certainly has been scrutinised as a form of greenwashing (PwC & Miljøstiftelsen ZERO, 2022), an accusation of which, whether true or untrue, would pose a substantial “threat to a firm's legitimacy”, as Dowling and Pfeffer (1975, p. 122) posit.

3.3.2 Stakeholder theory: Stakeholder accountability as motivation

Elements from stakeholder theory presents relevant predictions about corporate-stakeholder relationships. This thesis adopts the inclusive definition of stakeholders as “any group or individual who can affect, or is affected by, the achievement of an organization's objectives” (Freeman, 2010 p. 46), and their actions connected to value creation and trade. On corporate decision-making, stakeholder theory is based on the premise that those engaged in value creation must take into account the interests of their stakeholders, and focus on “how value gets created for each and every stakeholder” (Freeman et al., 2010 p. 9). Dynamic system changes due to phenomena such as the rise of globalisation and heightened societal awareness of the effects of capitalism on climate change and the biophysical environment, have been referenced as core reasons for the development of stakeholder theory over the last five decades (Freeman et al., 2010).

In what is generally deemed the normative sense, stakeholder theory is “descriptive, prescriptive, and instrumental at the same time,” (Hörisch et al., 2014 p. 333) and if used to address ethics in capitalism “(...) it must show how a business could be managed to take full account of its effects on and responsibilities towards stakeholders” (Freeman et al., 2010 p. 9). In the corporate context, key stakeholders may include “consumers (including other businesses), financiers, employees, environmental interest groups, regulators, lenders, and insurers as well as standard setters (including business associations)” (Hörisch et al., 2014 p. 336). In relation to CSR, several approaches of stakeholder theory also consider nature itself as a stakeholder, such as through viewing civil society as “intermediaries between nature and the company” (Hörisch et al., 2014 p. 336) seems a more frequent, and perhaps more easily adaptable approach.

According to Freeman et al., stakeholder theory assumes that although different stakeholder interests may require trade-offs, they may also present opportunities for value creation (2010). “Stakeholder theory solves the value creation question by asking how we could redefine, redescribe or reinterpret stakeholder interests so that we can figure out a way to satisfy both, or to create more value for both,” (Freeman et al., 2010 p. 16) they argue. Freeman et al. (2010) also conceptualise stakeholder theory with several links to CSR and business ethics. Furthermore, the stakeholder view emphasises an institutional understanding of businesses through addressing their relationships with their many stakeholders. On how businesses ensure value creation for their stakeholders, Freeman et al. state “(...) executives must understand that business is fully situated in the realm of humanity. Businesses are human institutions populated by real live complex human beings” (2010 p. 29).

What and who firms define as their stakeholders, and the *power* (Vatn, 2021) of these on the firms’ decision-making, has an important impact on firm practices, including with regards to CSR practices and the use of VCMs. The influence or importance that stakeholders have for a firms’ decision-making is often defined in terms of power, legitimacy and urgency, which Mitchell et al. (1997) refer to as *stakeholder salience*. Perez-Batres et al. (2012) believed that stakeholder salience within the firm’s “desire to achieve normative legitimacy” motivated companies to “demonstrate their commitment to a more sustainable future”.

3.3.3 Three main assumptions on firms’ strategically determined decision-making

For the sake of later use in the discussion of this thesis’ findings, the following three core assumptions on firms’ strategically determined decision-making are derived from this section: assumption 1. *decision-making grounded in stakeholder salience and legitimacy*;

assumption 2. *desire to demonstrate, uphold and prevent threats to legitimacy*; and assumption 3. *strategic and social decision-making and behaviour with regards to stakeholder theory, with display of bounded and context-dependent rationality and multi-rationalism*.

With increased public knowledge and discourse regarding sustainable development, firms may increasingly be dependent on acting in accordance with developing perceptions of stakeholders, also stakeholder groups not previously accounted for in their decision-making. For example, in order to legitimise their business, firms may feel increasing pressure to display sustainable practices from their investors, partnerships, NGOs, other industry actors, and employees. Purchasing VCCs may be one of the decisions they make in order to display this legitimacy, as a potentially more cost-effective way to legitimise themselves than making adaptations to limit their own emissions.

Similarly, consequently *not* purchasing VCCs for the sake of limiting greenwashing claims, or purchasing a certain specific type of VCCs over another, may also be a display of the firm safeguarding itself against possible threats to its' legitimacy.

As non-ETS firms are not *required* to offset their emissions nor directly guaranteed to financially benefit from purchasing VCCs, such practice would not likely be grounded in instrumental rationality or individual interest, and considering motivations in line with assumptions of the social man as socially motivated, what would be socially expected from the firm, might be useful. Furthermore, assuming the firm acts in line with context-dependent multi-rationalism might explain the differences in VCC choices made by firms.

3.3.4 Elements of altruism in firms' decision-making

In continuing the above train of thought regarding decision-making beyond individualistic motivations of profit, this section points to the possibility that beyond strategic motivation and decision-making on VCM participation, firms may even display even more so socially or even altruistically driven motivation. Three main understandings of altruism are put forward, namely pure altruism, impure egoistic altruism, and normative altruism. Since assessing truly pure altruism would be empirically difficult in any case, elements of the latter two forms of altruism are likely more empirically applicable in assessing firms' motivation in VCM participation.

Assessing firm behaviour through an institutional lens, considering the possibility of both egoistic and normative explanations of altruism for motivation, and implementing an

understanding that firms' decision-making is not isolated, may result in a farther-reaching analysis than one based solely on assumptions on profit maximisation and purely strategic motivation. In evolutionary theory, the notion of altruism refers to "behavior that reduces the actor's fitness while enhancing the fitness of the others" (Simon, 1993 p. 156). Kotek et al. (2018) delineate altruism within CSR as forfeiting the firm profit for the good of others, by providing a public good or internalising negative externalities of the firm's production. In referencing altruism, several divisions between types of altruism exist, with much reference in particular to the divide between pure altruism and impure altruism. Vatn (2021) also divides the concept of altruism into two main veins: pure altruism and *mutual altruism* (or *solidarity*) which refers to behaviour that benefits *both us* and *our group* (p. 86). Schwartz (1977) presents three types of explanations for altruism, which are the intertwined processes of activation of self-expectations (which relates to the notions of pure altruism); arousal of emotion (which can be related to notions of egoistic or impure altruism, such as warm glow and sympathy); and activation of social expectations (which relates to ideas of normative altruism) (p. 224). These form the basis for the rest of this chapter.

3.3.4.1 Pure altruism: Doing good to do good

Vatn (2021) refers to *pure altruism* as behaviour that only serves *others*, a *they* (author's translation, p. 86). Similarly, Schwartz (1977) defines it as "intentions or purposes to benefit another as an expression of internal values, without regard for the network of social and material reinforcements" (p. 222). In this sense, purely altruistic behaviour is value-rational, which Weber (1978) exemplifies as behaviour by those who are "determined by a conscious belief in the value for its own sake (...) regardless of possible cost to themselves" (p. 24-25).

3.3.4.2 Egoistic (impure) altruism: Doing good to feel good ("warm glow") and do well

Several explanations of altruism relate to how agents may derive utility from it. Firm behaviour is grounded in egoistic (impure) altruism when the agent's behaviour is intended to in some way serve the agent. Andreoni (1990) conceptualised altruism within the context of the economic man, with reference to the "warm glow"-sensation one might experience upon acting in a way that serves others, that is, to "gain utility from the act of giving" (p. 475). Similarly, Sen refers to the two different concepts of *sympathy* and *commitment*, and argues that action based on the latter is non-egoistically motivated, while behaviour based on the

former carries *egoism*, “for one is pleased at others’ pleasure and pained at others’ pain, and the pursuit of one’s own utility may thus be helped by sympathetic action” (1977, p. 326).

Similarly, Schwartz (1977) states that altruism elicited from “emotional or empathic arousal” to the extent that it is mostly intended to alleviate the “helper’s own distress” is not truly altruistic (p. 224). According to this line of reasoning, firms may engage in, and benefit from altruistic behaviour “if they interact in a context where reciprocation is rewarded” (Kotek et al., 2018 p. 162), that is, if their stakeholders respond positively to the engagement. Altruism may indeed be a strategically rational way of generating or upholding goodwill and legitimacy among stakeholders. Becker (1974) argues that actors may act altruistically motivated by how the action ultimately may benefit the firm socially, referring to how “apparent “charitable” behavior” might in fact be “motivated by a desire to avoid the scorn of others or to receive social acclaim” (p. 1083). In turn, he states that “an egoist” might be motivated by how it may in turn benefit them financially, as they will have “incentive to simulate altruism whenever altruistic behavior increases his own consumption through its effect on the behavior on others” (Becker, 1976 p. 822).

Through strategic voluntary carbon credit use, firms may observe and cultivate a similar warm-glow feeling (as of that mentioned above) among stakeholders like their customers (Bhattacharya et al., 2021) or investors (Tatomir et al., 2023). For example, cultivating a warm-glow effect is positively associated with higher consumer and investor attraction, and is displayed to positively affect willingness to pay [WTP] and customer loyalty (Habel et al., 2016). Similarly, the VCC practice may be driven by firm-internal warm-glow feeling, as this may boost morale, attractiveness, and retention among current and prospective employees and decision-makers (Hoffman, 2005; Petrenko et al., 2016), which may both increase firm productivity and minimise the risks and costs of employee instability (Kotek et al., 2018). According to Kotek et al. (2018), firms looking to improve the credibility of their altruistic motivation and practices should (and tend to) emphasise that they internalise the cost of pro-social or -environmental initiatives (which in this case would be expressing internalisation of costs for emissions reduction or climate financing through VCCs, for example) or as customers only tend to experience the positive warm-glow effect from engaging with the firm if they truly believe in the altruistic motivation behind the firm’s practice (Habel et al., 2016), which may also be the case for other stakeholder groups.

Ultimately, this assumption contends that the “beneficial indirect effects” from an agent surrendering part of their income may “dominate the direct disadvantages of being altruistic” (Becker, 1976 p. 820).

3.3.4.3 Normative altruism: Doing good to comply with expectations (norms and institutions)

Firm behaviour is grounded in normative altruism when the agent's altruistic behaviour is intended to comply with normative and institutional structures (Schwartz, 1977). Normative altruism seems to land somewhere in a grey area between motivation related to altruism and normative legitimacy as motivation. This explanation attributes altruism to motivations of "prosocial behavior" (Schwartz, 1977) to comply with "norms presumed to be widely shared", "specific expectations or rules," and "content-specific norms which emerge in the course of continuing relationships" (p. 225). As opposed to egoistic (impure) altruism, normative altruism in this sense relates more to an instrumental rationality of acting altruistically so as to "comply" with what is expected of them through institutions and social norms.

4. Methodology

With the intent of addressing the outlined problem statement and RQs using the analytical framework outlined above, the dissertation employs the research strategy, design, and methods as presented below. This chapter presents and explains methods of data collection and analysis chosen for this thesis, with reference to relevant stages of decision making both ahead of, during and after data collection and analysis. The chapter also includes practical and ethical considerations, and outlines core elements pertaining to validity, reliability and replicability.

4.1 Research Strategy: Mixed methods research

This study utilises a mixed-methods research strategy, combining quantitative and qualitative research. As defined by Bryman, mixed methods research refers to research that combines both quantitative and qualitative data collection (2015 p. 634).

Bryman (2015) makes note of several potential strengths of using a mixed methods strategy. These include the potential of producing a more credible and complete answer with diverse views, the possibility of using different methods to address different kinds of RQs, room to address and explain potentially unexpected results that may arise in using one method, and the option of using one method to create a sample for another method (Bryman, 2015 pps. 642-655). It must be emphasised that although a mixed methods research strategy would *ideally* result in providing a "better understanding of a phenomenon than if just one

method had been used” (Bryman, 2015 p. 658), it cannot be assumed to be inherently superior to mono-method research (p. 659). Many researchers raise concerns about the quality of mixed methods research, and Bryman (2015) emphasises that, as with any other research strategy, it is highly necessary to take into account the constraints and considerations of this as a research strategy, as it in no way constitutes a one-size-fits-all approach (pps. 657-658).

Nevertheless, considering the thesis’ scope and RQs, this seemed a fitting research strategy, with application using the quantitative method of an online questionnaire and the qualitative method of semi-structured interviews. This allowed drawing on the strengths of collecting data on the scope and extent of voluntary carbon credit purchase among a relatively large sample of respondents through a quantitative online questionnaire, *and* reaping the benefits of more in-depth insights through semi-structured interviews with a smaller sample of companies. This choice was firstly made based on the assumption that a purely qualitative research strategy would fail to produce a large enough response rate needed for addressing the nature of RQ1. Secondly, the choice of a mixed methods research strategy was based on the assumption that more in-depth and open-ended semi-structured interviews would better serve data collection in answering RQ2 and RQ3. Lastly, as mentioned by (Bryman, 2015), this combination of methods was intended to allow the quantitative online questionnaire to serve as a way of producing a sample of companies to be interviewed in addressing RQ2 and RQ3.

4.2 Research Design:

A research design illustrates a framework for collecting and analysing data for a project (Bryman, 2015 p. 40). With regards to formulating an appropriate research design to address this thesis’ scope and intended undertakings, an *explanatory sequential design* as described by Bryman (2015) as “the collection and analysis of quantitative data followed by the collection and analysis of qualitative data in order to elaborate or explain the quantitative findings” (p. 640). The thesis’ application of the explanatory sequential design is illustrated in Figure 1 below. The use of upper case or lower case letters demonstrate the priority of the respective data-collection approach used. For example, an upper case “QUAN” indicates that the dominant data-collection approach for the study is qualitative, while a lower case “quan”

indicates that quantitative data-collection has a subordinate role in the study.

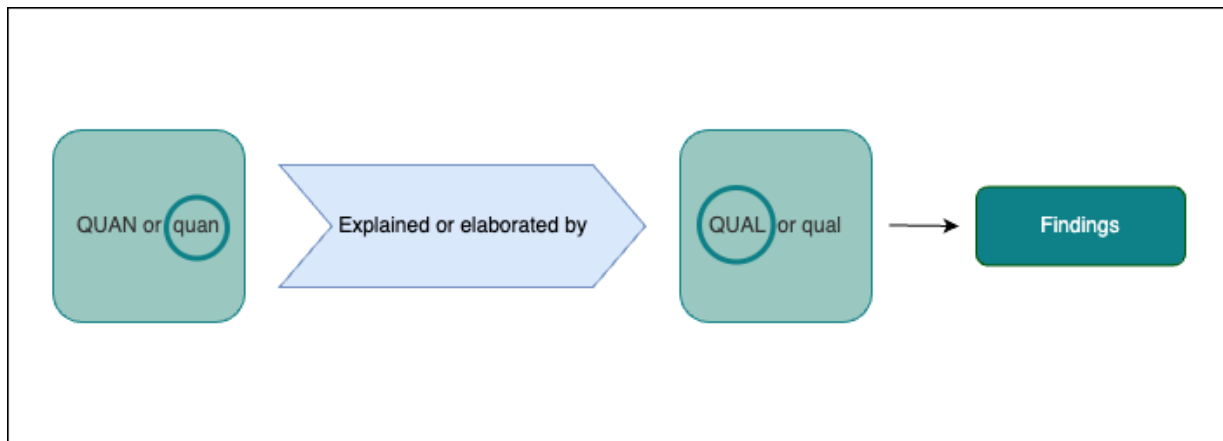


Figure 1: Application of explanatory sequential design (based on Bryman (2015, p. 639))

The explanatory sequential design was employed through an quantitative online questionnaire (represented by the circled lower case “quan” on the left in Figure 1) to answer RQ1 and produce a sample for the semi-structured interviews (represented by the circled upper case “QUAL” on the right in Figure 1) to address RQ2 and RQ3. The upcoming section provides further elaboration on the use of these methods in this thesis.

4.3 Research Methods

The term *research method* in itself is explained by Bryman (2015) as a “technique for collecting data” (p. 40). A quantitative online questionnaire and a qualitative semi-structured interview were the two main research methods utilised in completing this thesis.

4.3.1 Online questionnaire

The main research method employed in addressing RQ1 is an online self-administered questionnaire, as elaborated upon below. A self-administered questionnaire (often referred to as a *survey*) is defined by Bryman (2015) as a quantitative method where “respondents answer questions by completing the questionnaire themselves” (p. 221). The mode of administration of the questionnaire used in this thesis was an online survey platform. This method will therefore henceforth be referred to as an online questionnaire, and, for the sake of simplicity the respondents of the online questionnaire will henceforth be addressed through the abbreviation “QResps”.

4.3.2 Semi-structured interviews

The main research method employed in addressing RQ2 and partly RQ3 were semi-structured interviews. Bryman refers to this form of research method within which “the interviewer has a series of questions that are in the general form of an interview guide but is able to vary the sequence of questions,” and “(...) the interviewer typically has some latitude to ask further questions in response to what are seen as significant replies” (2015, p. 201). Furthermore, though staying overall similarly worded irrespective of the interviewee, the questions of a semi-structured interview may not be posed exactly the way they were worded in the interview guide (Bryman, 2015 p. 468).

The qualitative semi-structured interviews were carried out with companies belonging to the same core sample as outlined above. However, an important note to make is that the interviewed companies, henceforth referenced as “IResps”, were not required to have completed the online questionnaire in order to be interviewed. This will be elaborated upon in Chapter 5.2. *Results and analysis: Determinants of VCM participation.*

4.4. Choice of study population and delineation of population

The term population refers to the “universe of units from which the sample is to be selected” (Bryman, 2015 p. 174). This study’s population consisted of Norwegian medium-size and large firms whose main financial activity lies within selected emissions sectors that are not covered by the EU ETS, henceforth non-EU ETS sectors or firms in non-EU ETS sectors. The following section elaborates on this choice of population for the study.

The decision to focus the study on non-listed companies of these size categories largely relates to the expected approval of suggested amendments to the Norwegian Accounting Act following the CSRD, which will primarily introduce legal requirements regarding sustainability reporting for firms within these groups from the fiscal year of 2025 and onwards (The Ministry of Finance, 2024b). The requirements for sustainability reporting both in the CSRD (EP & CEU, 2022) and the proposed amendments to the Norwegian Accounting Act (The Ministry of Finance, 2024b) insofar exclude so-called micro-undertakings. Although non-listed SMEs won’t be subject to the legal requirements of reporting in the proposed amendments to the Norwegian Accounting Act (The Ministry of Finance, 2024b), they will likely still be affected in the form of new expectations and requirements from several of their stakeholders regarding sustainability reporting (p. 29). This might be the case for non-listed SMEs facing reporting requests from banks, customers or

partners that are themselves obligated to provide sustainability reports from their value chain, for example (Verdipapirlovutvalget, 2023 p. 29).

The decision to focus on medium-sized and large companies also reflects grey literature pointing to firm size as relevant to the extent of the firm's participation in VCMs and similar practices. Engler et al. (2023), for example, attribute the extent of a firm's participation in voluntary carbon markets to "the availability of resources, including knowledge and financial funds, which tend to increase not only with firm size, but also with the years of existence in the market" (p. 6). Engler et al. (2023) did note that only a small percentage of the small- and medium-sized firms they surveyed in Germany had participated in or even discussed voluntary offsetting as of 2023.

Non-EU ETS sectors include those mainly relating to transport, agriculture, construction and waste, in addition to emissions from industry and petroleum operations that are not defined as EU ETS-obligated (Regjeringen, 2016). This study focuses on the population of Norwegian enterprises with main financial activity as categorised within the former four of these non-EU ETS sectors, as the incorporation of the latter presents challenges in terms of delineation from the rest of their emissions that are regulated by and under the regulation of the EU ETS.

The categorisation by sector follows the industrial codes of the Norwegian Standard Industrial Classification (SIC2007) (Statistisk Sentralbyrå, 2008), which is based on the European Classification of Economic Activities (NACE Rev. 2) (Eurostat, 2008). These codes, termed NACE codes, are structured as follows:

“Main industrial area – the first level identified by a letter code

Activity – the second level identified by a two-digit code

Main industrial group – the third level identified by a three-digit code

Industrial group – the fourth level identified by a four-digit code

Industrial code – the fifth level identified by a five-digit code”

(The Brønnøysund Register Centre, 2023)

The segmentation of Norwegian enterprises with their main financial activity within non-ETS sectors was based on the *second* level of NACE identification, namely the Activity categories consisting of a two-digit code. The following **Activity categories** within the Brønnøysund Register Centre were deemed to fit the criteria of having their main activity align with what is defined as the four main non-ETS sectors in Norway, as listed above:

“01 Crop and animal production, hunting and related service activities

02 Forestry and logging

38 Waste collection, treatment and disposal activities, materials recovery

41 Construction of buildings

42 Civil engineering

43 Specialised construction activities

49 Land transport and transport via pipelines

50 Water transport'

(Statistics Norway, n.d.)

In order to produce a list of companies to make up the population for the study, a segmentation was performed by running the relevant NACE Activity groups through The Brønnøysund Register Centre [BRC] search engine for open data on business activity information (“Virksomhetsopplysninger”) (The Brønnøysund Register Centre, n.d.), which allows a defined search for businesses within the registry, returning a population delineated by the criteria below. The criteria used in the search were as follows:

Municipality: All of Norway

NACE Activity codes: 01, 02, 38, 41, 42, 43, 49, 50

Organisation type: Stock-based listed limited companies, (AS (Aksjeselskap))

Employee count: 50 and up

Currently undergoing bankruptcy proceedings: No

Date of registration in the Unit Registry (Enhetsregisteret): Undefined

Based on these criteria, the unit search resulted in a population of a total of 1059 listed and unlisted stock-based limited companies of a medium- to large size carrying out main activities within non-ETS sectors, categorised with the above NACE Activity Codes as their primary NACE Code. The initial sample for this study, consisting of (n =) 400 companies in total, was then drawn from the above population through stratified random sampling.

4.5 Sampling methods

4.5.1 Stratified random sampling for the online questionnaire

For the online questionnaire, the sampling method utilised was that of stratified random sampling, which Bryman defines as being able to ensure that “the resulting sample will be distributed in the same way as the population in terms of the stratifying criterion” (2015). This ensured that the outlined population was well represented in the final sample.

Stratified sampling refers to the act of “stratifying the population by a criterion (...),” in this case, by NACE Activity Codes, “(...) and selecting either a simple random sample or a systematic sample from each of the resulting strata” (Bryman, 2015 p. 178). An advantage of stratified random sampling, which was employed in this study, was that the final sample it produced would be weighed proportionately in the same way the population was distributed in terms of the criteria used for stratification (Bryman, 2015 p. 178). The sample was drawn from the population using Microsoft Excel. First, the search result returning the population of 1059 was exported into a Microsoft Excel sheet, which was then formatted as a table for easier management. The functions of RAND, COUNTIFS, IF, ROUND, and COUNTA, were then used to extract a stratified random sample of 400 companies.

The choice to have a sample of this number in total was intended to capture a large enough number of firms to produce a sufficiently representative result from the initial online questionnaire, with the knowledge that some sectors were much more heavily represented than others in the population (and thus, in the stratified sample), *and* taking into account the expectation of some level of non-response among respondents (Bryman, 2015 pps. 184-186). Repeated testing with smaller stratified samples (with 350 in total, and 300 in total) produced samples that implied very few stratified possible respondents stratified from the smaller sectors. Ultimately, the decision was made to cut NACE Activity Code of 02 Forestry and Logging from the final sample. This decision was made due to its size, since only one (1) of the 1059 companies in the extracted population had this code. Table 3 displays the stratified proportion of companies sampled and used for the qualitative online questionnaire.

Table 3: Stratified random sample for the online questionnaire

Stratum (NACE Activity Code)	Companies (in population)	Sample proportion (of total sample)
01	18	7
02	1	0
38	43	16
41	221	83
42	58	22
43	479	181
49	174	66
50	65	25
Total	1059	400

4.5.2 Initial sampling for semi-structured interviews: Convenience sampling based on stratified random sample

The sampling for the semi-structured interviews was made using convenience sampling from the same core sample of 400 using stratified random sample. As part of the online questionnaire, the sample which received this questionnaire received an invitation to provide further insight through a more in-depth semi-structured interview. The companies voicing their interest for these interviews were then contacted directly.

4.5.3 Secondary sampling for semi-structured interviews: Purposive sampling based on stratified random sample

A secondary sampling method of purposive sampling based on the same stratified random sample for the semi-structured interviews was deemed necessary to produce enough insight to address the thesis' research questions. This decision was made during the data collection process, as only four firms initially expressed interest for participating in the semi-structured interviews. Bryman refers to purposive sampling as sampling participants or cases "in a strategic way, so that those sampled are relevant to the research questions that are posed" (2015, p. 408). A noteworthy limitation of purposive sampling is that it does not allow researchers to draw generalising conclusions about the population (Bryman, 2015 p. 408). The consideration of this is important in the case of this thesis, particularly with regards to how this secondary sampling method was not initially part of the plan. The secondary sampling through purposive sampling was performed through contacting some of the firms within the sample that had insofar not expressed interest in participating, but seemed likely to either purchase or be interested in purchasing VCCs based on website searches. Following this round of secondary sampling, the final number of total interviewees was 6. This number was deemed sufficient with grounds in the thesis' limited scope and time frame.

4.6 Data collection

The process of data collection refers to the gathering of data from the chosen sample in order to answer the research questions that have been posed (Bryman, 2015 p. 12). The data collection for this thesis was performed using two core methods of data collection, namely a quantitative online questionnaire, and qualitative semi-structured interviews. The following section addresses the use of these two core methods.

4.6.1 Quantitative data: Online questionnaire

The questionnaire was short and anonymous, with seven multiple-choice questions not allowing for open-ended answers. The respondents were however able to supply additional information in a text field at the bottom of the questionnaire if they wished to do so.

The online questionnaire was administered through student e-mail, with an invitation specifically addressed to the sample delineated above. The survey was created and carried out through the use of Nettskjema.no, which is a web-based survey tool developed by the University of Oslo (n.d.). The tool is specifically designed for the secure and accurate collection, storage and extraction of data (Universitetet i Oslo, n.d.), and is approved as an instrument of data collection by the Norwegian Agency for Shared Services in Education and Research (Sikt, n.d.-b).

The online questionnaire was intended to produce results that could be sorted by sector based on the companies' core activities, as were elaborated on above. Questions from the online questionnaire are to be found in Appendix A.

Overall, a total of 77 companies completed the online questionnaire. Three of the responses were unsuitable questionnaire responses, since they came from companies that registered their response with a NACE Activity Code outside the sample. With a remainder of 74 usable questionnaire responses, the online questionnaire as a data collection method had a response rate of 18,63%, using the below formula. This response rate was far lower than desired, with implications for validity, as will be elaborated upon later in this chapter.

Table 4: Calculated response rate based on response rate formula (Bryman, 2015 p. 185)

$$\frac{\text{number of usable questionnaires (74)}}{\text{total sample (400) - unsuitable or uncontactable members of the sample (3)}} \times 100$$

4.6.2 Qualitative data: Semi-structured interviews

The semi-structured interviews were carried out based on the structure outlined in the Interview Guide which can be found in Appendix B. As evident in the Interview Guide, the firms' are mostly asked questions with regards to RQ2, and not asked specific questions regarding RQ3. This is because RQ3 was mostly intended to be answered through discussion

in light of RQ2. The decision of this approach lies in the time constraints of the already long Interview Guide, which chiefly addressed RQ2, which was also the highest priority among the three RQs.

The semi-structured interviews allowed more in-depth perspectives from the industry actors within the sample. The interview guide (Appendix B) was fairly structured and thematically approached, with the intention of touching upon the specific themes of the theoretical chapter, while allowing for flexibility and adaptation to the respondents' answers as the interview went along, with potential for relevant supplementary questions. This aligns with the description of semi-structured interviews as defined by Bryman (2015, p. 468), and ensured a level of comparability between each separate interview. This was also somewhat facilitative in terms of carrying out a subsequent thematic analysis, which is elaborated upon in later chapters.

As the interviewees were spread across the country, all interviews were carried out using Microsoft Teams. As no interviews were performed in person, the interviews were carried out based on the same premises in this regard. Each interview (with some exceptions, as elaborated upon in chapter 4.6. and 4.7.3.) were recorded through this platform. Each interview was later replayed and transcribed following the interview.

Following each interview, a research diary was used to make notes on reflections and afterthoughts from the interview, mention of any specific noteworthy aspects of the interview, while also making note of any technical, practical or other difficulties that may have occurred. Bryman (2015) refers to this as a useful practical tool during data collection (p. 86). This also proved useful with regards to improving as an interviewee, particularly between the first couple of interviews conducted.

The process regarding the steps surrounding each interview was recorded in a Microsoft Excel worksheet which simultaneously served as a checklist for each interview. Throughout all interviews, short notes were made by hand regarding specific areas of interest or follow-up questions relevant to the discussion. This facilitated a relaxed atmosphere, while it allowed for relevant direction regarding areas of interest. During the interviews that allowed for recording, notes were also made by hand for specific timestamps for particularly noteworthy parts of the conversation and possible quotes, so it would be easy to come back to and make note of during transcription.

Overall, six semi-structured interviews were held with members of the sample across four different NACE Activity codes. The process and results of the interviews were recorded and coded using a number key for each of the interviewed companies [IResps] from 1 to 6.

The companies that were interviewed as part of the semi-structured interviews will therefore be represented by these numbers throughout the rest of this thesis with reference to IResp 1, IResp 2, and so on.

4.7 Data analysis

The data analysis stage of a research process refers to the handling, analysis, and interpretation of the data collected for the study (Bryman, 2015 p. 12). This stage is essentially about *data reduction*, as it is “concerned with reducing the large body of information that the researcher has gathered so that he or she can make sense of it” (Bryman, 2015 p. 12). This research project requires the analysis of two types of data – the quantitative data from the online questionnaire, and the qualitative data from the semi-structured interviews. Two important aspects must be noted here: firstly, although the results of the online questionnaire is mostly used to address RQ1, and the results of the semi-structured interviews are mostly used to address RQ2 and RQ3, the results of the respective research methods are also used to *supplement* each other to some degree in the discussions of the RQs. Secondly, it must be noted that RQ3 is mostly intended to be a RQ addressed through discussion in light of the analysis and discussion of RQ2, as specified above.

4.7.1. Quantitative analysis of the online questionnaire

The results of the quantitative online questionnaire were extracted directly into a Microsoft Excel sheet, which was then formatted to allow for analysis. Each questionnaire submission represented one company, and there were 77 questionnaire responses in total. Since three (3) of the responses registered with a NACE Activity Code outside the sample and were rendered unsuitable to the study, the amount of usable questionnaire responses amounted to 74 in total. The questions in the questionnaire allowed the data to be divided by main NACE Activity, which was useful in categorising the firms and producing graphs to display the results of each of the questions of the online questionnaire.

Since some firms are registered with more than one NACE Activity Code in Brønnøysundregisteret, it was possible to register the response with more than one NACE Activity Code. For the companies in which this is the case, the NACE Activity Code representation is evenly distributed across the NACE Activity Codes they ticked, so that every company’s total NACE Activity Code representation still amounts to that of *one* company in the numbers and figures representing all questionnaire respondents. Figure 2 displays the 74

usable responses distributed per NACE Activity Code in percentages, where 74 equals 100%. The title along the upper corners within these figures display the number and corresponding wording of the question in the online questionnaire that the figures represent. The figures may be found in Appendix G.

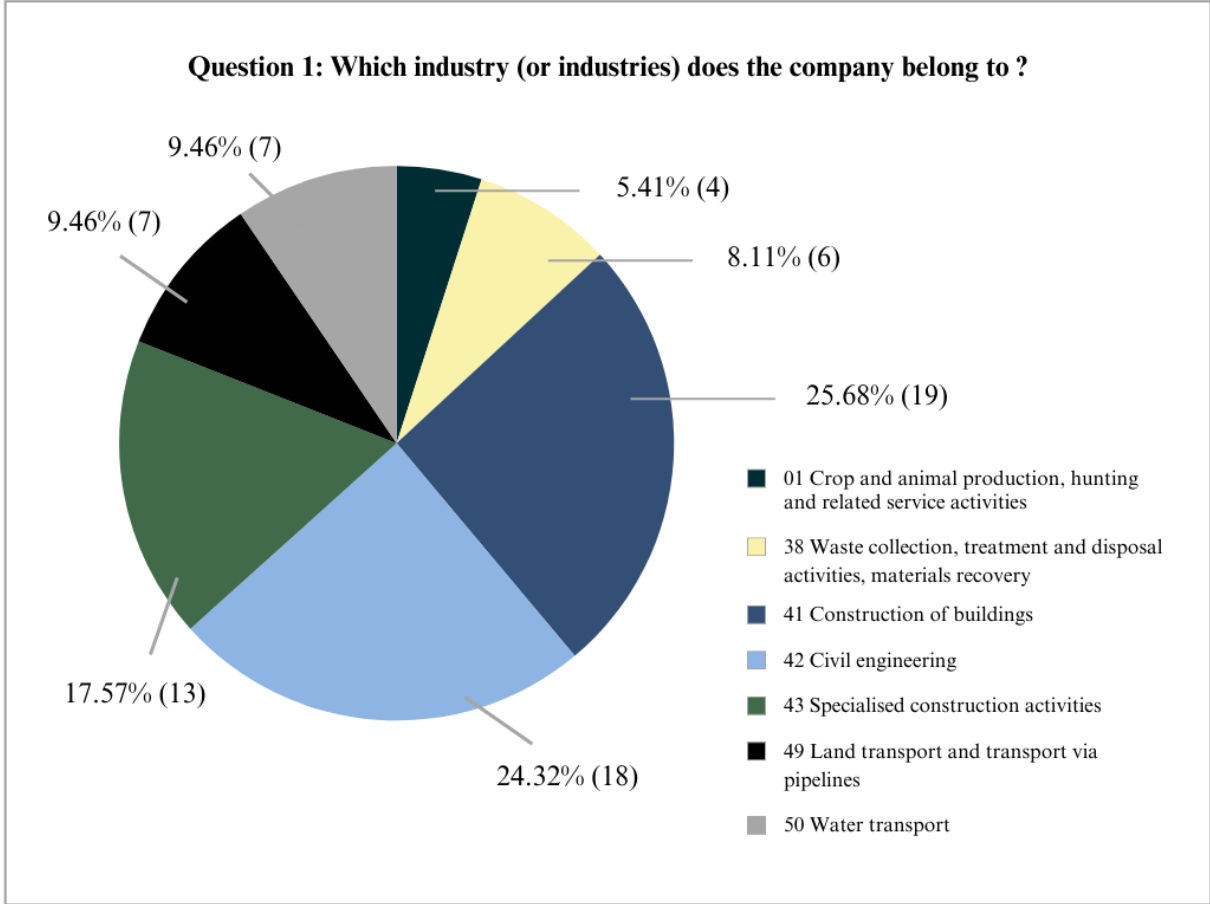


Figure 2: NACE Activity Code representation across all 74 usable questionnaire responses

4.7.2. Qualitative analysis of the semi-structured interviews: Thematic Analysis

The interviews were analysed through the use of thematic analysis. Bryman (2015) refers to this as “the extraction of key themes in one’s data” (p. 697). Following the definition of Bryman (2015), themes are categories identified in an analyst’s data that pertain to the analyst’s chosen research focus, build on different codes ascertained in (for example) transcripts, and ultimately supplies the analyst with “the basis for a theoretical understanding of his or her data that can make a contribution to the literature relating to the research focus” (p. 584). In the search of themes as part of thematic analysis, Ryan and Bernard (2003) suggest keeping an eye out for certain elements such as repetition of recurring topics, transitions between topics, commonalities and dissimilarities in topics discussed across

interviewees, linguistic connectors that may display causal relationships, and theory-related concepts (pps. 88-94). The results from the qualitative semi-structured interviews were coded based on the transcripts in their original language, since they were all conducted in Norwegian. Relevant excerpts and quotes were translated from the original quote to English and used in the thesis, with the original quote in its original language and formulation in a footnote. The qualitative interviews were transcribed following the completion of each separate interview. For the sake of time efficiency, interviews recorded using Microsoft Teams were transcribed using a Microsoft Word's transcription service for a rough draft. Although this was a rather efficient tool, each interview had to be replayed and listened through manually to ensure each interview had been transcribed correctly. One interview was not recorded due to the personal preferences of the interviewee – the answers from this were recorded using manual note-taking throughout the interview, which necessitated some additional time between each question to write down and double-check answers. The relistening and proofreading of the interviews allowed for reflection with regards to the analysis and discussion of the results.

Although no single standardised approach exists to approaching a thematic analysis, the chosen course of action for the thematic analysis of this thesis' interviews centered around the roughly delineated steps for thematic analysis below, as devised by Bryman (2015):

- “1. Read through at least a sample of the materials to be analysed;*
- 2. Begin coding the materials;*
- 3. Elaborate many of the codes into themes;*
- 4. Evaluate the higher-order codes or themes;*
- 4a. Give names or labels to the themes and their sub-themes (if there are any);*
- 5. Examine possible links and connections between concepts and/or how the concepts vary in terms of features of the cases;*
- 6. Write up the insights from the previous stages to provide a compelling narrative about the data;*
- 6a. Make sure you justify your themes”* (pps. 587-588).

According to Bryman (2015), avoiding vagueness in the justification of themes (step 6a) is particularly important in the use of thematic analysis, which can be aided by “having an audit trail of key decisions relating to coding, theme identification, and conceptualization, as well

as an evidence base for those decisions” (p. 587). The following section therefore provides a detailed account of the thematic analysis used in this thesis.

In accordance with steps 1 and 2, the initial coding of the material from the interviews began after having completed the first interview transcription. Already during the first interview, and upon reading through each completed transcript for the first time, it was possible to begin making initial mental notes and simple remarks and reflect what some of the data could be coded as. Upon reading through each of the completed transcripts, significant remarks and observations from the interviews were made note of by highlighting portions of text and labelling them using simple terms such as “expectations within sector”, “expectations from potential future employees”, “sense of moral responsibility” and so on.

Following step 3, these initial codes were then reduced to four named higher-order themes, which each of the codes had some form of belonging to. In line with steps 4 and 4a, the four initial themes were then evaluated and revisited to provide a division and structure more representative of the type of data they represented. They were also made to more concisely relate to the terminology of the literature and theory addressed in formulating the thesis’ problem statement and hypotheses. This produced four main themes, namely 1. *Timing and priority of actions*; 2. *Firms’ conditions for financial stability and profitability*, 3. *Firms’ incentives and motivations in assessment of VCM participation*, and 4. *Firms’ knowledge and preferences regarding CSR measures, VCMs and VCCs*. These four main themes ended up encompassing a total of 10 sub-themes, while provided a structure for the results and analysis chapter. Table 5 displays the division of themes and sub-themes for the thematic analysis, with the range of company response within sub-themes.

Table 5: Themes and sub-themes of the thematic analysis

Determinants (themes and sub-themes)	
5.2.1.	Timing and priority of actions
5.2.2.	Developments affecting firms' conditions for financial stability and profitability
5.2.2.1.	Financial stability, profitability and liquidity as core priorities
5.2.2.2.	Changes in stakeholder demands and expectations
5.2.3.	Firms' incentives and motivations in assessment of VCM participation
5.2.3.1.	Addressing extent and cost of fulfilling firms' emissions reduction targets
5.2.3.2.	Alleviating risks of financial instability and insecurity
5.2.3.3.	Capitalising on opportunities for financial gain
5.2.3.4.	Fulfilling firms' sense of role, responsibility and conscience through climate financing
5.2.4.	Firms' knowledge and preferences regarding CSR measures, VCMs and VCCs
5.2.4.1.	Gaps, maturity and transaction costs in VCM knowledge
5.2.4.2.	Concerns regarding measurability, integrity, and credibility
5.2.4.3.	Preference for demonstrable, visible efforts relevant to core activities and emissions, and geographical location
5.2.4.4.	Industry or field cooperation and conformity

4.8 Ethical considerations

A number of considerations were made in order to avoid and address potential ethical issues throughout the process of completing this thesis. Diener and Crandall (1978) refer to the following four areas of ethical issues in social research as most prominently occurring: harm to participants, lack of informed consent, invasion of privacy, and deception. The following section outlines which measures were taken so as to address the potential ethical issues of this study. Firstly, the project was reported to the Norwegian Agency for Shared Services in Education and Research (also known as Sikt). Overviews of both the online questionnaire and the semi-structured interviews were submitted along with information letters regarding consent and the collection and processing of personal data for both of these research methods (Appendices C and D). The information letters followed Sikt's standard templates and their guidelines for handling personal data in terms of consent, data processing, and anonymity (Sikt, n.d.-a). Many considerations were overall made so as to best address the potential pitfalls pertaining to how corporations' GHGe emissions and sustainability efforts, or potential lack thereof, may constitute a point of pressure for the companies themselves as respondents.

An initial concern was that the nature of the data collected might deter potential respondents from participating as they might feel the project was intrusive or out to expose, confront or shame the company in some way, because of general pressure on companies to adopt climate-friendly operations, but also pressure to not greenwash. The companies contacted were therefore ensured anonymity and confidentiality, as their participation would not be traceable back to the company nor the employee. The online questionnaire and the semi-structured interviews were both formulated in a way that they would not ask for nor reveal company-specific information, and so the companies would only be represented by the sector they reported belonging to. The data was handled and presented anonymously, with each company being represented by either IResp or QResp in the thesis. The data and codes for each participating company were stored and handled separately and deleted upon completion of the project. This ensured the anonymity of both the interviewee and the company they represent. The data was also collected from a relatively large sample, making it even more so difficult to trace data back to a single company or employee. However, interviewed firms were not identified by NACE Activity Code, as this in combination with some of their responses may have made them identifiable.

Furthermore, both the questionnaire and the interview went through several rounds of revisions and were pilot tested through test interviews and test runs, allowing for adjustments in the formulation and sound of the questions before being conducted on the actual sample. This aided in steering clear of questions that may risk harm to participants, produce feelings of shame or being exposed, potential invasions of privacy, or questions that may present other ethical issues.

Lastly, all participants of both the online questionnaire and the interviews gave their informed consent to participate. Upon receiving an invitation to participate in the online questionnaire, all potential respondents received the aforementioned informed consent letter (Appendix C) and were required to tick a box to confirm their informed consent before submitting the questionnaire. All interviewees also gave their informed consent (Appendix D) before participating. This ensured that all participants actively consented to participate, knew what they were agreeing to, and were not subject to deception or a lack of informed consent. Lastly, all interview subjects were informed of and asked for consent to having their interview recorded for transcription before the recording was started.

4.9 Practical considerations and limitations

4.9.1 Language

As the companies studied in this project are all Norwegian, both the questionnaire and the interviews were carried out in Norwegian. This may present limitations in the form hard-to-translate terms or wordings from respondents in the interviews. To avoid misinterpretation or subjective translation of responses, neither the transcripts of the interviews nor the written responses of the questionnaire were translated into English unless when utilised as a quote. Translated quotes are presented in the thesis, with the original quote in its original Norwegian phrasing in Appendix F.

4.7.2 Response rates

A prominent limitation of online questionnaires is that of low response rates, which ultimately increases the risk of biased findings (Bryman, 2015 pps. 224-226). Several measures were implemented in the attempt to produce a high response rate for the online questionnaire used in this study, such as writing an email invitation with a concise, descriptive yet inviting introductory statement with clear instructions, and creating a short, clearly presented and easy-to-access questionnaire. These align with several of the steps for improved response rates for questionnaires as formulated by Bryman (2015, pps. 225-226). Confidentiality was prioritised as a measure to alleviate the risk of deterring companies from participating due to fear of feeling exposed or scrutinised by the project's undertakings. This also produced the challenge that complete anonymity made following up non-respondents of the online questionnaire impossible.

4.8. Study limitations and trustworthiness

This research project displays a clear variation in the level of validity and reliability. On the idea of validity as a measure of quality in research, Bryman (2015) points to an overall question of “the integrity of the conclusions that are generated from a piece of research” (p. 41). Reliability refers to the concern of whether a study's results are stable and consistent enough to be repeatable (Bryman, 2015 p. 41).

Arguably, the validity of this study was challenged both in answering RQ2 and RQ3, due to a necessary adjustment to account for not only firms purchasing VCCs, but also those considering it. This adjustment was necessary to make use of the firms that were possible to interview despite the low response rate. Furthermore, as the study was initially have a core

focus on addressing RQ2 on determinants of firms purchasing VCCs, with RQ3 intended as a discussion question based on these findings, answering RQ3 in a sufficient way proved difficult. Furthermore, the purposive sampling deemed necessary for completing the project lead to the inability to generalise results. Lastly, the confidentiality which was prioritised as a measure of both ethical consideration and alleviating the risk of deterring companies from participating due to fear of feeling exposed or scrutinised by the project's undertakings. A challenge was that complete anonymity made following up non-respondents impossible. However, it is difficult to say whether respondent confidentiality limiting the follow-up of non-respondents lead to a lower response rate than if complete anonymity had not been ensured, even with the possibility of then following up non-respondents.

With regards to reliability, the extensive methodology for sampling and distribution arguably points to relatively reliable results of the online questionnaire. The extensive interview guide for the semi-structured interviews, however, proved a challenge to reliability as its length likely makes difficult to repeat in a way that would produce results comparable to those of this study.

5. Results and analysis

The following chapter addresses the results gathered from the quantitative and qualitative data collection methods elaborated on above, with reference to the RQs of the thesis. Although both the online questionnaire and the semi-structured interviews are based on the same core sample and in many ways address the same main questions, the results derived from each of them are not directly combined or viewed as interchangeable. This is the case even in the instance that the questions are the very same (which is the case for all of the core questions in the online questionnaire, as is illustrated in the highlighted sections in Appendices A and B). Since respondents remained anonymous in both samples, their respective respondents likely also carry some overlap, but are not guaranteed to do so. Furthermore, the data collection was carried out using two different methods and thus, produces results based on different premises.

For the sake of clear delineation of the data derived from each sample, respondents of the online questionnaire and companies subjected to the semi-structured interviews will henceforth be referred to as *questionnaire respondents* [QResps] and *interview respondents* [IResps] respectively. This above distinction is made to account for the above considerations, and for the fact that there is no clear way to verify how many of the interview respondents are

also among the online questionnaire respondents. As the sampled firms received the invitation to complete the online questionnaire through an e-mail which *also* openly encouraged the recipients to reach out via e-mail if they were interested in participating in the semi-structured interviews, there was no guarantee or clear way to verify that those who expressed interest in being interviewed had completed the online questionnaire. In fact, upon consideration of the results from both the online questionnaire and the semi-structured interviews, it was discovered that *at least* one of the interview respondents could not have completed the online questionnaire.

Most importantly, it must be noted that 1. the firm that reported to purchase VCCs through the online questionnaire could not have been the same as the firm that reported to purchase VCCs during their interview (IResp 6); and 2. the IResp that reported to purchase VCCs (IResp 6) could not have completed the online questionnaire. This distinction was possible to make since none of the QResps had reported to have purchased the same *type* of VCC as the type the IResp reported to have purchased during their interview.

Although the findings from the online questionnaire and the semi-structured interviews may compliment or contrast each other in addressing the RQs of the thesis, they are viewed as separate findings and will be presented and specified as distinctive from each other using the above abbreviations throughout the rest of this chapter and in Chapter 6. *Discussion*.

The responses from the online questionnaire are displayed using figures showing the response per question across all respondents, and figures showing response per NACE Activity Code where this is relevant.

The responses from the semi-structured interviews are displayed chiefly through translated versions of excerpts from each of the interviews. The excerpts are presented using numbered and firm-specific references (per IResp) to the quote in its original formulation in Norwegian, which can be found in Appendix F. Where relevant, results from the semi-structured interviews are also displayed using tables following the codes pertaining to the thematic analysis as elaborated upon in the methodology chapter.

5.1. Type and extent of VCM participation

In terms of measuring the extent of VCM participation among the QResps and/or IResps, both the online questionnaire and the semi-structured interviews produce findings that indicate overall low levels of participation through actual VCC purchase, but a notable portion of

potential participation in terms of firms reporting they consider or could consider purchasing VCCs in the future.

Among the 74 QResps, a majority number of 63 (85.1%) stated that they do not purchase VCCs. Meanwhile, 10 (13.5%) of the QResps stated that they do not purchase VCCs, but are considering doing it in the future. Only one (1) (1.4%) of the QResps stated that they currently do purchase VCCs. This is displayed in Figure 3. None of the QResps stated to be purchasing VCCs, but planning not to do so in the future (Appendix A).

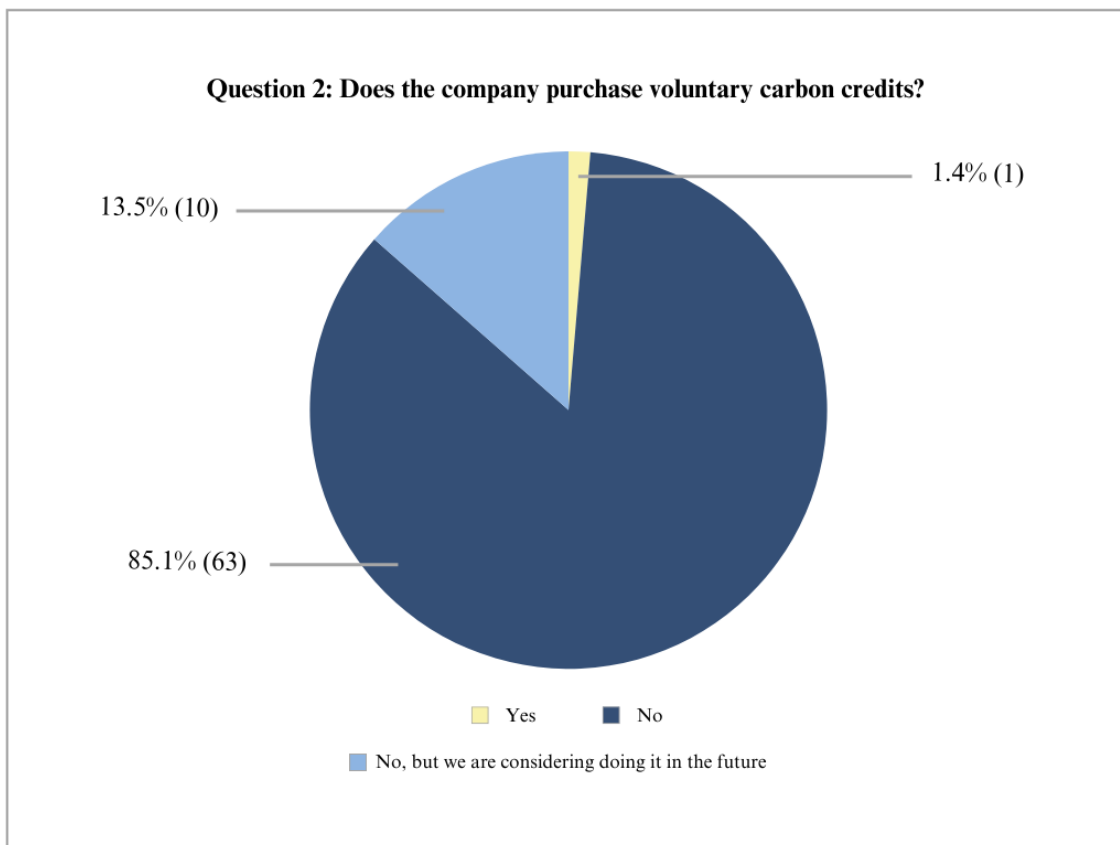


Figure 3: VCC purchase across all QResps

The distribution of the QResps' extent of VCC purchase varies across the registered NACE Activity Codes. The QResps' extent of VCC purchase across all NACE Activity Codes is displayed in Figure 4 below.

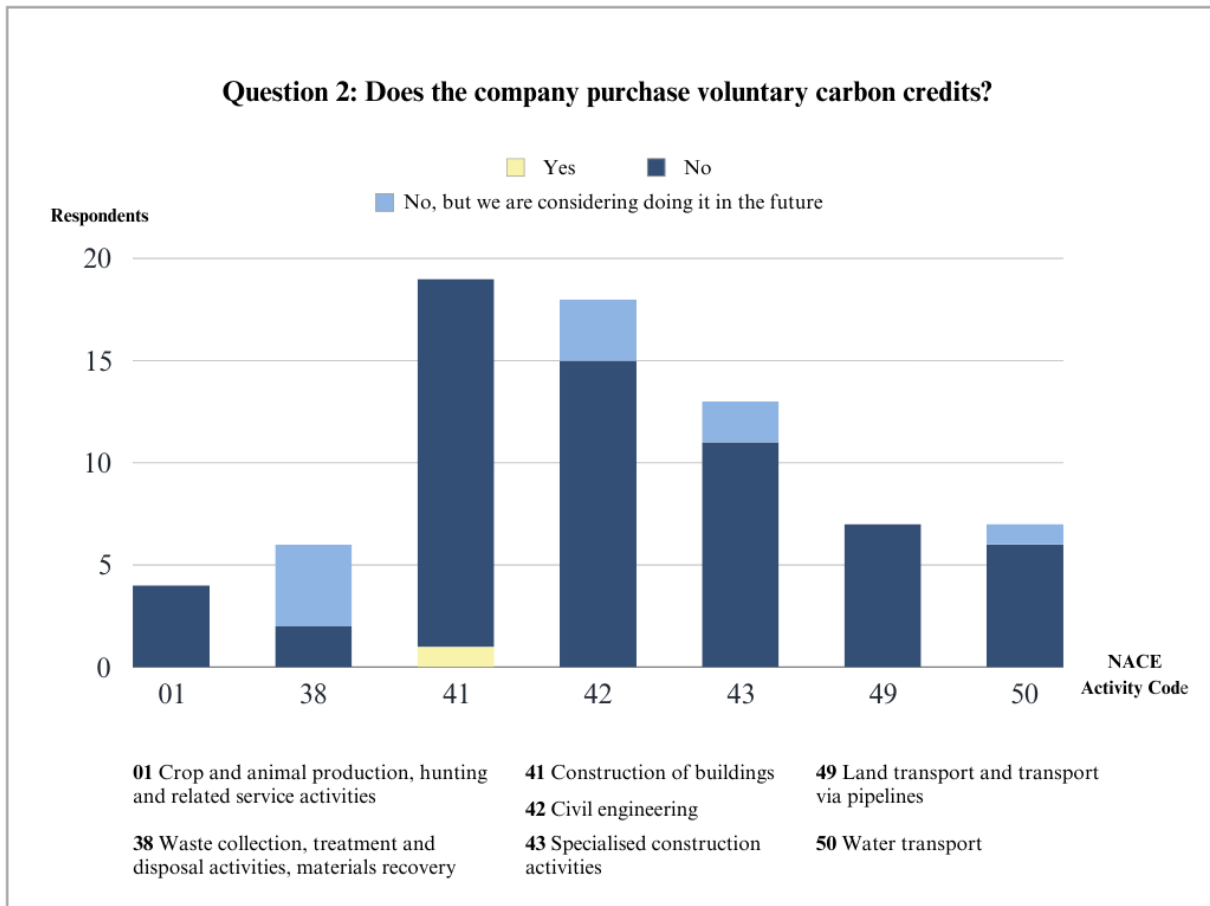


Figure 4: VCC purchase across QResps per NACE Activity Code registered

Across the QResps registered within each of the NACE Activity Codes, none of the companies registered with NACE Activity Code 01 *Crop and animal production, hunting and related service activities* or 49 *Land transport and transport via pipelines* reported to purchase nor consider purchasing VCCs (Figure 4)

Varying levels of QResps registered with NACE Activity Codes 38 *Waste collection, treatment and disposal activities, materials recovery*; 42 *Civil engineering*; 43 *Specialised construction activities* and; 50 *Water transport* reported to be considering purchasing VCCs in the future (Figure X2). The distribution of the QResps' reported answers to whether they purchase VCCs within each NACE Activity Code is represented in Figure 5 below.

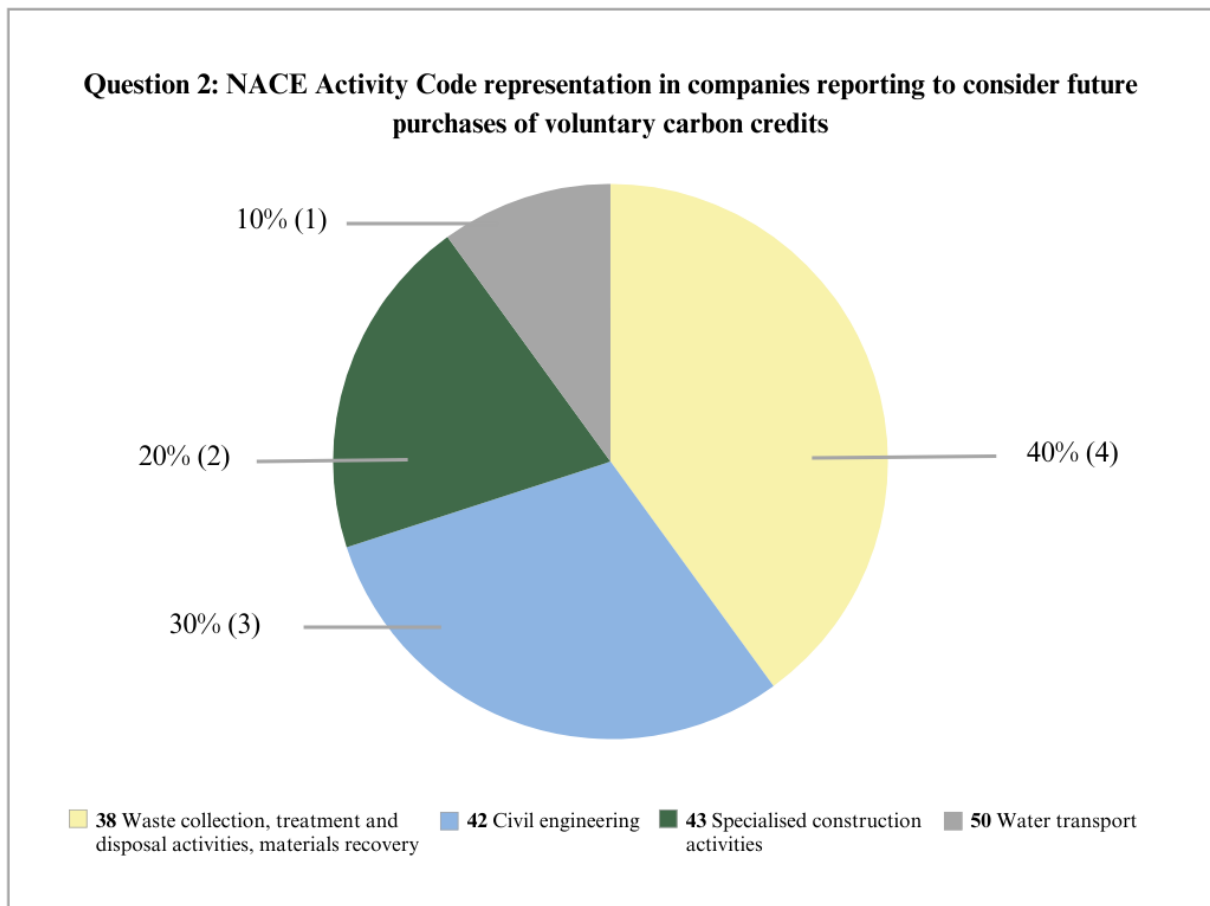


Figure 5: NACE Activity Code representation in QResps reporting to consider future VCC purchases

Only one QResp reported to be currently buying VCCs (Figure X2). It is worth noting that this QResp is registered within NACE Activity Code 41 *Construction of buildings*, and that none of the other QResps registered with this same NACE Activity Code report to be even *considering* purchasing VCCs in the future (Figure X2; Figure X3).

Although the question regarding the extent of VCM participation was raised both in the online questionnaire and the semi-structured interviews, the IResps produced a somewhat different range of answers to the question than the QResps did. Specifically, the IResps produced a more nuanced range of answers among those who don't purchase VCCs. This was most likely due to the fact the question was asked more open-endedly in the semi-structured interviews than in the online questionnaire, as it did not give pre-defined alternatives for types of answers, and allowed for further elaboration and reflection throughout the interview. Since the semi-structured interview did not give alternatives in the same way the online questionnaire did, the IResps level of VCM participation were more difficult to categorise in a way that was as concrete as that of the QResps. Among the 6 IResps that completed semi-

structured interviews, two main levels of VCM participation were identified, as was displayed in the presentation of the themes and sub-themes of the semi-structured interviews in Table 6. The relevant levels of VCM participation, and the representation of these across the 6 IResps, are displayed in Table 6 below. Acronyms for each level of VCM participation in the right column are elaborated upon below the Table.

Table 6: Identified levels of VCM participation in IResps

Interview Respondent [IResp]	4d. Level of VCM participation
IResp 1	4d1
IResp 2	4d1
IResp 3	4d1
IResp 4	4d1
IResp 5	4d1
IResp 6	4d2

*) the acronyms for the levels of VCM participation (far right column) are explained as:

- **4d1:** Firm does not purchase VCCs, but expresses consideration or possible future consideration of purchasing VCCs
- **4d2:** Firm purchases VCCs

Overall, five of the IResps were identified to pertain to the 4d1 level of VCM participation, indicating they do not purchase VCCs but are considering or could have considered purchasing VCCs. Meanwhile, IResp 6 was identified to belong to VCM participation 4d2, indicating they do purchase VCCs. The expressed extent of VCM participation is therefore also limited among the IResps, although a relatively large portion of the IResps display consideration of or plans to consider future purchase of VCCs.

5.1.1. Use or hypothetical use of VCCs in climate strategy

In a similar way to how the IResps’ answers regarding whether or not they purchased VCCs showed more nuance as compared to the QResps’ answers to the same question in the online questionnaire, the IResps were able to provide some insight into how they might have used the hypothetically purchased VCCs in their climate strategies, as they were not given set alternatives and could speak freely.

The respective IResps’ use or hypothetical use of VCCs in their climate strategies is displayed in Table 7, with reference to the answer range repeated in Table 6 above.

The answer range with regards to the use or hypothetical use of VCCs in the IResps climate strategies are repeated in the explanation Table 7, with reference to sub-theme 4b in the thematic analysis of the semi-structured interviews.

Table 7: Use or hypothetical use of VCCs in climate strategy per IResp

Interview Respondent [IResp]	4d. Level of VCM participation	4b. Use or hypothetical use of VCCs in climate strategy
IResp 1	4d1	4b5
IResp 2	4d1	4b5
IResp 3	4d1	4b4, 4b5
IResp 4	4d1	4b4
IResp 5	4d1	4b5
IResp 6	4d2	4b1, 4b2

*) the acronyms for the use or hypothetical use of VCCs in climate strategy (far right column) are explained as:

- **4b1:** Firm purchases VCCs as climate finance or climate contribution
- **4b2:** Firm purchases VCCs as compensation for residual emissions
- **4b3:** Firm purchases VCCs as compensation for emissions
- **4b4:** Firm hypothetically purchases VCCs as climate finance or climate contribution
- **4b5:** Firm hypothetically purchases as compensation for residual emissions
- **4b6:** Firm hypothetically purchases as compensation for emissions

Among the IResps that indicated they were considering or could consider buying VCCs in the future, three IResps expressed that upon their eventual purchase of VCCs, the VCCs would be purchased as a means of compensating for the residual emissions that they were unable to cut themselves (4b5), while one IResp reported the potential purchase would serve as a means of climate financing or climate contribution (4b4). One of the IResps expressed that the purchase would be purchased as a means of both (4b4, 4b5) (Table 7).

IResp 6, the only buyer of VCCs among the IResps, formulated their VCC purchase as intended to help abate the residual emissions they could not currently find a way to further reduce themselves (4b2), and as a contribution towards reducing the emissions within their sector (4b1) (Table 7).

5.1.2. Type of VCCs purchased or considered purchased

As the online questionnaire did not open the question regarding types of VCC for anyone but the VCC-purchasing QResps (Appendix A), it was not possible to gather insight into what type of VCC would hypothetically be purchased among the 10 QResps that responded they might consider purchasing VCCs in the future.

Since only one QResp reported to be a buyer of VCCs, this QResp was also the only QResp to answer the subsequent questionnaire question of what best describes the type of VCC the company purchases, as this subsequent question only appeared when ticking “Yes” on Question 2 (Appendix A). Among the VCC categories presented in the questionnaire, the QResp registered the VCCs they purchased as within the category ‘Forest and land projects that ensure avoided deforestation (through jurisdictional programs)’ (Appendix A).

As opposed to the online questionnaire’s lack of possible insight into the non-purchasing QResps’ potential type of preferred VCCs, the semi-structured interviews allowed the non-purchasing IResps to elaborate on what their VCC purchases might have looked like if they were currently considering or were to later potentially consider purchasing VCCs (Appendix B). The IResps expressed varying preferences for the type of VCCs purchased or considered purchased, as is displayed in Table 8. With reference to sub-theme 4c in Table 10, the range of possible VCCs purchased or considered purchased by the IResps is repeated in the explanation for Table 8 below.

Table 8: Expressed type of VCC purchased or considered purchased per IResp

Interview Respondent [IResp]	4d. Level of VCM participation	4b. Use or hypothetical use of VCCs in climate strategy	4c. Type of VCC purchased or considered purchased
IResp 1	4d1	4b5	4c10
IResp 2	4d1	4b5	None specified
IResp 3	4d1	4b4, 4b5	4c1
IResp 4	4d1	4b4	4c1, 4c7
IResp 5	4d1	4b5	4c1
IResp 6	4d2	4b1, 4b2	4c1

*) the acronyms for the type of VCC purchased or considered purchased (far right column) are explained as:

- **4c1:** CCS projects with long-term storage
- **4c2:** Forest and land projects for carbon removal, which meet requirements to ensure long-term storage without leakage
- **4c3:** Forest and land projects that ensure avoided deforestation (through jurisdictional programs)
- **4c4:** Projects assessed through a due diligence assessment
- **4c5:** Projects not assessed through a due diligence assessment
- **4c6:** EU emission allowance

- **4c7:** Clean Development Mechanism [CDM] projects or similar projects
- **4c8:** Joint Implementation projects
- **4c9:** Other
- **4c10:** Uncertain, but related to core activity of company

IResp 6, the only IResp which reported to be a current buyer of VCCs, indicated that the type of VCC they had purchased to be within type 4c1, regarding CCS projects with long-term storage. Three of the IResps that considered or could consider purchasing VCCs at a later stage (IResp 3, IResp 4, IResp 5) specified that the type of VCC they would eventually consider purchasing would also be that of 4c1, regarding CCS projects with long-term storage. IResp 4 also expressed interest for projects of type 4c7 by referencing projects similar to Clean Development Mechanism [CDM] in the sense that the type of VCC would be focused on projects in developing countries. IResp 1 did not reference a specific type of VCC upon potential future purchase, but emphasised that the type of VCC potentially purchased would and should be related to the core activity or source of emission for the IResp. IResp 2 referenced no specific types of VCC that they would consider purchasing despite opening for the hypothetical future purchase of VCCs for compensation of residual emissions (Table 8).

It may be worth noting that all three of the IResps that stated a clear preference for the type of VCC they would consider purchasing (IResp 3, IResp 4 and IResp 5), expressed a VCC preference that coincided with the type of VCC purchased by the only IResp to currently purchase VCCs (IResp 6) (Table 8).

5.2. Determinants of VCM participation

This thesis chiefly addresses the question of determinants affecting firms' VCM participation, *specifically their practices surrounding the purchase of VCCs*, through qualitative data collection in the form of semi-structured interviews, as is elaborated upon in Chapter 4.3.2. *Semi-structured interviews*. Within the context of this thesis, the term "VCM participation" refers to firms' relation to the purchase of VCCs. Through a thematic analysis of these interviews, several main themes were identified as overarching types of determinants or core motivations in relation to IResps' participation in VCMs. The thematic analysis of the semi-structured interviews is elaborated upon in Chapter 4.5.2. *Qualitative analysis of the semi-structured interviews: Thematic Analysis*. Four overarching themes were identified across the IResps' responses with regards to determinants of VCM participation. As the firms' reflections on the timing and priority of actions provides important context for the

introduction of the identified core determinants, these are placed in the first sub-chapter called 5.2.1 *Timing and priority of actions*. The remaining core themes of determinants are 5.2.2 *Developments affecting firms' conditions for financial stability and profitability*; 5.2.3 *Firms' incentives and motivations in assessment of VCM participation*, and; 5.2.4. *Firms' knowledge and preferences regarding CSR measures, VCMs and VCCs*.

The second overarching theme in determinants relates to what the IResps' reference as a consistently underlying determinant, namely the conditions and premises of their financial profitability and stability, and changes to these premises. The IResps chiefly point to recent developments such as changes in external stakeholders' direct and indirect expectations and demands, and anticipation of emerging legal requirements and standards, as key drivers changing the direction for the premises of their financial considerations. The IResps point to the directional change necessitating some sort of response and departure from business-as-usual from the firms should they seek to uphold financial profitability and stability as before.

In addressing their reactions to these developments, the IResps point to considerations regarding financial risks and opportunities, costs and benefits, and roles and responsibilities. Four main sub-themes in incentive or motivation with relation to VCC purchases were identified, as listed within the second third overarching theme in determinants. These respectively pertain to *addressing extent and cost of fulfilling firms' emission reduction goals*; *alleviating risks of financial instability*; *capitalising on opportunities for financial gain*, and; *climate financing as means of fulfilling firms' sense of role and responsibility*.

Lastly, the IResps' knowledge and preferences regarding CSR measures, VCMs and VCCs are defining for the way the firms' make their VCC choices based on their incentive and motivation regarding theme 3 Firms' incentive and motivation in assessment of VCM participation. The fourth overarching theme of determinant regarding firms' VCM participation therefore relates to firms' knowledge and preferences regarding CSR, VCMs and VCCs as defining conditions.

The main headlines of this sub-chapter are derived from the main themes that appeared from the aforementioned thematic analysis of the interviews. The headlines pertaining to each main theme are not organised in any type of order indicative of their salience nor importance in answering the RQ, nor are any of the subsequent sub-titles pertaining to different sub-themes. However, the chapter is structured with the intent of presenting the themes and sub-themes of determinants in a somewhat logic order.

The excerpts from the semi-structured interviews are presented with reference to the quote in its original formulation in Norwegian, which are displayed as numbered per IResp in

Appendix F. Due to the number of references to this Appendix, all references to original formulations in Appendix F will be in the following shortened format throughout the remainder of the thesis. All references in this format will always refer to Appendix F. Each reference to the original formulation of an excerpt is formatted as “**(IResp(number of IResp)-(number of quote))**”. For example, the in-text reference “(IResp1-6)” would refer to excerpt number six from the interview with IResp1, as found in Appendix F.

Reference to relevant responses from the QResps are also made where this is considered useful or relevant within the context of the delineated themes.

5.2.1 Timing and priority of actions

Several IResps point to timing and prioritisation of measures relating to sustainability, CSR and emission-reduction in discussing VCM participation as underlying the general discussion of purchasing VCCs. None of the IResps express that they would prioritise purchasing VCCs *before* implementing other measures of emission reduction.

IResp 2 mentions that purchasing VCCs could hypothetically, down the line, be used “as a way to compensate, or try to compensate, in particular for Scope 3 emissions that we are unable to do any more about ourselves” (IResp2-12), while IResp 6 states that they purchase VCCs to “helping to reduce emissions that we cannot get down otherwise with our other measures” (IResp6-7). IResp 3 states that due to having set targets through the Science Based Targets initiative [SBTi] (n.d.), they have to “reduce emissions (...) by 90% before we can use carbon capture or other methods that permanently remove CO₂ from the atmosphere,» stating that the firm’s use of instruments like VCCs would be held off until «when you are stuck and cannot do anything else about your emissions» (IResp3-3). This ties in closely with what IResp 5 declares regarding the prioritisation in their course of action:

“(...) if we see that we actually cannot get any further, that we cannot do what we are supposed to do other than with fossil fuel machines, and there is very little we can do about the emissions in other ways, then perhaps we would resume the dialogue about other mitigating measures then.” (IResp5-8)

IResp 1 states that they are in too early a stage of adopting measures regarding sustainability and therefore don’t want to rule out future VCC purchases, as they don’t yet know enough about their own emission levels:

“We don't have an overview of our climate emissions today, so I also don't know how much we would have spent to compensate for it. So I think for our part, this will be a

little down the line, when we have gotten an overview and seen what we can do to cut, and what requires more.” (IResp1-12)

As will be touched upon in several of the upcoming chapters, there is a general consensus among the IResps that credits for projects pertaining to carbon capture and storage [CCS] would be prioritised in terms of which type of VCC they would purchase or consider purchasing. With regards to timing and prioritisation of emissions reduction efforts, IResp points out what they identify as a type of trade-off situation, stating that while development of important CCS technology requires significant and consistent financial investments, taking concrete measures to reduce the extent of GHGs emitted in the first place would ultimately reduce the need for the CCS technology overall (IResp3-13).

5.2.2 Developments affecting firms’ conditions for financial stability and profitability

Overall, the IResps display a core priority of ensuring their financial security and stability, with some IResps displaying a greater profitability focus than others. This is elaborated upon in sub-chapter 5.2.2.1 *Financial stability and profitability as core priorities*. In relation to this baseline priority, all IResps reference certain external developments which affect the foundations on which their premises for financial security, stability and profitability rest. These largely relate to changes in direct and indirect expectations and demands from both external and internal stakeholders, and anticipation and adaptation regarding emerging legal requirements and standards. This is elaborated upon in sub-chapter 5.2.2.2 *Changes in stakeholder demands and expectations*. Overall, these changes in conditions are formative for the IResps’ initial considerations of VCM participation in the first place, as is elaborated upon in Chapters 5.2.3 *Firms’ incentives and motivations in assessment of VCM participation*.

5.2.2.1 Financial stability, profitability and liquidity as core priorities

With some variation, all six IResps reference financial stability and some form of profitability or liquidity as bottom-line priorities at the core of their firm. This is evident in several statements regarding what the firms most heavily value in their general decision-making, on which IResp 6 states that “you have to choose based on what is appropriate in a cost-benefit assessment, you have to, that's the way it is for all choices you make” (IResp6-1). IResp 4 expresses that their “main goal is to make money” (IResp 4-1), while IResp 1 states that their main responsibility lies in “balancing what is the most important thing we can do, and what

are the economics of it” (IResp 1-1). Chiefly geared towards “(...) goals of socio-economic profitability” (IResp2-1) state that they “don’t have profit as the main goal, in a way, but clearly, if not for profit, then liquidity” (IResp2-2).

The IResps also stress the importance of endured financial stability and profitability, such as IResp 4, who emphasises the following about their finances: “We are to make money with what we do, and we are to live for a long time” (IResp4-2). They further state that “the day you stop making money, you're on your way down and home” (IResp4-3). Similarly, IResp 3 concludes that the premise of ensuring profitability provides a crucial and indisputable foundation for the firm’s decision:

“Profitability is important in everything we do, we have to survive on this journey too. Of course we would like to speed up to do better in terms of sustainability, but after all, we must not die getting while trying to get there.” (IResp3-4)

5.2.2.2 Changes in stakeholder demands and expectations

Across all IResps, developments in stakeholder demands and expectations are pinpointed as affecting the foundations of the IResps’ aforementioned economic considerations and subsequent decision-making. As underlying these developments, the IResps reference stakeholders’ increased orientation towards climate and sustainability in value chains, like formal demands for sustainability reporting and targets in audits and tenders. The recently EU-adopted Corporate Sustainability Reporting Directive [CSRD] is also referenced as a core driver. With regards to what firms deem to be expected from them in terms of adaptation of emission-reducing measures, IResp 2 curtly states that “the world around us actually expects more on these things now than they expected before” (IResp 2-3).

Several IReps express to feel indirectly required to adapt to pressures from new sector-internal standards and stakeholders which are increasingly subjected to new legal requirements. Although the IResps themselves may not be directly subjected to the legal requirements they mention, several of them reference the influence of having salient stakeholders that *are*, to which the IResps in turn have to subsequently adapt in order to uphold their relation to the stakeholders in question. For example, IResp 4 states that they are *indirectly* affected by instruments like the recently EU-adopted Corporate Sustainability Reporting Directive [CSRD] in having to adapt by subsequently implementing sustainability reporting due to being part of a larger *business group* or *concern* that is covered by the scope of these instruments. Therefore, although IResp 4 is too small a firm to fit the criteria of the CSRD, they are still subject to them through the business group as a salient stakeholder:

“In March, I was at a management meeting in the (...) group, we were presented with the big happening of the year from now until probably forever, and it was the concept of sustainability reporting. And this comes into full force now, where all large companies must report on factors in sustainability matters, and in line with the Paris Agreement. In EU law, it is equated with financial information from these companies.

And it does not affect us directly, because we are a little too small to report, but it affects the (...) group. When you affect the (...) group, you also affect us, because then they require information and input from us. In a way, we become part of it too, since we are part of the (...) group, and have to start reporting in many areas ourselves.”

(IResp 4-4)

Referencing the growing spotlight on sustainability in their company, IResp1 states this came about as “(...) a consequence of the green shift, and a consequence of our owners getting increasingly stricter requirements, the companies getting increasingly stricter requirements, and then (...) the strategy had to reflect that” (IResp1-2).

IResp 5 states that “customers have definitely been heavily coming to the stage. We are also seeing that having targets and reports and showing progress is also important in relation to audits that we are exposed to” (IResp5-1). Similarly, IResp 4 cites the increased pressure from customers for documentation of the company’s emissions reductions and performance on sustainability measures in project tenders:

“Tendering processes now, especially for the public sector, are more and more angled towards climate and the environment. (...) we calculate tenders and have to answer a lot of things, where perhaps the price only counts for 40%, the climate measures count for 40%, while our organization counts for 20%. And then we have to write pages upon pages explaining how good we are at climate and the environment. And then we have to address whether we can point to previous projects where we have had climate reduction. We can't do that without further ado, because we haven't been focusing on documenting things like this. (...) But going forward now, it is important for us to start tracking and documenting what we achieve, so that we can have it as a reference going forward, so that it is under constant development. We have to, and we do what we can to keep up.”

(IResp4-5)

IResp 6 states that since companies they work with, belonging to other industries, are subject to requirements for sustainability, they themselves must adapt to the requirements despite technically not being directly subjects of them themselves:

“There are companies in many other industries we work tightly with, and they are under demands, many. And I think there will be more of that too. They are under requirements for sustainability reporting. There are many who simply now have to start reporting on a lot more of this eventually, and then we have to meet the demands they bring to us to give them numbers on our footprint and the like, and we try to facilitate more for that now, we have to. (...) In a way, we also get those demands transferred to us a little indirectly, since they themselves are under those demands.”

(IResp6-2)

IResp 1 points out that they have observed a generally increased emphasis on prioritising the environment have in managing the firm with regards to stakeholder expectations:

“After all, we are set to manage the company in the best possible way, and until recently it has only been about finances, while now we see that the environment will matter more and more, and in the long term become completely equal to finance and economic results.”

(IResp1-3)

Furthermore, IResp 1 also refers to other companies as salient stakeholders of which they feel they currently cannot adequately fulfil the expectations of, but are working on maintaining their accountability to:

“ (...) they have a large global market, global owners, who set strict requirements for reporting. We see that we do not have good enough statistics to serve them in the way we need to. So that’s what I’m working on now, (...)”

(IResp1-4)

IResp 4 states that all units of their firm have come to realise that the new demands are here to stay, acknowledging that “(...) this is not something that will pass, this is how it’s going to be going forward, and there will be more and more of it.” (IResp4-12). Four IResps point out that they themselves also set some forms of expectations and requirements regarding climate and sustainability measures to their suppliers (IResp2-17; IResp3-15; IResp3-15; IResp5-10).

IResp 3 states they have different ways of setting expectations for emissions reduction both in their value chain and their industry at large. Firstly, they “set requirements for Environmental Product Declaration, (...) which means that all products must have documented greenhouse

gas emissions in all phases, from raw material to end of life” (IResp3-15). Furthermore, IResp 3 mentions they take initiative in discussing what measures can be taken with their customers, in which they might agree to “take measures which mean that we prioritise suppliers with the lowest emissions.” (IResp3-16). Lastly IResp 3 tries to actively be part of raising emissions reduction in industry discussions, ultimately underlining that “not everything is solved by demands, so we also try to contribute to the whole industry to develop quickly in the right direction” (IResp3-16).

Similarly, IResp 5 notably states that having their own emissions reduction goals is useful when expressing their expectations to suppliers:

“We have climate and environmental demands for suppliers, and it is very good to have specific goals of your own to point to then. When we have meetings with our suppliers, we can say that we will be cutting this or this much by 2030, and it important to us that you are with us on this journey. So we include that in all meetings with the larger suppliers.”

(IResp5-10)

IResp 6, on the other hand, does “not really require the suppliers themselves to have this or that level of emissions” (IResp6-13), and neither does IResp 1, although they state this is something they are planning on formulating (IResp1-17). Meanwhile IResp 4 states that although they haven’t formulated own requirements for contracts with suppliers, they do “pass on all requirements that a client may have in a tender process” to their subcontractors (IResp4-22). IResp 4 also references the difficulty they are faced with in terms of competitiveness when being subsequently subjected to the requirements which their salient stakeholders are under, while their competitors are not:

“When we compete locally with the smaller players, it's a bit like, we have to deal with the requirements that the (...) group has to deal with, while this small local business doesn't need to. (...) It is a bit of a challenging spot to be in, in all of this, because we are hit by some of these requirements, while others are not. And then there are some we also get away with, but since we are part of the (...) group, we don't get away completely after all.”

(IResp 4-6)

IResp 5 puts forward the following thought regarding the dependency on consistent demand in stakeholders’ emissions reduction requirements, attesting that;

“If we are going to provide equipment that is emission-free, then it has an additional cost for us. And in an industry with very low margins, we are completely dependent on

the customers' demand for this type of service, and that it is part of the competitive basis.” (IResp5-2)

Lastly, IResp 4 expresses frustration about being dependent on keeping up with industry expectations set through processes that they themselves do not feel represented by:

“(…) it is of no use if some local business forum or something finds out that this or that is very smart. There must be much more anchored and agreed-upon organisation around it, so that there are no coincidences. If not, we as contractors are left with a huge bill to satisfy these airy demands for emissions reduction and so decided on by people who never have to deal with it anyway. That’s kind of what everyday life is. An incredible number of people can sit around and discuss and process and decide on lots of hairy goals (...), but those who ultimately end up having to take the consequences of this is the outer link, it is either a consumer or a supplier.” (IResp4-23)

Addressing these shifts in stakeholder dynamics, demands and expectations, IResp 3 points out the vital importance of understanding which adaptations to make in order to ensure the firm’s future stability, survival and competitiveness, stating that “it is essential to see and understand what measures must be taken in the short term to ensure viability and competitiveness going forward” (IResp3-1).

5.2.3 Firms’ incentives and motivations in assessment of VCM participation

In response to the developments put forth in sub-chapter 5.2.2 *Developments affecting firms’ conditions for financial stability and profitability*, the following central sub-themes were identified as pertinent to the firms’ assessment of VCC purchases with regards to the IResps’ incentives and motivations: *addressing extent and cost of fulfilling firms’ emission reduction targets; alleviating risks of financial instability; capitalising on opportunities for financial gain*, and; *climate financing as means of fulfilling firms’ sense of role and responsibility*. The following section elaborates on notable elements pertaining to each of these sub-themes with regards to the IResps’ interview answers and, where relevant, with some reference to specific responses from the online questionnaire. The sub-themes within this section are not presented in order priority nor salience to the RQ.

5.2.3.1 Addressing extent and cost of fulfilling firms' emissions reduction targets

In addressing developments as those outlined above, several of the firms have produced goals for emissions reductions in their operations and products. Multiple IResps reference time constraints and a sense of urgency in discussing emission-reductions, particularly in relation to the ambitions and time constraints of their own emission reduction goals. The following sub-chapter discusses the IResps' emission reduction goals with regards to the firms' consideration of VCM participation.

With some variation in the extent and type of aims, 5 of the 6 IResps respond that the firms they represent have some form of goal for emission reduction (IResp1-5; IResp2-2; IResp3-2; IResp4-7; IResp5-3; IResp6-3). While IResp 4 expressed that they do not insofar have specific goals for emissions reduction (IResp4-7), IResp 1 and IResp 6 expressed to have goals of reducing their emissions, but with no concrete dates or quantifiable measures as of yet (IResp1-5; IResp6-3). IResp 2 expresses concrete goals of halving their emissions by 2030, but with no aims relating to terms such as climate neutrality or net zero emissions (IResp2-2). Lastly, both IResp 3 and IResp 5 express goals of net zero emissions by 2045, having set science-based goals through the Science Based Targets initiative [SBTi] (n.d.) (IResp3-2; IResp5-3). Although knowledge of their emission goals provides no direct grounds for generalisation, it is worth noting that as the only IResp that currently purchases VCCs, IResp 6 is also one of the two IResps with no time dependent or quantifiable goals, instead expressing a general aim to "(...) do the best they can" (IResp6-3).

Although it is not possible to extract any form of sentiment from the QResps regarding determinants for purchase or considered purchases of VCCs, their reported type and extent of emissions reduction may be of interest in this context. It must be duly noted that these findings are of limited value in terms of deducing any causality or true correlation between the QResps goals and levels of purchase. All 11 of the QResps reporting to purchase or consider purchasing VCCs also reported to have some form of emissions reduction goal, with four (4) (36.4%) reporting to have an overarching goal of climate neutrality*, and seven (7) (63.6%) reporting to have other goals of emissions reductions, but without any aim of climate neutrality* (Appendix G). Overall, 14 (18.9%) of the total of 74 QResps responded to have overarching goals of climate neutrality*, while 46 (62.2%) responded to have other goals for emissions reductions, though with no aim of climate neutrality*, with the remaining 14 (18.9%) reported to have no set goals of emissions reductions in their company (Appendix G). None of the QResps reporting to purchase or consider purchasing VCCs were among the 14 QResps that reported to have no set goals of emissions reductions (Appendix G).

In the concluding sentence of the reasoning for their purchase of VCCs, IResp 6 points to the time urgency in reducing their emissions:

“In short, we do it because we care about trying to reduce emissions and try to do something for the environment. It is mostly about reducing emissions, a climate measure for that, helping to reduce emissions that we cannot otherwise reduce with our other measures. And we don't have much time to get those emissions down.”

(IResp6-4).

Several IResps reference the costliness of adopting an increased focus on emission-reduction. For example, IResp 4, states that: “everything is more expensive in relation to the climate focus” (IResp4-11). IResp 3 emphasises the challenging position that their emission reduction goals pose in terms of being ambitious both in what they strive for with regards to extent of how much they aim to reduce, the time limits they set for reaching these goals, and the cost of reaching them. Having set targets through the SBTi (n.d.) of reducing their emissions by five percent every year, halving their GHGs by 2030, and reaching net zero emissions in 2045, IResp 3 states the following:

“(...) it's demanding to reduce emissions by five per cent every single year, as we have in our targets. It also costs money. There is a cost to innovation, - there is a cost to choosing the right suppliers. It's an expensive journey already. So we prioritise spending funds on what we must. And on what we can include in our climate accounts now.”

(IResp3-3)

IResp 3 also references a sense of time pressure with regards to both their emissions targets and other measures, stating that they “(...) feel that with our targets and our other measures, we are now helping to enable things that point towards good solutions. But then the question remains whether it moves fast enough” (IResp3-4). With reference to their own goals for emissions reduction as for now, IResp 1 expresses concern for their insofar absence of concrete plans or intentions for how much they will need to cut, and how this may effect their considerations regarding the purchase of VCCs:

“(...) we have not set a target for how much we will cut - we have only said that we will cut. And I mean, it has to happen. This does take time, I mean, for example investing in a large wheel loader worth millions, that ship has already sailed in a way (...). But perhaps that is precisely why one should buy climate credits, because we are in a way getting a sort of backlog of what we want to do and what we can do.”

(IResp1-7)

In considering other possible goals of emission reductions, IResp 2 remarks that as an actor within their specific industry, a more ambitious goal would have likely necessitated some form of emission compensation or reduction measure like VCCs:

"(...) if we had had a goal of climate neutrality, then one would probably have to open up to some solution like that. At least in our industry, (...) it is not possible to build a road without emissions, as it is today. So then you would have had to compensate in one way or another."

(IResp2-5)

Some of the IResps point to the purchase of VCCs as a possible means of circumventing the financial barriers of reaching their own goals of reducing emissions, such as IResp 2, who states that in the sense of cost effectiveness, the discussion could boil down to purchasing VCCs to reduce emissions instead of directing funds towards emissions reducing measures in their own operations:

"(...) with which climate measure do we get the most emission reductions for the money? And in such an assessment, allowances or credits could do quite well, because it could be significantly cheaper to buy a credit than to buy an electric excavator instead of one that runs on diesel, for example."

(IResp2-10).

5.2.3.2 Alleviating risks of financial instability and insecurity

Several IResps reference VCM participation as a possible means of alleviating the risks related to changes in the firms' premises of economic stability that come about as a product of the developments in stakeholder demands and expectations outlined in chapter 5.2.1.

Developments affecting firms' conditions for financial stability and profitability. The IResps reference sustaining and nurturing their relationships with stakeholders as a priority in their decision-making generally and with regards to VCC purchases.

With reference to recent developments in requirements of reporting through the CSRD, IResp 3 states that these requirements are "an indication of the direction in which we should move. This means that developing in a sustainable direction would be to reduce financial risk" (IResp 3-6). IResp 4 expresses the sentiment that they feel increasingly financially dependent on adopting goals and measures that are of specific interest to stakeholders:

“What sometimes makes it a bit difficult or challenging is that there are different perceptions of which measures are good. And it really depends a lot on some political, ideological thoughts, that either you should have net zero emissions, or it might as well just be. But there are many solutions between being net zero, which you may have to buy voluntary climate credits to become, and not being net zero, and many of the solutions that lie outside the goal of becoming zero emissions could also contribute to a better climate. But there is no interest in that. We don't get paid for that.”

(IResp4-9)

In addressing contextual development and changes in stakeholder expectations as factors in their VCC purchase, IResp 6 states that “After all, we do not operate in a vacuum, so we have to follow what is expected and perhaps what will be expected in the future, and make choices based on that. You actually have to be a bit adaptable” (IResp6-10).

IResp1 poignantly highlights the importance of adequately addressing the changing demands of customers as stakeholders in connection to upholding secure relationships to their stakeholders for continued financial stability. Although they currently perceive themselves as a strong first choice with little competition, they acknowledge the financial risk of not adapting to new stakeholder demands for sustainability reporting:

“We are in a kind of monopoly situation, since we are the closest supplier, so many people want to use us. But we are completely aware that if we cannot deliver what the customers are asking for in terms of sustainability reporting, they can turn around and find another supplier a little further away. It is our foremost priority to serve those customers and give them what they ask for.”

(IResp1-7)

The issue of addressing current and upcoming expectations and requirements regarding sustainability is a main focus of general survival for many of the IResps, and in consideration of VCC purchases. IResp 4 states that with new direct and indirect expectations, they must adapt to stay afloat:

“We see that if we are to survive as a company in an industry like this, we must in a way operate as environmentally friendly as possible, and we are constantly focusing on that. What can we do to be good enough, and in some contexts better than other competitors, to be a preferred supplier. But it is not that simple, and the tender processes now, especially for the public sector, are more and more oriented towards the climate and the environment.”

(IResp4-5)

IResp 4 further points out that they would make a decision regarding the purchase VCCs with priority of what stakeholders asked for, and in turn, consider what they themselves deemed appropriate based on this demand:

“(...) if a client in a tender competition had made a requirement that you can fulfill this requirement either by having zero-emission machines or buying climate credits, then we would have made an assessment of what was the smartest for us to do based on that”

(IResp4-10)

Similarly, IResp 1 references customers as salient stakeholders both in forming their emissions reduction targets and in choosing their emissions reduction measures, stating that "if our customers had said that they only wanted to deal with companies that are climate-neutral or climate-positive, and our competitors were, of course we would have to be too" (IResp1-8). Several IResps point to other actors within the same industry as salient stakeholders, and underscore the importance of keeping up to stay relevant. On this, IResp 6 states the following:

“We don't want to do worse than others, in a way. I think that many of us put a bit of pressure on each other within the industry, we kind of push each other and of course follow what the other does. And you must keep up with the twists and turns.

(IResp6-5)

With regards to the effect of stakeholder perception on the IResps' VCC purchases, the IResps display sentiment that both external and internal stakeholder perceptions may sway the firms' decision both *towards* and *against* purchasing VCCs, and that addressing these perceptions is important in upholding stakeholder accountability. Referring to owners as stakeholders, IResp 1 states the importance of being able to defend their choice of emission reduction measures, especially the purchase of VCCs, to their owners: “(...) we must be able to stand for what we do and do not do. We have to argue for whether we should buy climate credits or choose not to do so” (IResp 1-9).

In terms of what would ensure and sustain the financial survival of their company, IResp 4 states that among other things, they are dependent on being competitive, be a preferred supplier, and uphold a good reputation. They state: “We must run a financially sustainable business, which means we must be competitive, we must deliver good quality, we

must be a preferred supplier and we must have a good reputation, and this is what drives our objectives” (IResp4-14).

In pointing to employees as stakeholders, IResp 6 contends that they “think it’s good to be a company that clearly tries to be more sustainable, I think the employees can perhaps be a little proud of that” (IResp6-6). Meanwhile, IResp 2 references a company culture and employees that might respond negatively to the company adopting the purchase of VCCs as a main strategy in two ways:

"I think a lot of people internally would have reacted negatively to it. Especially if it appeared to be a main strategy. And people would probably have been negative for various reasons. I think that the employees who are most interested in climate and environment and nature would have been critical because it appears like us buying some pardon instead of implementing measures in the actual projects. I also think to that those who are most concerned with finances would have been critical because they had been unsure of the actual effect of that spending." (IResp2-6)

IResp 4 specifies that upon the possible consideration of purchases of VCCs, the consideration of employees as internal stakeholders would be generally important. However, employees’ possible negative response to a VCC purchase would be overlooked if a VCC purchase was rationalised to be considered necessary in addressing other more salient external or internal stakeholder pressure, and avoid falling behind:

"I believe the rational and the logical will be the driving force for the decisions we end up making, including those regarding climate credits. So if we see that we are not sharpening up or changing, that we are starting to lag a little too far behind, then we do it, even if there may be someone in the company who has the kind of response where they wonder "what is management doing, have you gone completely crazy? The focus has completely changed!", but then, no, to them we would have to say that the focus has not actually changed, we just have to do other things to remain where we think we should be. And then maybe more people will have to change their mindset then, going forward." (IResp4-15)

IResp 1 states that another risk that may push the firm to consider of purchasing VCCs would be the possibility that stakeholders a few years from now will, in hindsight, note that the company has not done enough with regards emission-reduction or sustainability measures (IResp1-10). IResp 3 points to the duality of both financial risk and opportunity for firms in

being proactive by moving in a sustainable direction in response to the new EU directives on sustainability reporting: “(...) this becomes, in a way, what you call a "two of a kind" situation, it becomes integrated. Real financial risk and opportunity lie in the guidelines now” (IResp3-6). IResp 3 further states that aptly responding to the underlying prompts for sustainability measures in the CSRD may be of advantage in anticipating and reducing financial risk, and making use of the financial opportunities which may arise in the future:

“This situation of combined financial risk and opportunity, that could occur in many ways; things can happen politically, i.e. these transitional risks that come with new political decisions, or there may be an emergence of bans, orders, resource shortages. The point is that there are a lot of things that can have an impact in different ways.”

(IResp3-7).

The following section, sub-chapter 5.2.3.3 *Capitalising on opportunities for financial gain*, will address the use of VCCs in capitalising on opportunities for financial gain as derived from the recent developments in stakeholder demand and expectations.

5.2.3.3 Capitalising on opportunities for financial gain

Closely related to the risks addressed above, some IResps also reference VCM participation as a possible way to capture opportunities of financial gain that result from changing dynamics in stakeholder demands and expectations. Motivation regarding the possible use of VCCs as a means of financial gain is predominantly identified in IResp 3 and IResp 4.

As IResp 4 states that the basis for competition has been visibly altered following altered stakeholder demands in that “whether you are able to cut your emissions is given emphasis in tender competitions” (IResp 4-13). As aforementioned, IResp 3 perceives the emerging guidelines of the CSRD, through which the EU sets guidelines for sustainability reporting, as dually providing both financial risk *and* financial opportunity. These are tightly interconnected. About the indicative direction of the emergent requirements in the CSRD, IResp 3 states that “it would be financially profitable to seize the opportunities in it as quickly as possible” (IResp3-6). They further state that being strategic in seizing these opportunities could produce the result that “sustainability then becomes a driver of profitability. That is the goal in this” (IResp3-7).

IResp 4 states that they could hypothesise purchasing VCCs if they were certain, through the form of clear and consistent requirements from large and salient stakeholders, that it would entail turnover for them to respond to these requirements:

“(...) If there is a large client, which we know that "ok, from now on, (redacted client) will require this for all their projects", or the county council - if there is some predictability in that, then it would affect our assessments and conclusions. If there was a time, we would look at buying climate credits, it would be because we could assume that we would get turnover and use for (...) having taken the necessary measures to respond to those requirements. So, it's about how substantial the predictability in the offer of assignments is.” (IResp4-8).

With regards to the costs of adapting to new this new basis for competition, IResp 4 contends that a core priority in choosing whether or not to purchase VCCs pertains to finding a cost-beneficial balance in terms of what can secure their ability to compete successfully without taking up too much of their funds: “(...) finding those solutions, those things that we see can make us better than the others without it costing too much, that has a lot to do with what we choose to do” (IResp4-2). IResp4-2 further states that beyond considering possible VCC purchases in focusing solely on survival by adaptation to new stakeholder expectations, they also look for what can allow them to thrive:

“(...) We must in a way operate as environmentally friendly as possible, and we are constantly focusing on that. We look at what we can do to be good enough, and in some cases better than other competitors, to be a preferred supplier” (IResp4-5)

IResp 4 notably points out that although purchasing VCCs certainly might garner goodwill among current or prospective clients, they would not have directly profiled themselves on it for the sake of reputation building:

“If we had bought climate credits, we would never have gone to the newspaper and asked to have them report on it. We had just done it, that's all. (...) It is what we deliver, and other people's mention of it, that should be our reputation building. Of course, it could have given us a bit of goodwill to tell a client that we actually have such a high focus on sustainability that we have now decided to buy climate credits that lead to a little more forest being planted, or that we contribute to carbon capture, or whatever it might be. It may certainly be that some would have seen it as very positive, but beyond that, we would not have profiled ourselves on it that much, I think.» (IResp4-15)

5.2.3.4 Fulfilling firms' sense of role, responsibility and conscience through climate financing

With relevance to how the IResps perceive their responsibility, some refer to perceiving themselves as having a certain role in their industry with regards to what stances and actions they take regarding sustainability and emission-reduction measures such as VCCs.

Upon mentioning their sense of role in the industry, IResp 3 states that they feel like they as an industry leader both set the tone and should continue to do so: "I think in many ways we set the tone a bit. By thinking new things, being innovative, in a way having given breadth to this way of thinking, it sows seeds from within the organisation, which makes it sprout widely" (IResp3-4). Meanwhile, IResp 4, displays reluctance and clear hesitance to being a company at the forefront of moving early or initiating transition or financing of technology among their industry peers: "Locally, we are quite the leader in a lot of things, but we don't want to be at the forefront of things, not when it comes to emissions reductions either, that would be too expensive" (IResp4-16).

Several of the IResps referenced what they themselves, perceived as their responsibility in terms of measures relating to emission reductions such as VCCs, whether as an actor within their specific industry, or outside. IResp 4 stated that:

"We, as an industry, have a responsibility. We are part of an industry that represents a great deal of polluting activities. We also have a moral responsibility in the industry to do something. We are fully committed to that, both as a company and the industry" (IResp4-17).

IResp 3 references the firm's prominence in their industry as a notable factor in considering VCCs as a possibility of doing more to live up to their social responsibility:

"What in a way stings a little in relation to maybe purchasing voluntary carbon credits, when I say that we are considering it, is the social responsibility. That perhaps we, as one of the largest players in our industry in Norway, and in Scandinavia, should join in and contribute a little. That can also perhaps encourage others to contribute a little, so that you for example stimulate the necessary technology that is important in reducing greenhouse gas emissions on a bigger scale." (IResp3-8)

In reflecting on types of VCCs the firm might consider purchasing, IResp 4 expresses a sense of responsibility towards developing countries, voicing that the firm might be inclined to opt for a VCC project geared towards financing projects in developing countries since

“everything we’re talking about now, it puts the developing countries even further back compared to the industrialised countries. So they really just get worse and worse off trying to get up and running” (IResp 4-18).

Two of the IResps pinpoint an important contrast with regards to their sentiments surrounding VCC purchase. IResp 3, who considers purchasing VCCs, are explicit in attesting that they “(...) are very clear that we are not to buy ourselves a good conscience, and we understand that we cannot do that” (IResp3-9). Meanwhile, IResp 6, which does purchase VCCs, may reference some sense of sentiment or conscience in their use of words such as “care” and “helping” in the following of their statements on why they purchase VCCs:

“it's because we care about trying to reduce emissions in the industry and trying to do something for the environment. It's mostly about reducing emissions, a climate measure for that, helping to reduce emissions that we cannot get down otherwise with our other measures” (IResp 6-7).

5.2.4 Firms’ knowledge and preferences regarding CSR measures, VCMs and VCCs

The IResps’ expressions of their knowledge and preferences regarding CSR measures, VCMs and VCCs are defining conditions for the way the firms’ make their VCC choices based on what they articulate as core incentives or motivations as they are outlined in sub-chapter 5.3.2 *Firms’ incentives and motivations in assessment of VCM participation*. This sub-chapter therefore encompasses the firms’ knowledge and preferences regarding CSR, VCMs and VCCs as relating to what affects the choices made in assessing VCM participation in addition to the above motivations and incentives. These are elaborated upon in sub-chapters 5.2.4.1 *Gaps, maturity and transaction costs in VCM knowledge*, 5.2.4.2 *Concerns regarding measurability, integrity, and credibility*, 5.3.33. *Preference for demonstrable, visible efforts relevant to core activities and emissions, and geographical location*, and 5.2.3.4. *Industry or field cooperation and conformity*.

5.2.4.1 Gaps, maturity and transaction costs in VCM knowledge

Many of the IResps declare a need for further knowledge about VCCs and the use of VCMs as an instrument before truly considering the purchase of VCCs as an option for emission reductions. IResp 2, for example, states the need for “enough knowledge to assess truly good solutions” (IResp2-7). Meanwhile, IResp 1 states that they aren’t yet fully aware of the different types of VCCs available, as they aren’t familiar enough “with all the various

projects” (IResp1-11). In assessing the possible use of VCCs, IResp 2 points out the generally challenging lack of information, and consensus and standardisation of VCMs by stating that “one can't really expect people to know this market” (IResp2-8).

Some of the IResps also reference transaction costs as a determining factor with regards to the purchase of VCCs. Upon consideration of one type of VCC against another and ensuring that it would produce the desired effect, IResp 2 states that: “it would require a lot of follow-up to be sure that they provide the effect we are possibly looking for. So, we have rather spent the money on measures that take place in projects” (IResp2-9).

5.2.4.2 Concerns regarding measurability, integrity, and credibility

Tying in closely with the above statements, a general concern among the IResps relate to the integrity of different VCCs, and upon purchase, how genuine and measurable their effects are in terms of reducing emissions. This concern ranges from uncertainty about the general measurability of VCCs, to scepticism about their credibility and integrity as a tool for emission reduction.

IResp 2 asserts that their company “(...) has a great deal of attention to concrete effects,” and that “it is very much in the walls that we must measure the effects of the things we do” (IResp2-10). Furthermore, they state that “measuring the effect of a voluntary credit purchase can be very difficult, at least if you go deeper than to kind of just assume that the credit you buy actually corresponds to a ton of CO₂” (IResp2-10). IResp 2 states that these very elements of their corporate culture and tradition might deter from the purchase of VCCs. In discussing VCCs, IResp 2 further emphasises their scepticism by stating they have yet to see that they can “be sure that it will produce the effect we are possibly looking for” (IResp2-9). With reference to VCCs available in VCMs at large, IResp 5 states the following:

“It is, after all, a very immature market in a way. The vast majority of credits that you can buy are very cheap and of very low quality. I think one can put rather big question marks to how much emissions some of them actually cut. For example, with some of the tree planting projects that have been carried out far away from Norway: you have probably planted this certain number of trees, but you haven't followed up afterwards how many have survived, or how much CO₂ they actually absorb. I think you have to go a long way with some of those products to ensure that it actually absorbs CO₂ before you put your money there.” (IResp5-4).

IResp 2 also emphasises the importance of being certain that the VCCs they might have purchased were to be verifiable: “in the voluntary market, we kind of would have had to be sure that the credits we buy have integrity, that they contribute to further emissions reductions or nature restoration or whatever it may be” (IResp2-11). IResp 2 further asserts that “there are many problems with old allowances and credits. There are many problems with quotas from projects that might actually have happened regardless of whether they received money or not” (IResp2-15). In addressing the various types of VCCs, IResp 3 notes that “the more real the better” (IResp3-10).

In considering types of VCCs, IResp 5 states that higher-quality and more verifiable VCCs would garner more interest than most VCCs currently available through VCMs:

“If there are types of products that actually remove carbon that has already been emitted, and it's provable that they remove it, then that could also be more interesting than a lot of what's on the market today. So, I think, in a way, that the quality of a lot of what is being offered now is not good enough” (IResp5-5).

IResp 3 expressed a great deal of skepticism regarding the integrity and effect of VCCs from projects related to tree planting, maintaining that:

“(...) you never know how it will go when you plant the small trees, and in a way, you take out an advantage in advance based on the assumption of them becoming big. So, I personally have little faith in that.” (IResp3-11)

IResp 2 also questions the level of trustworthiness of the different bodies of accreditation and verification that are prominent features of VCMs:

“If I had been given some kind of responsibility for that in this company, I would have been very, very critical of which types of allowances were involved. I would not have trusted, immediately, a stamp of approval from one scheme or the other. I would probably have argued that we would have to have a very, very thorough process to identify which ones to choose, especially if it was voluntary allowances” (IResp2-12).

In addressing the process of eventually considering what type of VCC to opt for, IResp 6 also refers to the challenge of knowing whose advice to trust in, questioning the integrity and

credibility of recommendations from different external consultants, and assessing whether the recommendations are genuine or characterised by vested interest:

“(...) for example, you can get recommendations about various credits through consulting firms for example, and I think you can be a bit critical of that, because you don't know if they're just recommending some specific types of projects just because it is something they have in their portfolio, for example. That can also make it extra difficult to know what to trust and what actually has an effect.” (IResp6-8).

The topic of future developments regarding emissions trading markets is raised in several of the semi-structured interviews, with reference to both the regulated, mandatory EU Emissions Trading System [EU ETS], and non-compliance VCMs. IResp 2 states that more official regulation and standardisation of VCMs would produce more verifiable and reliable instruments for voluntary emissions trading:

“If it was sort of a more official, good, well-regulated, sort of EU-regulated system, upon which everyone was in accordance regarding how it worked, and everyone agreed on how it would affect the countries' own total greenhouse gas accounts, then it would have been more natural to approach.” (IResp2-12)

Further, IResp 2 also states that although purchasing allowances from the EU ETS is not very relevant for them as they primarily operate in non-ETS sector, a possible future expansion of the EU ETS could provide more relevant instruments than VCMs as they currently function:

“But, for example, the EU's emissions trading system [ETS] today, it is not so relevant for us to buy allowances from that, because we primarily operate in non-ETS sectors, for example. So then it is more relevant to take action on the ground. But one could imagine that that system could be expanded in a way. And there are ongoing discussions regarding other instruments in the UN. More, in a way, official credit systems under the UN. Such solutions would probably be more relevant.” (IResp2-14)

5.2.4.3 Preference for demonstrable, visible efforts relevant to core activities and emissions, and geographical location

Closely related to the sense of responsibility regarding climate financing presented in sub-chapter 5.2.3.4 *Fulfilling firms' sense of role, responsibility and conscience through climate*

financing, several IResps reference a preference for efforts of demonstrability and visibility, with relevance to core activities, emissions, and local initiatives.

As most of the IResps belong to industries and carry out activities producing what IResp 2 deems a “very obvious and clear footprint in the world” (IResp2-13), many of them adamantly emphasise the importance of reducing their emissions in a way that is clearly demonstrable and as visible as their emissions or footprint are. IResp 2 emphasises the notion that since their “(...) negative impact on nature and the environment is so obvious, (...) many people would have thought it was too easy to just buy allowances” (IResp2-13). IResp 5 similarly states that the financial means the firm puts towards cutting emissions are “(...)best spent on something that we very clearly can see actually cuts emissions” (IResp5-6).

In discussion of types of VCCs, in terms of which would be more or less relevant for the IResps to purchase or consider purchasing, several IResps highlight the importance that the VCC in question has relevance or connection to their core activities and emission sources, and to local initiatives. IResp 1, for example, expresses their preference for “something to do with our core business, (...) some local initiatives,” and something “linked to our problems,” stating that these “(...) would have gone before somewhat distant goals” (IResp1-11). Similarly, IResp 4 states that as a carbon-intensive business, it would be sensible and in their interest to contribute to CCS upon purchasing some form of VCC (IResp1-19).

IResp 3 asserts that in considering different types of VCCs, they would weigh locally relevant projects more positively than projects in other parts of the world, while emphasising that in the big picture, limiting the negative effects of activities at home is better than supporting projects to offset these negative effects elsewhere (IResp 3, Appendix E). IResp 3 poignantly expressed this in relation to forest-based VCCs:

“(...) regarding tree planting: more carbon is stored in the ground in nature in Scandinavia, than the mangrove forests in the tropics absorb. So, to think that we should solve things in a completely different part of the world, I would also argue against that. It is better that we refrain from digging in bog, than that we support tree planting somewhere else” (IResp3-11).

Lastly, IResp 5 points to how they would be likely be perceived negatively both with regards to societal expectations and among their industry peers especially if they had purchased VCCs of no relevance to their activities as a way to cut their emissions.

“I also think that we are rather visible in society, aren't we? If we were to cut emissions from planting trees in Africa, I have no faith that it would have been positively received in society. And what other actors would have thought with regards to those, I think it would have been seen as a bit frivolous.” (IResp5-11).

With reference to the possibility that they reach the point where they consider purchasing VCCs to abate their remaining emissions, IResp 5 expresses hopefulness in more demonstrable VCCs, expressing the following: “Hopefully it coincides with slightly better products entering the market eventually, where it is more demonstrable that it actually cuts emissions. Because I think that's a bit lacking today” (IResp5-7).

5.2.4.4 Industry or field cooperation

Several IResps reference cooperation within their respective industries in their discussions regarding adapting to changes in the competitive basis and potential VCM participation. Regarding their choice of VCC, IResp 6 points out that looking to the choices of others in the same industry made their decision easier: “(...) there are also several others in the industry who also buy from them, so it is something to rely on” (IResp6-12). IResp 1 points out the mutual trust and cooperation within their industry in stating that “there is very good cooperation. There is little competition. I think that helps to make it easy to share, because everyone benefits when the neighbour is doing well” (IResp1-13). Overall, five out of the six IResps reported to be part of one or more types of industry networks with a specifically sustainability- or climate-focused orientation, though none of these five IResps reference participation in these as a direct cause or influencing factor in the consideration of the purchase of VCCs (IResp1-14; IResp2-16; IResp3-14; IResp4-20; IResp5-9; IResp6-13).

With regards to the question regarding participation in sustainability- or climate-oriented industry networks in the online questionnaire, 72.7%, i.e. eight (8) out of the eleven (11) QResps that reported to either purchase or consider purchasing VCCs, reported to also participate in such networks (Appendix G). Of the 63 QResps reporting to not purchase VCCs, nor consider it, 52.4% stated they participate in sustainability- or climate-oriented industry networks, while the remaining 47.6% stated they do not (Appendix G). Due to the limitations and small size of this online questionnaire, the responses from the online questionnaire cannot provide any secure point of reference for causality or correlation between the QResps' relations to purchase of VCCs, and their participation in sustainability- or climate-oriented industry networks. It may nevertheless be worth noting that within the

group of QResps that purchase or consider purchasing, the proportion of companies that participate in such industry networks as opposed to those who do not, is larger than within the group of QResps that do not purchase, nor consider purchasing, VCCs.

6. Discussion

This chapter discusses the above qualitative and quantitative results utilizing the conceptual framework on three overarching explanations for VCM participation, as laid out in chapter 3.0. *Theory and conceptual framework*. The discussion chapter is divided into three main sections, each addressing the respective RQs of the thesis.

6.1 Extent and type of VCM participation among Norwegian non-ETS sector actors

Results of the quantitative online questionnaire, supplemented by relevant material from the semi-structured interviews provide substantial grounds for discussion of the type and extent of VCM participation among the sampled non-ETS sector actors. With very low levels of participation in VCMs through actual VCC purchases across both the QResps and IResps, much attention was awarded to the findings among firms that also were considering or could consider purchasing VCCs.

In terms of addressing the type of VCM participation, relevant findings were found with reference to the type of VCC purchased or considered purchased among the QResps and IResps. In total, two types of VCCs were found to be purchased across the IResps and QResps, namely VCCs relating to CCS projects with long-term storage (Appendix B) (IResp6-9), and the QResp registered the VCCs they purchased as pertaining to forest and land projects that ensure avoided deforestation through jurisdictional programs (Appendix A) (Appendix G).

The singular QResp reporting to currently purchase VCCs makes for a notable and somewhat puzzling case for a number of reasons. Firstly, this QResp, which henceforth can be nicknamed QRespA, was registered with NACE Activity Code 41 *Construction of buildings*, one of three NACE Activity Codes of the online questionnaire within which no other QResps reported to even *consider* purchasing VCCs (Appendix G). In addition to this, QRespA reported to purchase a type of VCC that none of the IResps indicate any sort of preference for (as opposed to the QResps, the IResps that were not currently purchasing VCCs were still able to indicate which VCC types they would hypothetically choose if they later were to purchase them). The case of QRespA will be further touched upon in chapter 6.2. *Discussion: Determinants of non-ETS sector actors' participation in VCMs*.

In considering the confirmed purchases of the purchased and hypothetically purchased types of VCCs among the QResps and IResps, an indication of two preferences becomes apparent: 1. the IResps favour VCCs related to CCS, and; 2. the IResps generally prioritise VCCs with relevance to their main activities and/or emission sources. As the firms are all actors with emissions-intensive main activities (based on their NACE Activity Codes), the preference for VCCs relating to CCS both in actual and potential purchases further supports this. Furthermore, indications of the IResps' use or hypothetical use of VCCs in their climate strategies point to a clear priority among the firms to make an effort to reduce their own Scope 1, 2, and 3 emissions before eventually considering the purchase of VCCs either as a means of climate financing, or reducing the firms remaining emissions that the firm has not been able to reduce through other means or adaptations by then, particularly in Scope 3.

The type of VCM participation displayed among the firms in the study appear to align positively with a number of indications and suggestions for future uses of VCMs, both in terms of the firms' preferred use of VCCs in climate strategies and their preferred type of VCCs upon the actual or potential purchase thereof. Notably, in a report by PwC and Miljøstiftelsen ZERO, VCCs related to CCS projects with long-term storage are given the "green light" for use in firms' climate strategies, given that such a purchase occurs as a means of reducing remaining emissions in Scope 3, in combination with reductions of at least 50% in Scope 1 and 2 emissions by 2030 (2022, p. 27).

6.2 Determinants of non-ETS sector actors' participation in VCMs

Through a thematic analysis of six semi-structured interviews with selected non-ETS sector actors, the following three main themes were identified with regard to determinants of their VCM participation: *developments affecting firms' conditions for financial stability and profitability; firms' incentives and motivations in assessment of VCM participation*, and; *firms' knowledge and preferences regarding CSR measures, VCMs and VCCs. Timing and priority of actions* was defined as an underlying determinant of these. Each theme also encompassed a set of sub-themes of determinants.

Overall, the determinants of VCM participation evident across all the IResps are characteristically aligned chiefly assumptions of stakeholder and legitimacy theory, with some nuance in how they display behaviour and motivation characteristic of assumptions regarding simple profit maximisation and altruism respectively.

6.2.1 Assumptions on profit maximisation in motivation

As was elaborated upon previously, all IResps generally display clear priority of profitability, mostly with a focus on financial stability, though with clear underlying cost-benefit assessments ultimately centered on profit maximisation in every firm apart from IResp 2 (IResp6-1; IResp4-1; IResp4-2; IResp1-1; IResp2-1; IResp2-2; IResp3-1; IResp5-2; IResp3-5). This is generally consistent with the core assumption on profit maximisation from the theory chapter.

A certain level of determinants related to opportunism and free-riding is observed among two of the firms in the semi-systematic interviews. As was elaborated on in previously, clear elements of opportunism are seen in IResp 3's mention of the possible financial opportunities in terms of corporate climate strategy adjustment in accordance with what might provide financial opportunity in the emerging large-scale regulative measures on corporate sustainability reporting that will be increasingly affecting their stakeholders (IResp3-6). The element of free-riding can to some extent be found in IResp 4's reluctance to being "at the forefront of things (...)" with reference to being a driving force for reducing emissions in their industry (IResp4-16).. Beyond this, firm behaviour characteristic of the free-riding part of this assumption is not a very prominent feature among the IResps.

6.2.2 Strategic and profit-oriented adaptation for competitiveness and survival

The vast majority of the thematic analysis' main themes of determinants concern factors that in one way or the other align with the strategically grounded explanation for VCM participation, pointing to strategic and profit-oriented adaptation for competitiveness and survival. The firms display clear emphasis on adjusting their VCC practices to developments in stakeholders' demands and preferences so as to uphold their accountability towards them (IResp1-7; IResp1-8; IResp2-3; IResp3-6; IResp4-4; IResp5-1; IResp6-2), and safekeep firm legitimacy for their continued ability to compete (IResp3-1), survive (IResp4-5), and even thrive (IResp3-6). Several firms also point to specific stakeholders' as more or less salient in influencing their VCC purchases, such as organisations providing industry-relevant standards and validation for emissions reduction (Iresp3-2; IResp3-13), big customers (IResp4-8; IC4-10) and employees (IResp4-15; IResp6-6; IResp2-6). Multiple firms also heavily reference their industry peers and competitors as stakeholders with influence on their VCC decisions (IResp1-7; IResp4-5). Generally, the firms' sentiments regarding necessity to adapt to new expectations regarding emissions reduction do not seem grounded in disagreement towards

the expectations themselves, but rather a focus on maintaining what Vatn (2015) refers to as ensuring a “level playing field”.

In speaking of stakeholders’ demands and requirements regarding emissions reduction or reporting as influential on their VCC practices, it is worth noting that the firms themselves also set varying levels of requirements to their own suppliers, with some already doing so (IResp2-17; IResp3-15; IResp3-16; IResp5-10), some planning to (IResp1-17; IResp4-22), while some plainly do not, nor seem to plan to (IResp6-13). It is noteworthy that the firms seem to take on different *roles* within their industries regarding industry mobilisation and transformation with regards to reducing industry emissions, as some take on more prominent roles in this process (IResp2-17; IResp3-16), while some seem reluctant to be at the forefront (IResp4-16). In relation to this, some firms stand out as particularly interesting counterparts, and although their responses do not provide grounds for generalisation due to the limited amount of respondents, it makes for a notable point of discussion. IResp 3 asserts themselves as a rather leading and influential actor in their industry (IResp3-4), mostly references their own emissions targets (set through SBTi) (IResp3-2; IResp3-3) and the CSRD as influential on their practices (IResp3-6; IResp3-7), with little reference to their industry peers as salient stakeholders. Meanwhile they set requirements for emissions reporting in products from their suppliers (IResp3-15), are partial to prioritise suppliers based on which has the lowest level of emissions (IResp3-16) and try to contribute to get “the whole industry mobilising to develop quickly in the right direction” by actively raising emissions reduction as a topic in industry discussions (IResp3-16).

On the other hand, several of the firms expressing to be the most heavily influenced by pressure from stakeholders like customers and industry peers (IResp1-4; IResp4-5; IResp4-6; IResp4-7; IResp6-2; IResp6-5; IResp6-10; IResp6-11) seem the most inclined to purchase or consider purchasing VCCs now or in the near future (IResp1-13; IResp4-9; IResp6-9). It may be worth noting that these IResps also have not as of yet clearly defined their targets for emissions reduction (IResp1-5; IResp4-7; IResp6-3), and also do not set their own specific requirements regarding emissions to all their suppliers (IResp1-17; IResp4-22; IResp6-13) (although IResp 1 and IResp 4 plan to do so in the future (IResp1-17; IResp4-22)).

Furthermore, the firms with clearly delineated targets related to ambitions such as reaching net zero by 2045 (IResp3-2; IResp5-3) also may seem more inclined to have more concrete and specific demands regarding emissions among their suppliers (IResp3-16; IResp3-16; IResp5-10).

The IResps point to significant barriers relating to knowledge gaps in VCM participation (IResp2-7; IResp2-8; Resp5-4; IResp3-11; IResp1-11) and concerns for the measurability and integrity of different VCC types (IResp6-9; IResp5-4). The firms' varying levels of familiarity with VCMs seem to have some correlation with how they think VCC purchases should be timed and prioritised in relation to other emissions reduction measures, and which type of role a VCC purchase should play in their climate strategies. For example, the IResps expressing more familiarity and in-depth knowledge about VCMs are also clear in pointing out its shortcomings and expressing concern for VCCs' credibility and measurability, and seem more likely to be especially critical in consideration of VCC purchases (IResp2-11; IResp2-12; IResp3-10; IResp3-11; IResp5-4). IResp 1 admits to be less familiar with VCMs and types of VCCs, and generally seems less critical of VCCs integrity or credibility (IResp1-6); IResp1-11) but also references this and their insofar lack of knowledge about their own emissions as a current barrier to purchasing VCCs (IResp 1-12).

Meanwhile, IResp 6 references other industry peers' type of VCC purchase as a basis for their own evaluation of which type to buy (IResp6-11). Some IResps reference VCC purchases as a possible means of satisficing the need to cut remaining emissions that the firm is unable to find a better way to cut on their own (IResp2-5; IResp3-12; IResp1-12). These determinants in particular point to assessment and decision-making regarding VCM participation under the constraints of a limited amount of information and bounded rationality.

A point of interest to this discussion regards IResps 3 and 5's relationship to the Science Based Targets initiative [SBTi] as a form of stakeholder in their assessment of VCM participation with regards to their emissions reductions targets, and a recent development in the SBTi's attitudes towards the use of VCCs. The SBTi is a notably influential actor with regards to asserting what they deem "best practice in science-based target setting," in many ways defining a standard for emissions reduction ambition among corporate actors worldwide, providing tools and guidance for setting emissions reduction targets (n.d.). According to their own websites, more than 4000 companies worldwide have made commitments or set targets through their services as of May 2024, which points to their pronounced position (SBTi, n.d.). Notably, they assert that target-setting through their services "boosts profitability, improves investor confidence, drives innovation, reduces regulatory uncertainty, and strengthens brand reputation" for companies (SBTi, n.d.). On April 9th 2024, the SBTi Board of Trustees released a statement specifying that the SBTi henceforth would consider the use of VCCs for the abatement of Scope 3 emissions as a valid means of meeting emissions reduction targets (Science Based Targets initiative, 2024). This

illustrates a significant change in the SBTi's view of requirements for meeting targets for emissions reduction. Considering the influence of the SBTi's standards among corporate actors worldwide, this development would be worth keeping an eye on due to its potential of incentivising a significant increase in VCM participation.

6.2.3 Elements of altruism in VCC decision-making

This third section discusses the findings of the thematic analysis with consideration of these three assumptions. Certain aspects of altruism are observed among the interviewed firms. However, the behaviours and motivations observed among the IResps are generally mostly characteristic of what in the theory chapter is defined as *impure* forms of altruism such as normative altruism, as opposed to *pure* altruism.

Several of the statements on the firms' sense of moral responsibility are of relevance here, especially with regards to the IResps that express inclinations towards considering purchasing VCCs for the purpose of climate financing due to their sense of responsibility as actors in emissions-intensive industries (IResp3-8; IResp6-7; IResp4-17; IResp4-19), or as actors in a developed country (Resp4-18). This can be deemed characteristic of altruism through a willingness to forfeit firm profit for the good of something or someone else, as is elemental to theories on pure altruism (Schwartz, 1977).

IResp 3 expresses a paradox regarding what would be the most responsible and right thing to do with regards to their role as a prominent actor in an emissions-intensive industry: IResp 3 raises the question of whether it would be most right for them as an actor of their prominence to purchase VCCs to invest in CCS technology (IResp3-8), *or* to prioritise reducing their own emissions as much as possible *first*, thereby ultimately minimising their impact and the general need for CCS in the first place (IResp3-13).

Aspects pertaining to altruism can be observed in several firms' emphasis on "doing the right thing" in discussion of VCM participation. It is clear that the firms' perception of what is morally correct in this situation varies greatly, depending on which values they have internalised, what they have internalised as morally correct, and who or what they prioritise as definitive for what is morally correct or not. In short, the IResps show great variation of either discussing purchasing VCCs in the context of believing it to be the right thing to do, or in the context that they think of it as the wrong thing to do. What the firms deem to be the right thing to do in terms of VCM participation thus seems to have some correlation with the firms' knowledge and familiarity with VCMs. One might say the discussion boils down to

determining what the *most* right decision is, based on the information available to the firm when making the decision.

IResps more familiar with VCMs seem to be generally critical to VCCs and appear to express that it would be more right of them not to purchase VCCs when they can not be sure of their credibility (IResp2-9; IResp2-13; IResp5-4). Meanwhile, IResp 6, which does not express much familiarity with VCMs nor types of VCCs (IResp6-11) appears to purchase VCCs as a means of fulfilling what they deem to be the right thing (IResp6-4; IResp6-7).

In their consideration of VCC purchases, several IResps express concerns related to the concept of warm glow (Andreoni, 1990). IResp 4 refers to a possible increase in customer goodwill upon the hypothetical purchase of VCCs (IResp4-15). Meanwhile, IResp 6 points to employees' possibly increased sense of pride due to working for a firm that purchases VCCs to "try to become more sustainable" (IResp6-6). In their reasoning for purchasing VCCs, IResp 6 also state they do it out of "care" to "help reduce emissions", thus formulating themselves in a way that indicates some connection to fulfilling a sense of moral responsibility. On the other hand, IResp 3 underline that they are adamant in *not* using the purchase of VCCs as a means of clearing their conscience, stating they "(...) are very clear that we are not to buy ourselves a good conscience, and we understand that we cannot do that" (IResp3-9). Lastly, some IResps seem to articulate that purchasing VCCs could in some sense be immoral in the understanding that it would be a way to buy the firm a way out of reducing its own emissions, especially if this is what was reflected in employees' opinions and values and company culture. For example, IResp 2 articulates that purchasing VCCs might be the wrong thing for the firm to do especially with regards to employees' opinions and values if they felt it was a way for the firm to buy its way out from reducing emissions and releasing itself from its responsibility to reduce emissions (IResp2-6; IResp2-10). This thought might be related to normative altruism in some way, in that the firm seems to direct actions based on what is deemed right for the firm to do based on the "content-specific norms which emerge in the course of continuing relationships" (Schwartz, 1977, p. 225) within their firm. This is representative of the observation of Anderson et al. (2022a) that "socio-cultural decision-making may have strong bearing on economic and political decision-making, even if often implicit or underlying" (p. 192).

Ultimately, the firms subject to the semi-structured interviews display a wide array of motivational factors that may be related to characteristics of altruistic behaviour. Incentive characteristic of altruism is particularly apparent in the firms' actual or considered purchases of VCCs for the sake of climate financing, several do express a willingness to forfeit firm

profit for the sake of serving something other than themselves exclusively. Nevertheless, none of the motivation apparent across the IResps can be deemed characteristic of what (Schwartz, 1977) defines as pure altruism. Still, in their actual and hypothetical VCC purchases, the firms do appear incentivised by characteristics of what is instead deemed egoistic (impure) (Schwartz, 1977) and normative altruism (Schwartz, 1977). This is apparent in their underlying tendencies of incentivisation by aspects such as warm glow (Andreoni, 1990) (IResp6-6; IResp4-15), fulfilment of a sense of moral responsibility (IResp3-8; IResp6-7; IResp4-17; IResp 4-18; IResp4-19; IResp3-8), and adherence to the values in expectations of stakeholders (IResp2-6; IResp2-10; IResp3-8). Lastly, a notable and underlying factor in itself lies in the firms' nuanced views on VCM participation, in that purchasing VCCs overall seems to be considered as somewhat right and morally responsible for some IResps (IResp3-8; IResp6-4), while for others, it is perceived as the very opposite (IResp2-6).

6.2.4. Concluding remarks on Determinants of non-ETS sector actors' participation in VCMs

Ultimately, both in purchasing and *considering* purchasing VCCs, the firms of this study display motivation dominated by strategic considerations, especially relating to upholding stakeholder accountability and safeguarding firm legitimacy. However, varying elements of altruism are apparent across several firms, with the noteworthy observation that motivation characterised by elements of altruism appear present in arguments both *for* and *against* purchasing VCCs, including the sentiment that it would be immoral for firms to buy their way out of the responsibility of reducing their own emissions.

A clear observation in the interviewed firms' motivation and decision-making surrounding VCM participation seems to lie in a form of mutual interdependencies. Motivation and decision-making among those more partial to the purchase of VCCs seems to be largely grounded in *reactivity and dependency* on expectations and demands from customers and industry peers, especially (though not exclusively) among those who are not subjected to formal requirements for emissions reductions such as the CSRD. Meanwhile, one of the larger firms that might be seen as more of an industry leader, is subject to the CSRD and has set clear and quantifiable emissions targets through the SBTi, seems less dependent on customer and industry peer expectation, but more assertive in *setting the bar* through their demands to suppliers and in setting expectations for emissions reduction within their sector.

6.3. System adaptations for increased alignment with national targets

The following section attempts to address possible system adaptations for facilitated alignment between current emissions reduction practices of Norwegian non-ETS sector actors and Norway's emission reduction target of 55% by 2030, with reference to the above findings on extent and type of VCM participation discussed in RQ1, and the underlying motivation thereof discussed in RQ2. These findings are somewhat discussed in light of some of the system adaptations as put forward by Klimautvalget 2050 (2023) in the background chapter. It must be noted that the following assessments and suggestions are grounded in the limited findings of this thesis, and the authors' own limited knowledge as a student without extensive experience in such assessments.

The expected growth of the use of VCMs (Klimautvalget 2050, 2023 p. 299; PwC & Miljøstiftelsen ZERO, 2022 p. 3), especially among actors in sectors where sufficiently reducing emissions seems «unfeasible given today's technologies» (Ihenacho & Verpe, 2023 para. 2), non-critical and stakeholder-responsive VCC use may become more prominent in the time to come, as is illustrated in the above findings. Given the questionable credibility of the actual emissions reduction effect of many VCCs currently available through VCMs (PwC & Miljøstiftelsen ZERO, 2022), the leniency among some of the interviewed firms towards hypothetically purchasing VCCs to satisfy stakeholder demands presents reason for concern with regards to producing credible emissions reduction in line with both the firm's own targets and national targets (Klimautvalget 2050, 2023 pps. 299-300). An additional level of insecurity is added by independent actors providing various standards and recommendations regarding emissions reduction targets and measures (IResp2-12; IResp6-8). The indicated interest among several of the firms towards purchasing VCCs related to financing CCS technology may, however, align with IPCC's call "adaptation and mitigation finance (...) to address rising climate risks and to accelerate investments in emissions reduction" (2023, p. 111). Nevertheless, the findings indicated need for consensus on how non-EU ETS actors are to approach national goals in their sectors points to a need for system adaptation.

Overall, the thesis' findings on non-EU ETS sector actors' practices and determinants regarding VCM participation indicate a need for clearer more predictability and clearer guidance and governance (IResp1-7; IResp2-12; IResp2-8; IResp3-1; IResp4-9; IResp4-10; IResp5-2; IResp6-8), expressing a need for ownership in decision-making (IResp4-23; IResp1-2; IResp4-6; IResp4-7), and instruments of local and sector-specific relevance (IResp1-12; IResp3-11; IResp3-16; IResp5-2). The following section seeks to address this.

Policy enhancement and regulative measures in line with national circumstances and sector-specific considerations are deemed a necessary system adaptation. Ultimately, a deemphasised role of free markets (Anderson et al., 2022b p. 197) and a general expansion of the role of the state (Vatn, 2021 p. 304) are deemed necessary to lighten the risk and direct responsibility for non-EU ETS sector firms and facilitate their role in addressing national emissions reduction targets.

Increased guidance and regulation by the state in line with national circumstances may ensure less dependency on stakeholder accountability and legitimisation among Norwegian firms in non-EU ETS sectors. This may in turn lessen the risk of hasty and non-critical VCC purchases, while addressing possible issues of high transaction costs and free-riding (Anderson et al., 2022b, p. 196). Meanwhile, strengthening the role of participatory processes in shaping these instruments may ultimately increase their stability and long-term feasibility in producing more sector-relevant adaptation guidelines to which the firms feel ownership to.

As of May 13th 2024, clear direction for how non-EU ETS sectors are to reach the adjusted targets of reducing emissions by 50% by 2030 (based on reference numbers from 2005) (Klima- og miljødepartementet, 2023 pps. 4-7) is seemingly yet to be presented by the Government to the Norwegian Parliament, as demanded upon the amendment of the Climate Change Act on December 15th 2023 (Stortinget, 2023). However, a report has since been delivered from the Norwegian Environment Agency to the Minister of climate and environment on the April 10th 2024 (Miljødirektoratet, 2024), which will likely be formative for the Government's upcoming suggested adaptations. Although extensive, the report generally displays little mention of adaptation in non-EU ETS sectors, apart from a plan to legislate a "ban on fossil fuels for indirect firing in non-EU ETS industry in 2024 which will enter into force in 2030" (Miljødirektoratet, 2024 p. 14). In anticipation of likely upcoming Government suggestions regarding adaptation in non-EU ETS sectors (Stortinget, 2023), it is nevertheless advisable that new policy-making engages with the *drivers* of the emissions reductions rather than their effects, as suggested by Anderson et al. (2022b, p. 197). In doing so, the enhancement of policies and regulative measures should occur in close dialogue with civil society (Vatn, 2021), and not least, the firms themselves. The importance of this is even evident among statements of the interviewed firms, with IResp 4 stating that

"(...) it is of no use if some local business forum or something finds out that this or that is very smart. There must be much more anchored and agreed-upon organisation around it, so that there are no coincidences. If not, we as contractors are left with a huge bill to satisfy these airy demands for emissions reduction and so on decided on

by people who never have to deal with it anyway. That's kind of what everyday life is. An incredible number of people can sit around and discuss and process and decide on lots of hairy goals (...), but those who ultimately end up having to take the consequences of this is the outer link, it is either a consumer or a supplier."

(IResp4-23)

7. Conclusion and suggestions for future research

Norwegian firms within non-EU ETS sectors will have to play a crucial part in climate change adaptation if Norway is to reach the target of reducing national emissions by at least 55% based on 1990-levels of emissions by 2030. The findings of this thesis supplement and enrich previous findings on firms' motivation regarding the purchase of VCCs by providing perspective on the matter from Norwegian firms within particularly emissions-intensive sectors outside the EU ETS, which are currently undergoing challenging transitions under immense pressure while lacking consensus and direction on how to best navigate this very transition in a way that may still ensure their continued survival. The limited scope and extent of this thesis also presents ample opportunity for further research, which the last paragraph will provide suggestions for.

Significantly low levels of current VCM participation were identified across the firms studied through both the online questionnaire and the semi-structured interviews carried out for this thesis as addressed in RQ1. The findings of the online questionnaire and semi-structured interviews were based on 74 and six (6) responding firms respectively. Only two (2) of these firms reported to currently purchase VCCs; *one* firm out of the 74 respondents of the questionnaire, and *another* firm interviewed through the semi-structured interviews. Meanwhile, a total of ten (10) respondents of the online questionnaire expressed to consider purchasing VCCs in the future. The remaining five (5) interviewed firms reporting to not currently purchase VCCs expressed varying levels of interest in hypothetically purchasing VCCs, with reference to a range of determinants affecting their motivation and decision-making. Meanwhile, the purchasing and hypothetically purchasing firms' expressed type of VCM participation was largely characterised by inclination towards CCS projects for the sake of climate financing or compensation for remaining emissions. The remaining type of actual or hypothetical VCM participation entailed forest and land-related projects for carbon removal, and climate reduction projects in developing countries. Overall, a clear preference

was asserted for prioritising reduction of own emissions to the maximum extent before engaging in the purchase of VCCs. Furthermore, firms displayed prominent tendencies in their preference for visibly credible, measurable, and sector-relevant measures.

The studied firms' expressions regarding determinants of their current and hypothetical engagement in VCC purchase, as addressed in RQ2, were dominantly characterised by strategic considerations grounded in motivation to uphold accountability to salient stakeholders and ensure firm legitimacy. Debatably, elements pertaining to altruism may also be perceived in some firms' decision not to abstain from purchasing VCCs since they do not want to pay their way out of fulfilling a responsibility to reduce their emissions. Furthermore, the firms display dependence on customer demand and industry peers in the face of adapting to changed conditions for competition and a lack of consensus on how to best meet emissions reduction demands.

A core system adaptation suggestion pertaining to strengthening the role of civil society in forming sector-relevant policy and regulation in line with national circumstances was put forward in attempting to address RQ3 of how to better align the practices of firms in Norwegian non-EU ETS sectors purchasing or hypothetically purchasing VCCs and Norway's target of reducing national emissions by at least 55% of 1990-levels by 2030.

Based on the findings of this thesis, and the limits thereof, the following three main suggestions for future research are put forward. Firstly, it may be fruitful to perform a similar research project based on a population that instead focuses on SMEs within these sectors, instead of firms of a medium to large size. This recommendation is based on the low response rate in the data collection of this thesis, with consideration of the large number of sector-relevant SMEs which throughout the course of the thesis work were discovered to currently purchase VCCs, but were outside the population for this thesis due to having 5-10 less employees than the required population count. Due to an inability to generalise or produce significant relationships of correlation or causality from the limited number of interviewees, a second suggestion for future research entails exploring possible correlations between the extent of firms' emissions reduction targets, emissions reduction requirements to suppliers, and VCC purchases among suppliers upstream in their value chain. Thirdly, since this thesis only explored the types, extent and determinants of VCM participation among Norwegian firms in non-EU ETS sectors, the third and last suggestion for future research regards carrying out a comparative study investigating the same problem statement across firms within both non-EU ETS sectors and EU ETS sectors.

Appendices

Appendix A: Questions from Online questionnaire

Spørsmål til spørreundersøkelse

(ca. 5 minutter)

Spørsmål markert i gul er spørsmål som samsvarer direkte med intervju spørsmål.

1. Hvilken næring tilhører virksomheten? (Tosifret tallkode. Nivå 2 av Standard for næringsgruppering (Statistisk Sentralbyrå, 2008))
2. Kjøper virksomheten frivillige klimakreditter?
 - 2.1.Ja
 - 2.2.Ja, men vi planlegger ikke å gjøre det i framtiden
 - 2.3.Nei
 - 2.4.Nei, men vi vurderer å gjøre det i framtiden
3. Hvilken av de følgende alternativene beskriver best typen frivillige klimakreditter* som virksomheten kjøper? (sett kryss for det alternativet som passer best) (*følger inndelingen i trafikklysmodellen til PwC; and Miljøstiftelsen ZERO (2022 p. 27)).
 - 4.1.Karbonfangst- og lagringsprosjekter med langvarig lagring (f.eks. Direct Air Capture, produksjon av bioenergi, biokull, mineralisering, m.m.)
 - 4.2.Skog- og arealprosjekter for karbonfjerning, som oppfyller krav om å sikre langvarig lagring uten lekkasje
 - 4.3.Skog- og arealprosjekter som sikrer unngått avskoging (gjennom juridiske programmer)
 - 4.4.Prosjekter vurdert gjennom en due diligence-vurdering (innen f.eks. Transport, Fornybar energi, andre prosjekter innenfor Skog- og arealbruk)
 - 4.5.Prosjekter ikke vurdert gjennom en due diligence-vurdering (innen f.eks. Transport, Fornybar energi, andre prosjekter innenfor Skog- og arealbruk)
 - 4.6.EU-kvoter
 - 4.7.CDM-prosjekter
 - 4.8.Joint Implementation-prosjekter
 - 4.9.Annet (utdyp):
4. Uttrykker virksomheten mål om å bli klimanøytral*? (sett kryss for det alternativet som passer best)
 - 5.1.Ja, virksomheten har satt overordnede mål om å bli klimanøytral*
 - 5.2.Virksomheten oppnår allerede klimanøytralitet*
 - 5.3.Virksomheten har andre mål tilknyttet å redusere egne utslipp (men uten mål om klimanøytralitet*)
 - 5.4.Virksomheten har ikke fastsatte mål om reduserte utslipp

* i f.eks. drift eller produkttilbud. Innebefatter her også lignende mål om å bli karbonnøytral, netto null, klimapositiv, m.m.
5. Er virksomheten din del av et bransje- eller industrinettverk med fokus på bærekraft eller omstilling? (f.eks. Skift, Klimapartnere, UN Global Compact Norge m.m.)
 - 6.1.Ja
 - 6.2.Nei
6. Har du noe mer du ønsker å tilføye?

7. Kan en beslutningstaker med tilknytning til bedriftens kjøp av frivillige klimakreditter delta i et videre intervju angående samme tema, som del av dette masterprosjektet?
Kontakt gjerne i så fall student Åse Vigdisdatter Nytrø via e-post v/
ase.vigdisdatter.nytro@nmbu.no eller tlf. 957 69 741 med kontaktinformasjon slik at et intervju kan avtales.

Referanser:

- PwC; & Miljøstiftelsen ZERO. (2022). *Jakten på klimanøytralitet og ansvarlig bruk av klimakreditter*. zero.no: Miljøstiftelsen ZERO.
- Statistisk Sentralbyrå. (2008). *Standard for næringsgruppering (Standard Industrial Classification)*. Oslo, Kongsvinger: Statistisk Sentralbyrå,.

Appendix B: Interview guide for Semi-structured interviews

(Til bruk ved gjennomlesning av intervjuguide:

Research Question 1 [RQ1]: How and to what extent do Norwegian non-ETS sector actors participate in the use of voluntary carbon credits?

Research Question 2 [RQ2]: Which factors influence non-ETS sector actors' voluntary carbon credit practices?

Research Question 3 [RQ3]: Which system adaptations might facilitate better alignment between current emission reduction practices of Norwegian non-ETS sector actors and Norway's emission reduction target of 55% by 2030?

Spørsmål markert i gult er spørsmål som samsvarer med spørreskjemaet.)

Intervjuguide

Intervjuobjekt: [Fylles ut ved intervjustart]

Sted og dato: [Fylles ut ved intervjustart]

Introduksjon

Velkommen og takk for at du tok deg tid til å ta en samtale som del av dette forskningsprosjektet! Innledningsvis ønsker jeg å kort fortelle om oppgaven og forskningsprosjektets formål.

Kort om forskningsprosjektet:

Formålet med denne masteroppgaven er å undersøke kjøp av frivillige klimakreditter blant norske næringslivsaktører på tvers av næringer, og hva som påvirker dette.

Forskningsprosjektet er basert på innsikt fra beslutningstakere som deltar i avgjørelsene rundt slike kjøp hos ulike bedrifter på tvers av næringer.

Del 1: Bakgrunnsspørsmål

Innledningsvis:

1.0. Har du noen spørsmål til meg, ønsker du oppklaring rundt oppgaven, eller er det noe du synes jeg bør vite før vi starter?

Om bedrift og intervjuobjekt:

1.1. Hvilken næring tilhører virksomheten? (Tosifret tallkode. Nivå 2 av Standard for næringsgruppering, (Statistisk Sentralbyrå, 2008))

1.1.1. 01 Jordbruk og tjenester tilknyttet jordbruk, jakt og viltstell

1.1.2. 02 Skogbruk og tjenester tilknyttet skogbruk

1.1.3. 38 Innsamling, behandling, disponering og gjenvinning av avfall

1.1.4. 41 Oppføring av bygninger

1.1.5. 42 Anleggsvirksomhet

1.1.6. 43 Spesialisert bygge- og anleggsvirksomhet

1.1.7. 49 Landtransport og rørtransport

1.1.8. 50 Sjøfart

1.1.9. Annen næring – spesifiser:

1.2. Hvilken stilling har du i bedriften?

1.3. Hvilke hovedmålsetninger har bedriften?

1.3.1. Hvordan oppsto disse målsetningene, og hva påvirker dem?

1.3.2. Oppfølgingsspørsmål dersom respondent ikke nevner avkastning: Hvilke målsetninger har bedriften rundt avkastning?

- 1.4. Hvilke verdier er viktige for bedriften?
- 1.5. Har bedriften utført beregninger av klimagassutslipp i Scope 1, 2 eller 3?
 - 1.5.1. Er disse beregningene offentlig tilgjengelige?
 - 1.5.2. I hvilken grad tilpasses bedriftens kjøp av frivillige klimakreditter disse beregningene?
- 1.6. Hva er bedriftens overordnede holdning til bærekraft og samfunnsansvar (CSR)?
- 1.7. Hvilke klima- og bærekraftstiltak har bedriften igangsatt?
- 1.8. Er bedriften del av et bransje- eller industrinettverk med fokus på bærekraft eller omstilling? (f.eks. Skift, Klimapartnere, UN Global Compact Norge m.m.)
 - 1.8.1. Ja
 - 1.8.2. Nei
- 1.9. Uttrykker virksomheten mål om å bli klimanøytral*? (sett kryss for det alternativet som passer best)
 - 1.9.1. Ja, virksomheten har satt overordnede mål om å bli klimanøytral*
 - 1.9.2. Virksomheten oppnår allerede klimanøytralitet*
 - 1.9.3. Virksomheten har andre mål tilknyttet å redusere egne utslipp (men uten mål om klimanøytralitet*)
 - 1.9.4. Virksomheten har ikke fastsatte mål om reduserte utslipp

* i f.eks. drift eller produkttilbud. Innebefatter her også lignende mål om å bli karbonnøytral, netto null, klimapositiv, m.m.
- 1.10. Har bedriften opplevd å bli stilt krav om tiltak eller mål vedrørende klima eller utslipp?
 - 1.10.1. Hvem stiller disse kravene?
- 1.11. Stiller bedriften krav om tiltak eller mål vedrørende klima eller utslipp til partnere eller leverandører?

Om bruk av frivillige klimakreditter:

- 1.12. Hvem tar beslutninger om kjøp av frivillige klimakreditter i bedriften?
- 1.13. Hvordan tas beslutningene om kjøp av frivillige klimakreditter i bedriften?
- 1.14. Kjøper virksomheten frivillige klimakreditter? (Planlegger i så fall virksomheten å fortsette med å kjøpe frivillige klimakreditter i framtiden? Utdyp gjerne hvorfor eller hvorfor ikke.)
- 1.15. Hvilken av de følgende alternativene beskriver best typen frivillige klimakreditter* som virksomheten kjøper? (*følger inndelingen i trafikkllysmodellen til PwC; and Miljøstiftelsen ZERO (2022 p. 27)).
 - 1.15.1. Karbonfangst- og lagringsprosjekter med langvarig lagring (f.eks. Direct Air Capture, produksjon av bioenergi, biokull, mineralisering, m.m.)
 - 1.15.2. Skog- og arealprosjekter for karbonfjerning, som oppfyller krav om å sikre langvarig lagring uten lekkasje
 - 1.15.3. Skog- og arealprosjekter som sikrer unngått avskoging (gjennom juridiske programmer)
 - 1.15.4. Prosjekter vurdert gjennom en due diligence-vurdering (innen f.eks. Transport, Fornybar energi, andre prosjekter Skog- og arealbruk)
 - 1.15.5. Prosjekter ikke vurdert gjennom en due diligence-vurdering (innen f.eks. Transport, Fornybar energi, andre prosjekter Skog- og arealbruk)
 - 1.15.6. EU-kvoter
 - 1.15.7. CDM-prosjekter

1.15.8. Joint Implementation-prosjekter

1.15.9. Annet (utdyp):

Del 2: Åpne spørsmål: Formål og påvirkende faktorer eller prosesser ved kjøp av frivillige klimakreditter

Spørsmål 2.1.-2.6. er tiltenkt å la respondenten svare på hva som er viktig i bedriftens beslutningsgrunnlag for kjøp av klimakreditter. 2.1.-2.3 tillater respondenten å åpent svare på spørsmål vedrørende faktorer og/eller prosesser som motiverer bedriftens kjøp av frivillige klimakreditter, uten å introdusere hovedkonsepter fra oppgavens teoretiske grunnlag.

Spørsmål 2.4.-2.6. introduserer så konsepter fra oppgavens teoretiske grunnlag, tilpasset svar i 2.1.-2.3.

2.1. Hva er hovedformålet (-ene) med bedriftens kjøp av frivillige klimakreditter?

2.2. Hvilke forhold, faktorer og/eller prosesser spiller inn når bedriften gjør vurderinger om å kjøpe frivillige klimakreditter?

2.3. Hvilke forhold, faktorer og/eller prosesser spiller inn når bedriften gjør vurderinger om å velge én type frivillig klimakreditt ovenfor en annen?

Oppfølgingsspørsmål om unevnte faktorer eller prosesser (fra teoretisk grunnlag)

Dersom respondenten ikke nevner eller berører noen av de følgende faktorene når de svarer på 2.1.-2.3., stiller jeg de følgende oppfølgingsspørsmålene (2.4.-2.6.) etter behov. 2.4.-2.6. introduserer hovedkonsepter fra oppgavens teorikapittel, og tilpasses ut fra den grad respondenten berørte noen av konseptene i svar på spørsmålene ovenfor:

2.4. I hvilken grad er økonomisk lønnsomhet viktig ved kjøp av frivillige klimakreditter?

2.5. I hvilken grad er strategi og langsiktig bedriftsstyring viktig ved kjøp av frivillige klimakreditter?

2.6. I hvilken grad er samfunnsansvar viktig kjøp av frivillige klimakreditter?

Oppfølgingsspørsmål for utdypning om nevnte faktorer eller prosesser

De følgende oppfølgingsspørsmålene innunder 2.8. tilpasses og stilles etter behov basert på respondentens svar gjennom 2.1.-2.6. om hva som er viktig i beslutningstakingen for kjøp av frivillige klimakreditter. **Spørsmålene innunder 2.8. er tiltenkt å la respondenten utdype hvorfor faktorene eller prosessene de nevner (i 2.1.-2.6) er viktige i beslutningstakingen, altså hvorfor de vektlegger det de vektlegger.**

2.8. Hva er det som gjør at (ovenfornevnte faktor eller prosess nevnt som viktig i respondentens svar) er viktig i beslutningen om kjøp av frivillige klimakreditter? «Dette» nedenfor refererer til faktoren eller prosessen som respondenten nevner som viktig i svarene over.

2.8.1. Er det noen interne forhold eller elementer av bedriftskultur som spiller inn i hvorfor det er viktig?

2.8.2. Er det noen eksterne forhold eller elementer tilknyttet legitimitet, kultur eller praksis i næringen bedriften tilhører som spiller inn i hvorfor det er viktig?

2.8.3. Er det noen andre typer forventninger eller elementer av kultur som spiller inn?

2.8.4. I hvilken grad påvirkes dette av hensyn til bedriftens *stakeholders* (interessenter*)? (*med «interessent» mener vi her «enhver gruppe eller enkeltperson som kan påvirke, eller påvirkes av, oppnåelsen av en organisasjons mål» (oversatt fra Freeman (2010 p. 46)).

2.8.5. Har bedriften noen type ansvar (ovenfor noen eller noe) for å ha dette med i

- beslutningen?
- 2.8.6. Er bedriften på noen vis er pålagt (av noe eller noen å ha) å dette med i beslutningen?
- 2.8.7. Har bedriften noen type moralsk ansvar for å ha dette med i beslutningen?
- 2.8.8. Har bedriftens verdier noen innvirkning på hvorfor det er viktig eller ikke viktig å vektlegge (ovenfornevnte faktor eller prosess nevnt som viktig i respondentens svar) i beslutningen?
- 2.8.9. Hva skjer om (ovenfornevnte faktor eller prosess nevnt som viktig i respondentens svar) ikke tas hensyn til i beslutningen om kjøp av frivillige klimakreditter?

Del 3: Kontrollspørsmål

De følgende spørsmålene gjennomgås på slutten av intervjuet for å sikre svar på spesifikke problemstillinger, særlig dersom respondenten ikke gikk inn på disse spørsmålene i løpet av Del 1 eller Del 2. Kontrollspørsmålene tilbyr en ny vinkling på flere av spørsmålene, som kan tilby ytterligere innsikt i bedriftens motivasjoner og grunnlag for kjøp av frivillige klimakreditter.

- 3.1. Hva ville skjedd om bedriften ikke kjøpte frivillige klimakreditter?
- 3.2. Er det noen typer frivillige klimakreditter bedriften anser som bedre å kjøpe enn andre frivillige klimakreditter? Hvorfor?
- 3.3. Er det noen typer frivillige klimakreditter bedriften ikke ville ha kjøpt? Hvorfor?
- 3.4. Finnes det noe som hadde påvirket bedriften til å ikke kjøpe noen frivillige klimakreditter i det hele tatt?
- 3.5. Har bedriften noen type ansvar (ovenfor noen eller noe) å ta hensyn til i beslutningen?
- 3.6. Er det noen hensyn som bedriften på noen vis er pålagt å ha med i beslutningen?
- 3.7. Har bedriften noen type moralske ansvar i beslutningen?
- 3.8. Har bedriftens verdier noen innvirkning på beslutningen?
- 3.9. Finnes det noen risikoer ved å kjøpe frivillige klimakreditter som bedriften må ta hensyn til?
- 3.9.1. Hvilke risikoer er dette?
- 3.10. Er det noe i lovverket som har betydning for bedriftens kjøp av frivillige klimakreditter?
- 3.11. Hvordan uttrykkes bedriftens bruk av frivillige klimakreditter?
- 3.11.1. Uttrykkes bedriftens bruk av frivillige klimakreditter i virksomhetens markedsføring eller andre offentlige formidlingskanaler?
- 3.11.2. Uttrykkes bedriftens bruk av frivillige klimakreditter i virksomhetens offentlige rapporter?
- 3.12. I hvilken grad er hensyn til bedriftens *legitimitet* viktig i kjøp av frivillige klimakreditter?
- 3.13. Har andre bedrifters kjøp av frivillige klimakreditter noen betydning for bedriftens kjøp av frivillige klimakreditter?
- 3.13.1. Hvilken betydning har det?
- 3.14. Om bedriften er del av et bransjenettverk med fokus på tiltak tilknyttet klima og utslippsreduksjon, hvilken innvirkning har dette på bedriftens kjøp av frivillige klimakreditter?

- 3.15. Har potensielle arbeidstakeres holdninger eller verdier noen innvirkning på bedriftens kjøp av frivillige klimakreditter?
- 3.16. Fremkommer det ulike syn på kjøp av frivillige klimakreditter innad i bedriften?
 - 3.16.1. Påvirker dette bedriftens kjøp av frivillige klimakreditter?
- 3.17. Fremkommer det ulike syn på kjøp av frivillige klimakreditter innenfor bransjen som bedriften tilhører?
 - 3.17.1. Påvirker dette bedriftens kjøp av frivillige klimakreditter?
- 3.18. Fremkommer det ellers noen syn eller holdninger rundt kjøp av frivillige klimakreditter som har påvirkning på bedriftens kjøp av de?
- 3.19. Er hensyn til grønnvasking noe som påvirker bedriftens kjøp av frivillige klimakreditter?
- 3.20. Hvordan oppleves bruk av det frivillige klimakredittmarkedet som instrument av bedriftens beslutningstakere?
 - 3.20.1. Har dette noe å si for bedriftens kjøp av frivillige klimakreditter, eller prosessen rundt dette?
- 3.21. I hvilken grad har prisen på de frivillige klimakredittene påvirkning på bedriftens beslutning om kjøp av frivillige klimakreditter, eller hvilke klimakreditter bedriften kjøper?

Del 4: Avrundning

Tillater respondenten å tilføye eller supplere ut fra deres behov før intervjuet avsluttes.

Avsluttende kommentarer

- 4.1. Er det avslutningsvis noe mer du ønsker å tilføye eller supplere med?

Avslutning

Tusen takk for tiden din og at du tok deg tid til å delta i dette intervjuet!

Referanser

- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.
- PwC; & Miljøstiftelsen ZERO. (2022). *Jakten på klimanøytralitet og ansvarlig bruk av klimakreditter*. zero.no: Miljøstiftelsen ZERO.
- Statistisk Sentralbyrå. (2008). *Standard for næringsgruppering (Standard Industrial Classification)*. Oslo, Kongsvinger: Statistisk Sentralbyrå,.

Consent Form 1/ Mal for informert samtykke 1

Vil du delta i forskningsprosjektet

Kjøp av frivillige klimakreditter blant norske næringslivsaktører: Praksis, faktorer og systemtilpasning i tråd med Norges klimamål under Parisavtalen?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å undersøke kjøp av frivillige klimakreditter blant norske næringslivsaktører på tvers av næringer, og hva som påvirker slik praksis. Forskningsprosjektet er basert på innsikt fra beslutningstakere som deltar i avgjørelsene rundt slike kjøp hos et utvalg bedrifter på tvers av næringer. Prosjektet er videre tiltenkt å produsere forslag til systemtilpasninger i tråd med Norges klimamål under Parisavtalen om å redusere klimagassutslipp med 50-55% innen 2030.

I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med dette forskningsprosjektet er å undersøke kjøp av frivillige klimakreditter blant norske næringslivsaktører på tvers av næringer, og hva som påvirker slik praksis. Forskningsprosjektet er basert på innsikt fra beslutningstakere som deltar i avgjørelsene rundt slike kjøp hos et utvalg bedrifter på tvers av næringer. Prosjektet er videre til slutt tiltenkt å kunne produsere forslag til systemtilpasninger i tråd med Norges klimamål under Parisavtalen om å redusere klimagassutslipp med 50-55% innen 2030.

Problemstillingene som skal analyseres i denne masteroppgaven er som følgende:

1. Hvordan og i hvilken grad kjøper norske ikke-kvotepiktige bedrifter frivillige klimakreditter?
2. Hvilke faktorer påvirker kjøp av frivillige klimakreditter blant norske ikke-kvotepiktige bedrifter?
3. Hvilke systemtilpasninger kan fasilitere utslippsreduksjonspraksis i norsk ikke-kvotepiktig næring i tråd med Norges klimamål under Parisavtalen (om å redusere klimagassutslipp med 50-55% innen 2030)?

Prosjektet er en masteroppgave innen graden MSc. Internasjonale Miljøstudier ved Norges miljø- og biovitenskapelige universitet.

Hvem er ansvarlig for forskningsprosjektet?

Instituttet for internasjonale miljø- og utviklingsstudier (Noragric) ved Norges miljø- og biovitenskapelige universitet (NMBU) er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Dere får spørsmål om å delta i dette prosjektet fordi bedriften er registrert i Brønnøysundregistrene som å være en bedrift med 50 eller flere ansatte innenfor en næring med hovedvirksomhet innenfor:

- 01 Jordbruk og tjenester tilknyttet jordbruk, jakt og viltstell
- 02 Skogbruk og tjenester tilknyttet skogbruk
- 38 Innsamling, behandling, disponering og gjenvinning av avfall
- 41 Oppføring av bygninger
- 42 Anleggsvirksomhet
- 43 Spesialisert bygge- og anleggsvirksomhet
- 49 Landtransport og rørtransport
- 50 Sjøfart

I første omgang mottar omtrent 200 bedrifter innenfor disse næringene denne henvendelsen.

Consent Form 1/ Mal for informert samtykke 1

Hva innebærer det for deg å delta?

Dersom du velger å delta i denne delen av prosjektet, innebærer det at du svarer på en kort spørreundersøkelse med 5 spørsmål. Dette vil ta ca. 5 minutter. Spørreskjemaet inneholder spørsmål om virksomheten kjøper frivillige klimakreditter, om virksomheten uttrykker mål tilknyttet reduserte klimagassutslipp, og om virksomheten er del av noen bransje- eller industrinettverk med fokus på bærekraft eller omstilling. Dine svar fra spørreskjemaet blir registrert elektronisk og samler ikke inn personopplysninger eller konfidensiell data.

Det er frivillig å delta

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

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrevet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Opplysningene som oppgis vil kun være tilgjengelige for prosjektets veileder og student. Som deltaker vil både du samt bedriften du representerer anonymiseres i publikasjonen. Opplysninger om navn, bedriftsnavn og kontaktinformasjon vil erstattes med en kode som lagres adskilt fra øvrige data, hvilket sikrer at opplysningene ikke er mulige å få tilgang på for uvedkommende.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes innen mai 2024. Etter prosjektslutt vil datamaterialet med dine personopplysninger og opptak slettes.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke, som du gir ved å trykke «Jeg samtykker» på det gjeldende punktet for dette i selve skjemaet.

På oppdrag fra Institutt for internasjonale miljø- og utviklingsstudier (Noragric) ved Norges miljø- og biovitenskapelige universitet (NMBU) har Sikt – Kunnskapssektorens tjenesteleverandør vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

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

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

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

- Institutt for internasjonale miljø- og utviklingsstudier (Noragric), Norges miljø- og biovitenskapelige universitet ved veileder Arild Vatn (e-post: arild.vatn@nmbu.no; telefon: 672 31 303 eller student Åse Vigdisdatter Nytrø (e-post: ase.vigdisdatter.nytro@nmbu.no; telefon: 957 69 741.
- Vårt personvernombud: Hanne Pernille Gulbrandsen (e-post: personvernombud@nmbu.no; telefon: 402 81 558

Consent Form 1/ Mal for informert samtykke 1

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

- Epost: personverntjenester@sikt.no eller telefon: 73 98 40 40.

Med vennlig hilsen

Arild Vatn
(Forsker/veileder)

Åse Vigdisdatter Nytrø
(Student)

Samtykkeerklæring

Samtykke til å delta i spørreundersøkelsen gis ved å trykke «Jeg samtykker» i nettskjemaet under punktet: «Jeg har mottatt og forstått informasjon om masterprosjektet *Kjøp av frivillige klimakreditter blant norske næringslivsaktører: Praxis, faktorer og systemtilpasning i tråd med Norges klimamål under Parisavtalen* og har fått anledning til å stille spørsmål. Jeg samtykker til å delta i spørreskjemaet og samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet.»

Appendix D: Letter of informed consent 2: Semi-structured interview

Consent Form 2/ Mal for informert samtykke 2

Vil du delta i forskningsprosjektet

Kjøp av frivillige klimakreditter blant norske næringslivsaktører: Praksis, faktorer og systemtilpasning i tråd med Norges klimamål under Parisavtalen?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å undersøke kjøp av frivillige klimakreditter blant norske næringslivsaktører på tvers av næringer, og hva som påvirker slik praksis. Forskningsprosjektet er basert på innsikt fra beslutningstakere som deltar i avgjørelsene rundt slike kjøp hos et utvalg bedrifter på tvers av næringer. Prosjektet er videre tiltenkt å produsere forslag til systemtilpasninger i tråd med Norges klimamål under Parisavtalen om å redusere klimagassutslipp med 50-55% innen 2030.

I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med dette forskningsprosjektet er å undersøke kjøp av frivillige klimakreditter blant norske næringslivsaktører på tvers av næringer, og hva som påvirker slik praksis. Forskningsprosjektet er basert på innsikt fra beslutningstakere som deltar i avgjørelsene rundt slike kjøp hos et utvalg bedrifter på tvers av næringer. Prosjektet er videre til slutt tiltenkt å kunne produsere forslag til systemtilpasninger i tråd med Norges klimamål under Parisavtalen om å redusere klimagassutslipp med 50-55% innen 2030.

Problemstillingene som skal analyseres i denne masteroppgaven er som følgende:

1. Hvordan og i hvilken grad kjøper norske ikke-kvotepliktige bedrifter frivillige klimakreditter?
2. Hvilke faktorer påvirker kjøp av frivillige klimakreditter blant norske ikke-kvotepliktige bedrifter?
3. Hvilke systemtilpasninger kan fasilitere utslippsreduksjonspraksis i norsk ikke-kvotepliktig næring i tråd med Norges klimamål under Parisavtalen (om å redusere klimagassutslipp med 50-55% innen 2030)?

Prosjektet er en masteroppgave innen graden MSc. Internasjonale Miljøstudier ved Norges miljø- og biovitenskapelige universitet.

Hvem er ansvarlig for forskningsprosjektet?

Instituttet for internasjonale miljø- og utviklingsstudier (Noragric) ved Norges miljø- og biovitenskapelige universitet (NMBU) er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Du får spørsmål om å delta i dette prosjektet fordi du er en beslutningstaker i en bedrift som er registrert i Brønnøysundregistrene som å være en bedrift med 50 eller flere ansatte innenfor en næring med hovedvirksomhet innenfor:

- 01 Jordbruk og tjenester tilknyttet jordbruk, jakt og viltstell
- 02 Skogbruk og tjenester tilknyttet skogbruk
- 38 Innsamling, behandling, disponering og gjenvinning av avfall
- 41 Oppføring av bygninger
- 42 Anleggsvirksomhet
- 43 Spesialisert bygge- og anleggsvirksomhet
- 49 Landtransport og rørtransport
- 50 Sjøfart

Consent Form 2/ Mal for informert samtykke 2

I første omgang mottar omkring 15 beslutningstakere med tilknytning til bedriftens kjøp av frivillige klimakreditter innenfor disse næringene denne henvendelsen. Dersom interesse for deltakelse i intervju har blitt meldt etter gjennomføring av spørreskjema tilhørende samme masteroppgave, blir du kontaktet på grunn av dette (spørreskjemaet har undergått vurdering av Sikt på lik linje som intervjuet beskrevet i dette skrevet).

Hva innebærer det for deg å delta?

Dersom du velger å delta i denne delen av prosjektet, innebærer det at du deltar i et intervju som vil ta ca. 45-60 minutter. Intervjuet vil bestå av spørsmål om typer faktorer og motivasjoner som påvirker bedriftens kjøp av frivillige klimakreditter. Avhengig av om intervjuet gjennomføres fysisk eller digitalt, vil det bli tatt lyd- eller skjermopptak av intervjuet, samt vil det tas notater.

Det er frivillig å delta

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

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrevet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Opplysningene som oppgis vil kun være tilgjengelige for prosjektets veileder og student. Som deltaker vil både du samt bedriften du representerer anonymiseres i publikasjonen. Opplysninger om navn, bedriftsnavn og kontaktinformasjon vil erstattes med en kode som lagres adskilt fra øvrige data, hvilket sikrer at opplysningene ikke er mulige å få tilgang på for uvedkommende.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes innen mai 2024. Etter prosjektslutt vil datamaterialet med dine personopplysninger og opptak slettes.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Institutt for internasjonale miljø- og utviklingsstudier (Noragric) ved Norges miljø- og biovitenskapelige universitet (NMBU) har Sikt – Kunnskapssektorens tjenesteleverandør vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

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

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

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

- Institutt for internasjonale miljø- og utviklingsstudier (Noragric), Norges miljø- og biovitenskapelige universitet ved veileder Arild Vatn (e-post: arild.vatn@nmbu.no; telefon: 672 31 303 eller student Åse Vigdisdatter Nytrø (e-post: ase.vigdisdatter.nytro@nmbu.no; telefon: 957 69 741.

Consent Form 2/ Mal for informert samtykke 2

- Vårt personvernombud: Hanne Pernille Gulbrandsen (e-post: personvernombud@nmbu.no; telefon: 402 81 558

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

- Epost: personverntjenester@sikt.no eller telefon: 73 98 40 40.

Med vennlig hilsen

Arild Vatn
(Forsker/veileder)

Åse Vigdisdatter Nytrø
(Student)

Samtykkeerklæring

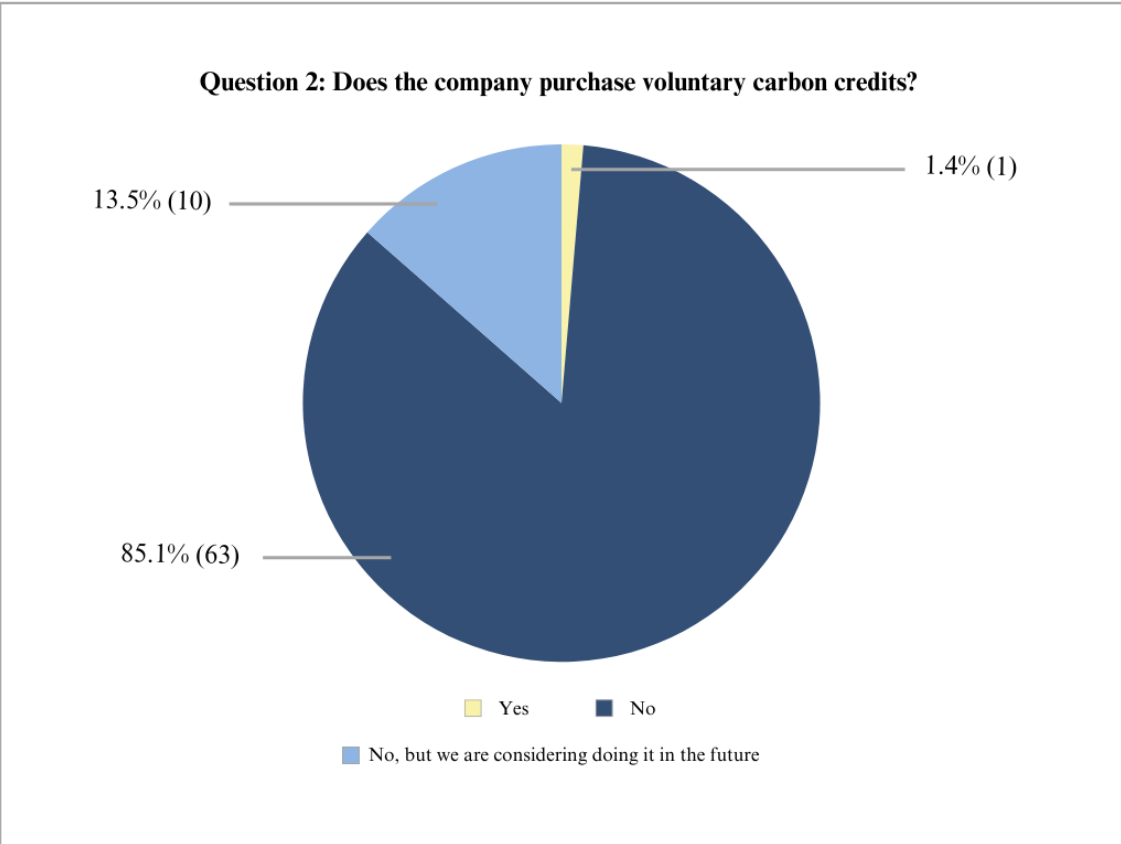
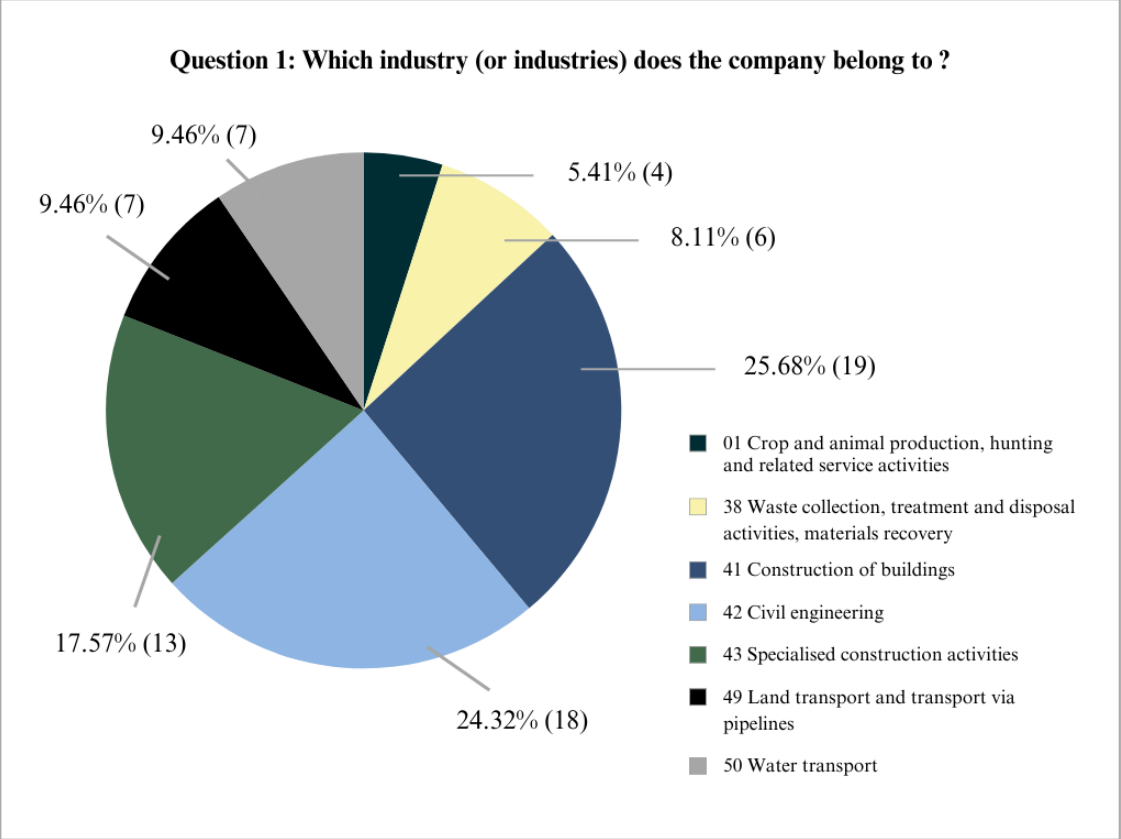
Jeg har mottatt og forstått informasjon om prosjektet *Kjøp av frivillige klimakreditter blant norske næringslivsaktører: Praksis, faktorer og systemtilpasning i tråd med Norges klimamål under Parisavtalen* og har fått anledning til å stille spørsmål. Jeg samtykker til:

- å delta i intervju

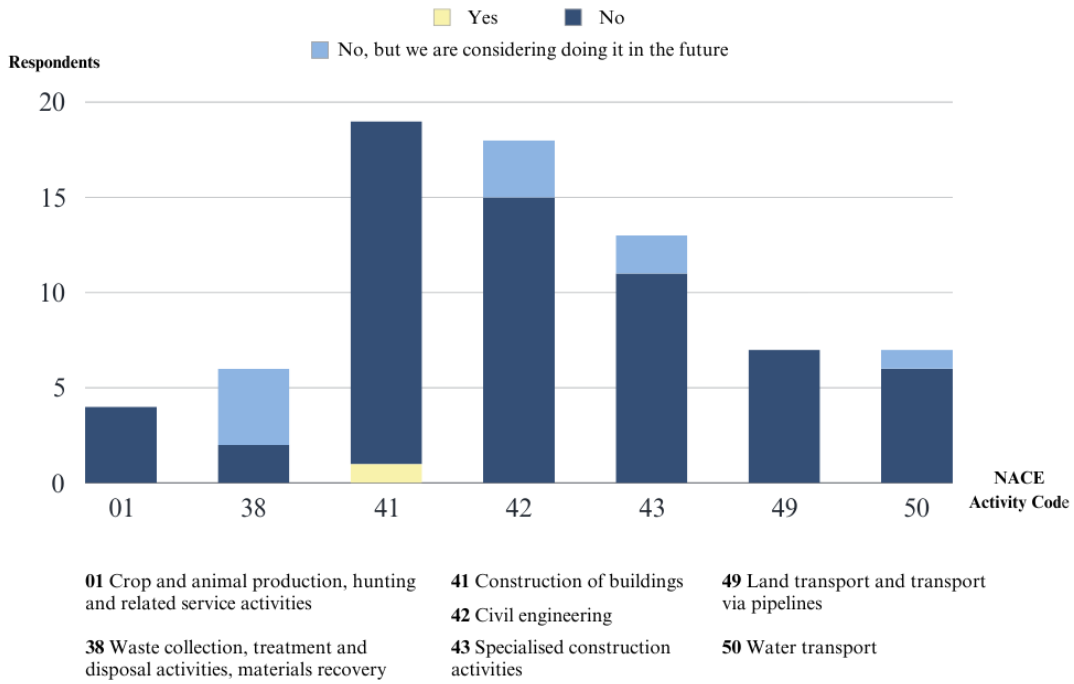
Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

(Signert av prosjektdeltaker, dato)

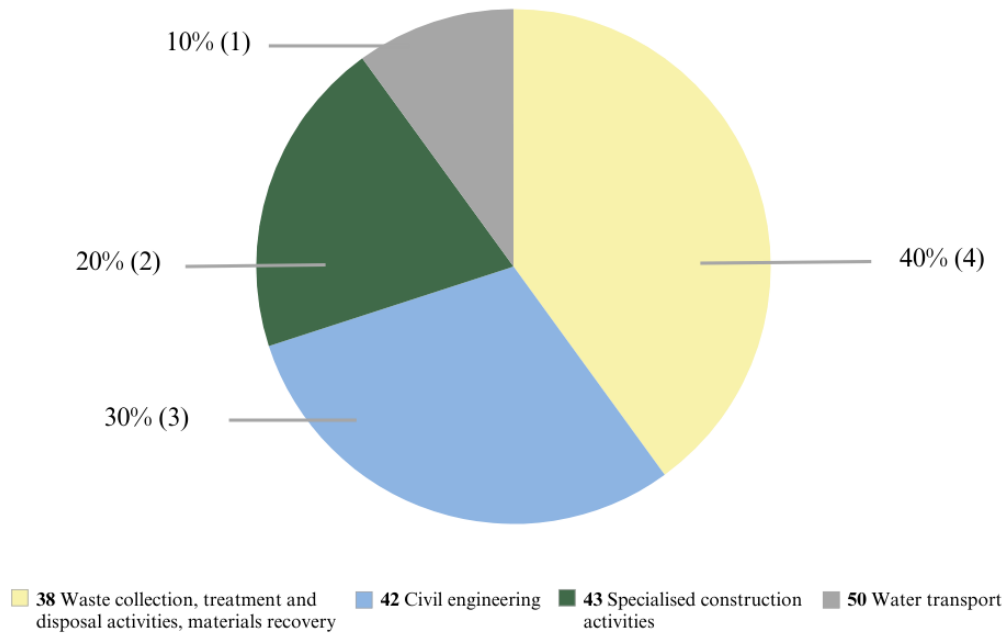
Appendix E: Figures from analysis of online questionnaire



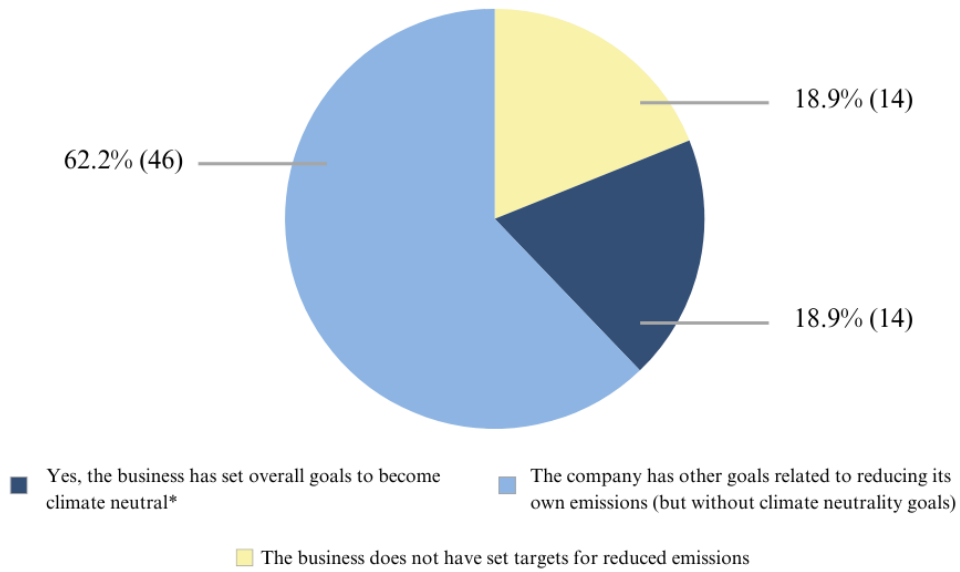
Question 2: Does the company purchase voluntary carbon credits?



Question 2: NACE Activity Code representation in companies reporting to consider future purchases of voluntary carbon credits

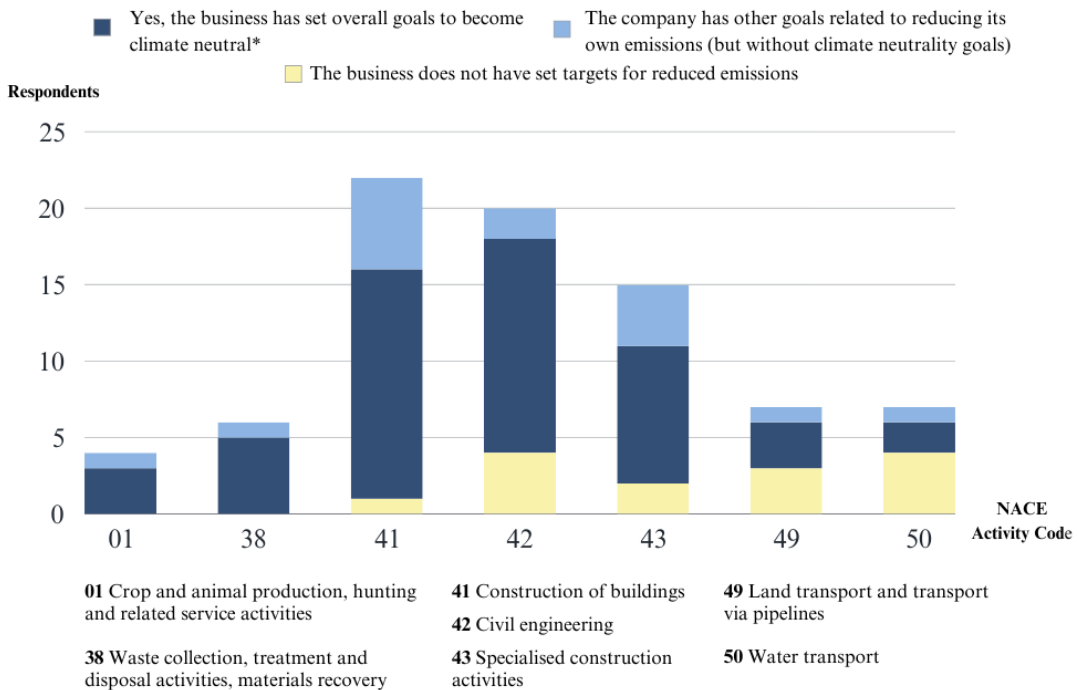


Question 4: Does the company express goals of climate neutrality*?



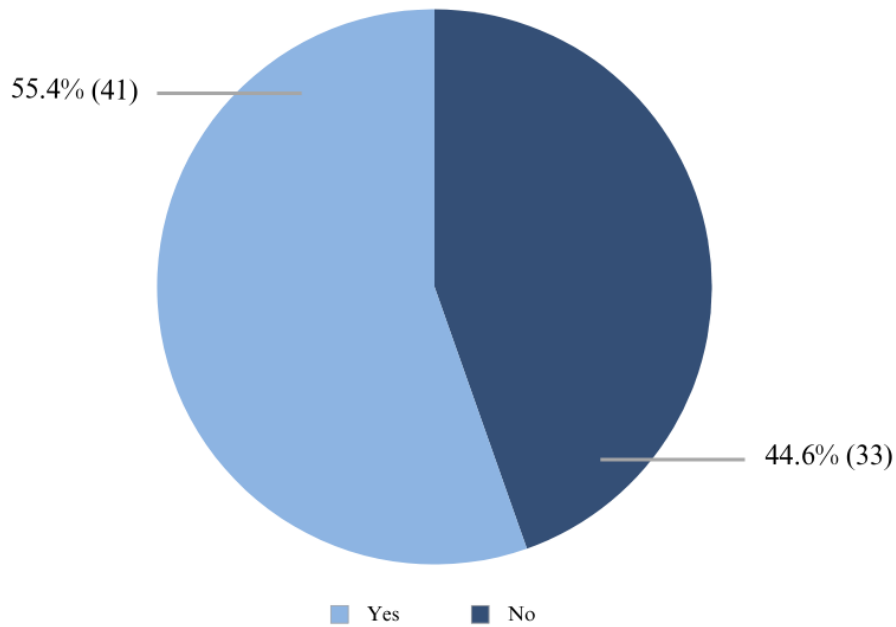
*in for example operations or products the company offers. In this question, this also refers to similar goals of carbon neutrality, net zero, climate positive, etc.

Question 4: Does the company express goals of climate neutrality*?

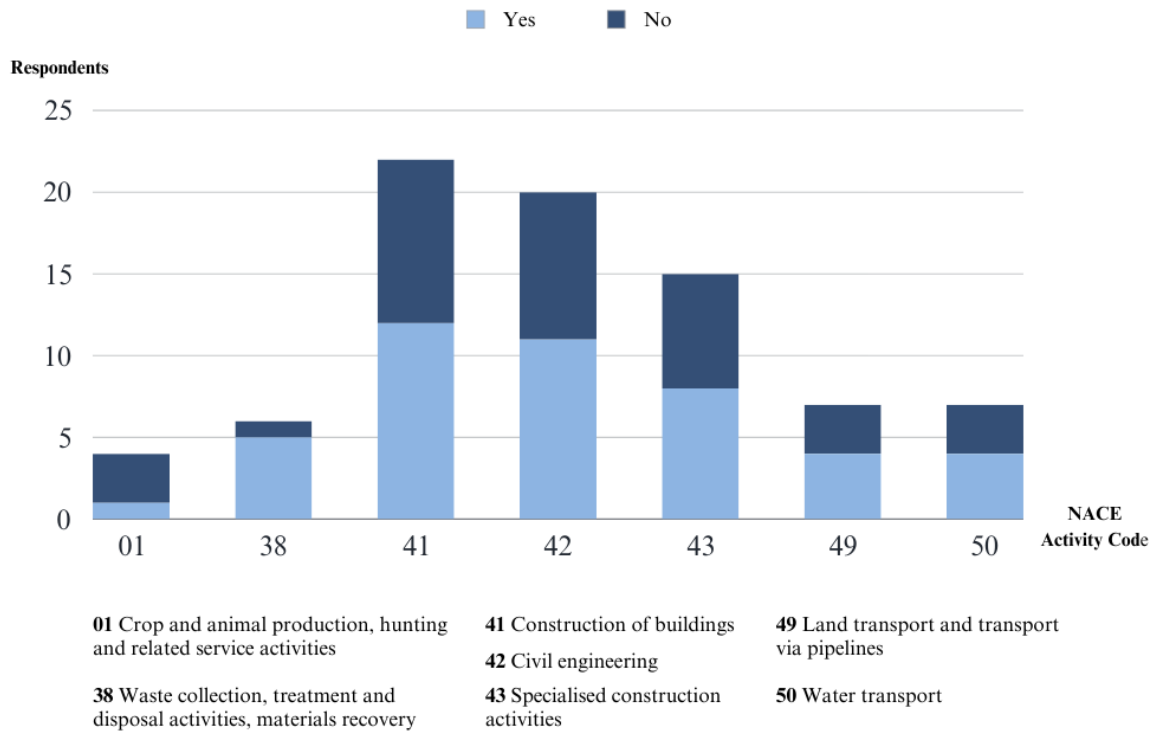


*in for example operations or products the company offers. In this question, this also refers to similar goals of carbon neutrality, net zero, climate positive, etc.

Question 5: Is the business part of a sector or industry network with a focus on sustainability or transition?



Question 5: Is the business part of a sector or industry network with a focus on sustainability or transition?



Quote in Norwegian (numbered per IResp)

IResp 1

1. «Hovedansvaret vårt ligger på avveieingen av hva som er det viktigste vi kan gjøre, og hva er økonomien i det»
2. «Det er en konsekvens av det grønne skiftet, og en konsekvens av at våre eiere, altså kommunene, får stadig strengere krav, bedriftene får stadig strengere krav, Og da ville jeg tro at man så at strategien måtte gjenspeile det. (...) Jeg tror denne bransjen strever med så mye krav rundt oss i forhold til myndighetspålagte krav og krav fra næringslivet at i ganske nær fremtid, eller i lang fremtid, så tror jeg at det kommer til å være hovedfokus på å tilpasse oss. Men jeg vet ikke enda hvor stor bit klimakreditter er av det.»
3. «Vi er jo satt til å forvalte bedriften på best mulig måte, og frem til nylig har det kun gått på økonomi, mens nå ser vi at miljøet kommer til å bety mer og mer, og på sikt bli helt likeverdig med finans og økonomiske resultater»
4. «Ja, og særlig bedrifter (...) de har jo et stort globalt marked, globale eiere, som stiller strenge krav til rapportering, Vi ser at vi ikke har god nok statistikk for å serve dem på den måten vi må. Så det er det jeg jobber med nå.»
5. «Målet er at vi skal redusere klimautslippet. Men klimautslippet er ikke målsatt enda. Så det blir min oppgave å få målsatt det, når vi vet hva vi har i dag»
6. «Det er ikke førsteprioritet. Men jeg vil ikke utelukke det heller, for det kan godt hende at vi bør gjøre det. Men eneste grunn til at man skulle kjøpe klimakreditter for vår del måtte være at vi ikke klarer å gjøre noe med utslippene selv. Forutsetningen må jo være at det må være den lille resten, forhåpentligvis, at vi ikke klarer å gjøre det uten å kjøpe klimakreditter.»
7. «Jeg tenker i og med at vi ikke har målsatt hvor mye vi skal kutte, - vi har bare sagt at vi skal kutte. Og så må det jo skje... Dette tar jo tid, altså å investere i en svær hjullaster til mange millioner. Det løpet er jo allerede kjørt på en måte, og den skal jo leve i så mange år. Men kanskje nettopp derfor burde man ha kjøpt klimakreditter, for vi får jo et slags etterslep over hva vi vil gjøre og hva vi kan gjøre.»
8. «Vi er jo i en slags monopolsituasjon, vi er nærmeste leverandør, så derfor vil jo mange bruke oss. Men vi er fullstendig klare over at hvis vi ikke kan levere på det kundene etterspør i forhold til bærekraftsrapportering, så kan de snu seg om å finne en annen leverandør som er litt lenger unna. Det er fremst i pannen, det her med å serve kundene og gi dem det de etterspør.»
9. «Hvis våre kunder hadde sagt at de ville bare ha å gjøre med bedrifter som er klimanøytrale eller klimapositive, og våre konkurrenter var det, måtte jo vi også være det.»

10. «Eierne, altså våre kommuner og innbyggere skal vi kunne stå for det vi gjør og det vi ikke gjør ovenfor. Vi må kunne argumentere for om vi skal kjøpe klimakreditter eller velge å ikke gjøre det.»
11. «Om fem år, hvis vi fortsatt har et fortsatt stort utslipp og ikke gjør noe med det, da vil jeg jo tro at våre interessenter reagerer på det.»
12. «Jeg har ikke satt meg inn i alle de ulike prosjektene. Det er liksom de vanlige som du kjenner til. Men hvis det kunne hatt noe med våre kjernevirksomheter å gjøre, altså noe innenfor avfall, noe innenfor sirkulær økonomi, noen lokale initiativer, da tror jeg de hadde gått før litt distanserte prosjekter. Noe som hadde knyttet seg opp til problemstillingene våre, hvis vi finner ut at det er diesel som er problemet, at vi ikke klarer å kvitte oss med resten, så burde det jo være et eller annet som var linket til den problemstillingen, uten at jeg vet hva slags prosjekt det skulle ha vært. Kunne ikke ha tatt noe helt annet, som regnskogfondet, når det var snakk om diesel på bilene våre. Så en eller annen link der måtte det ha vært med.»
13. «Vi har ikke oversikt over klimautslippene vi har i dag, så jeg vet heller ikke hvor mye vi måtte ha brukt på å kompensere for det. Så jeg tenker for vår del, så vil klimakreditter ligge litt frem i tid, altså når vi først har fått oversikt, og vi har sett hva vi kan gjøre for å kutte, og hva det er som krever mer. Unntatt kanskje at man kunne isolert for eksempel reiser og sagt at det er lett å klimakompensere med kreditter, for det er målbart og det får vi helt sikkert tall på fra reisebyrået vårt. Det kunne vi ha gjort. Det kunne vi ha gjort fort. Men jeg har ikke fått oversikt, så jeg vet ikke hvor mye det vil utgjøre.»
14. «Det er veldig godt samarbeid. Det er lite konkurranse. Det tror jeg er med på å gjøre at det er lett å dele, for alle er tjent med at naboen er god»
15. «Vi er med i et par slike nettverk, blant annet en lokal næringsklynge»
16. «Vi har ikke enda utført beregninger av klimagassutslipp i Scope 1, 2 og 3, men det er derfor jeg ble ansatt. Vi merker at vi sannsynligvis ikke vil være omfattet av de kravene om det enda, ikke i år og ikke til neste år, sannsynligvis 2026. Men mange av kundene våre må rapportere på det allerede nå. Så vi vet at det kommer. Og som sagt, det er derfor jeg ble ansatt.»
17. «Enn så lenge tror jeg ikke vi stiller noen klima- eller miljørelaterte krav til de mindre leverandørene våre. Men det tenker jeg også ligger i min jobb å få. Det er ingen grunn til at ikke miljøet skal telle like mye, hvis ikke mer, på alle de små innkjøpene vi gjør. Så vi har ingen ordentlig struktur på det enda, men det ligger på trappene.»

IResp 2

1. «Vi har jo disse målene om samfunnsøkonomisk lønnsomhet. (...) Ikke egentlig for vårt selskap, men for samfunnet.»
2. «Vi har ikke profitt som hovedmål, på en måte. Men det er klart, om ikke profitt, så likviditet.»

3. «Nå forventer omverdenen rundt oss faktisk mer på disse tingene enn det de forventet før.»
4. «Vi har faktisk formulert et halveringsmål innen 2030, men videre fra det har vi faktisk ikke formulert noe»
5. «Hvis vi hadde hatt et mål om klimanøytralitet, så måtte man jo antagelig åpne for en eller annen løsning som det. I hvert fall i bransjen vår da, så finnes ikke, det går ikke an å bygge en vei uten utslipp, sånn som det er i dag. Så da måtte man jo kompensert på en eller annen måte.»
6. «Jeg tror mange internt hadde reagert negativt på det, spesielt hvis det framstod som en hovedstrategi. Og folk hadde nok vært negative av ulike begrunnelser. Jeg tror at de ansatte som er mest interessert i klima og miljø og natur hadde vært kritiske fordi det framstår som at vi kjøper en eller annen avlat i stedet for å gjennomføre tiltak i de faktiske prosjektene. Og så tror jeg at for de som er mest opptatt av økonomi hadde vært kritiske fordi de hadde vært usikre på den faktiske effekten av pengebruken.»
7. «Jeg tror vi må ha kunnskap nok til å vurdere reelt gode løsninger»
8. «En kan jo ikke forvente at folk egentlig kjenner dette markedet. Så det er jo derfor disse ordningene finnes med frivilligstandarder, og du kan kjøpe gjennom andre selskaper. Men ja, jeg hadde vært skeptisk til mange av dem.»
9. «Vi har på en måte ikke sett at vi kan være sikre på at det gir den effekten vi eventuelt er ute etter enda. Det ville kreve veldig mye oppfølging for å være sikre på at de gir den effekten vi eventuelt er ute etter. Så vi har heller brukt pengene på tiltak som skjer i prosjekter»
10. "Jeg tror vi har bedriftskultur, bedriftstradisjoner, som ville trukket i begge retninger, egentlig. For vi har på den ene siden en veldig sånn oppmerksomhet om konkrete effekter. Det ligger veldig i veggene her at vi skal måle effekter av ting vi gjør. Og å måle effekten av et frivillig kredittkjøp kan være veldig vanskelig, i hvert fall hvis du går dypere enn å på en måte bare anta at den kreditten du kjøper faktisk tilsvare et tonn CO2. Hvis du på en måte slår deg til ro med det, så er det jo lett, men hvis du virkelig skal gå inn i det, så er det vanskelig. Det er på den andre siden også veldig oppmerksomhet om kostnadseffektivitet og samfunnsøkonomi. Og da er det jo på en måte, på hvilket klimatiltak får vi flest utslippsreduksjoner for pengene? Og i en sånn vurdering vil kvoter eller kreditter kunne komme ganske bra ut da. Fordi det kan være betydelig billigere å kjøpe en kreditt enn å kjøpe en elektrisk gravemaskin i stedet for en som går på diesel, for eksempel.»
11. «I det frivillige markedet måtte vi på en måte være sikre på at de kreditter vi kjøper har integritet. At de bidrar til ytterligere utslippsreduksjon eller naturrestaurering eller hva det måtte være."
12. «Hvis jeg hadde fått et eller annet ansvar for det i dette selskapet, så hadde jeg vært veldig, veldig kritisk til hvilke kvoter det var. Jeg hadde ikke stolt på, umiddelbart på et stempel fra den ene eller andre ordningen. Jeg hadde nok argumentert på at vi måtte ha en veldig, veldig grundig prosess for å

identifisere hvilke man skulle velge, i hvert fall hvis det var frivillige kvoter. Hvis det på en måte var et offisielt, godt, veldig regulert, på en måte kanskje EU-regulert system, som alle var enige om hvordan funket, og man var enige om hvordan det eventuelt virket inn på landene sitt egne totale klimagassregnskap, så hadde det vært mer naturlig å henvende seg der.»

13. «Jeg tenker at vi er en bransje som har et veldig åpenbart og tydelig fotavtrykk i verden. Så jeg tror veldig mange på en måte vil være ekstra skeptisk til kvotekjøp for en aktør som oss. Eller da måtte vi i hvert fall samtidig kunne vise at vi gjør veldig mye annet også. Bare fordi den negative påvirkningen på natur og miljø er så åpenbar, så tror jeg i hvert fall at mange hadde tenkt at det var for lett å bare kjøpe kvoter. Så det forventes rett og slett mer. Så det er nok en viktig del av vurderingen.»
14. «Men for eksempel EU sitt kvotesystem i dag, det er ikke så aktuelt for oss å kjøpe kvoter derfra, for vi opererer først og fremst i ikke-kvotepfiktige sektorer for eksempel. Så da er det mer aktuelt å gjøre tiltak på bakken. Men man kan jo se for seg at det systemet ble utvidet på en måte, og det diskuteres jo andre ordninger i FN, mer, kall det, offisielle kredittsystemer under FN. Sånne ting vil nok være mer aktuelt.»
15. «Det er mye problemer med gamle kvoter og kreditter. Det er mye problemer med kvoter fra prosjekter som kanskje egentlig hadde skjedd uansett om de fikk penger eller ikke.»
16. «Vi er med i flere slike nettverk med bærekraftsfokus»
17. «Vi er en bransje med et veldig stort fotavtrykk, spesielt på klima og miljø. Så det handler jo om å redusere det mest mulig, og samtidig bruke de verktøyene vi har for å påvirke samfunnet positivt. Og det gjør vi gjennom anskaffelser, vi har store anskaffelser og kan stille krav til forskjellige ting i de, for eksempel. Og da kan vi bidra til en positiv utvikling i næringslivet ellers, for eksempel.»
18. «Eierne våre har noen forventninger til at vi også leverer på klima og miljø. Men ikke i form av krav i en kontrakt eller noe sånt. Jeg vil heller si at vi har forventninger, men kanskje ikke krav.»

IResp 3

1. «Det er vesentlig å se og forstå hvilke grep man må gjøre på kort sikt, som skal sikre levedyktighet og konkurransekraft fremover.»
2. «På kort sikt går vi med en årlig nedtrapping av klimagassutslippene til 2030. Halvering i 2030. Og så har vi mål om netto-null i 2045. Disse målene er satt i tråd med vitenskapen gjennom Science-Based Targets»
3. «Fordi at når vi har satt mål sånn som vi har gjort, da er det et krav til oss at vi må redusere utslippene, helt konkret da, med 90 prosent før vi kan ta i bruk karbonfangst eller andre metoder som permanent fjerner CO2 fra atmosfæren. Det er et krav, og jeg oppfatter det som et fornuftig krav. For det betyr at man må ha renere prosesser, og gjøre bedre valg hele veien. Når man da sitter igjen og ikke får gjort noe mer med utslippene, så kan man ta i bruk virkemidler som klimakreditter. Det andre er at det er krevende å redusere utslippene - med fem prosent hvert eneste år, slik som vi har i våre mål. Det koster også

penger. Det koster innovasjon. Det koster valg av riktige leverandører. Det er en kostbar reise allerede. Så vi prioriterer å bruke midler på det som vi må. Og det som vi kan ta inn i våre klimaregnskap nå.»

4. «Jeg synes vi på mange måter slår an tonen litt. Ved å tenke nytt, være innovative, på en måte ha litt bredde til denne tankegangen, sår det frø ut fra organisasjonen, som gjør at det spirer bredt. Jeg opplever at vi med målsetningene og de andre tiltakene våre er med på å muliggjøre ting som peker mot gode løsninger nå. Men så er det jo spørsmålet om det går fort nok.»
5. «Lønnsomhet er viktig for alt vi skal gjøre, vi må jo overleve på denne reisen også. Vi vil jo såklart gjerne forte oss til å gjøre det bedre på bærekraft, men vi må jo ikke dø på veien.»
6. «Det er det som er interessant med EU-kravene om bærekraftrapportering som nå kommer. Hvis vi ser bak det som er kravene til rapporteringen er det bare en indikasjon på hvilken retning vi skal bevege oss i. Det gjør jo at det å utvikle seg i en bærekraftig retning, vil jo være å redusere finansiell risiko. Og det vil være finansielt lønnsomt å raskest mulig gripe mulighetene i det. Da snakker vi om finansielle risikoer og finansielle muligheter. Så dette blir på en måte det man kaller «two of a kind», det blir integrert. Det er en reell finansiell risiko og mulighet som ligger i føringene nå.»
7. «Denne situasjonen av sammensatt finansiell risiko og mulighet, det kan jo være på mange måter, det er jo ting som kan skje politisk, altså disse overgangsrisikoene da med at det kan skje politiske vedtak, det kan komme forbud, det kan komme påbud, det kan bli ressursmangel, altså det er veldig mange ting som kan komme til å slå ut på ulike vis. Bærekraft blir en lønnsomhetsdriver da. Det er det som er målet i dette.»
8. «Det som på en måte pirker litt i forhold til å kanskje kjøpe frivillige klimakreditter når jeg sier at vi vurderer det, det er jo samfunnsansvaret. At kanskje bør vi som en av største aktørene innenfor vår bransje i Norge, og i Skandinavia, være med og bidra litt. Det kan også kanskje oppfordre andre til å bidra litt, sånn at man for eksempel får i gang nødvendig teknologi som er viktig i å redusere klimagassutslippene i større skala.»
9. «Vi er veldig nøye på at vi ikke skal kjøpe oss god samvittighet, og vi skjønner at vi ikke kan gjøre det.»
10. «Noe vi også vi vurderer dette etter, det er jo også hvem, altså hva slags prosjekter, det er som eventuelt trenger det. Det finnes jo store aktører nå som har ganske sterke kapitalkrefter i ryggen. Men det er også mindre type virksomhet som vi tror trenger oss mer. Det er en vurdering på hva slags type kreditt, og jo mer reelt desto bedre.»
11. "Jeg har ikke satt meg helt godt nok inn i det. Hvis vi skulle gjort noe, så ville det være å se på karbonfangst. Og i forhold til dette med treplantingsprosjekter; det lagres mer karbon i bakken i naturen i Skandinavia, enn mangroveskogene i tropene absorberer. Så det å tenke at vi skal løse ting i en helt annen del av verden, det ville jeg også argumentere mot, egentlig. Det er bedre at vi ikke graver i myrer her, enn

at vi støtter treplanting et annet sted. Og så vet man jo aldri hvordan det vil bli når man planter de små, og man tar jo på en måte ut en slags gevinst på forhånd basert på antakelsen av at de skal bli store. Så det har jeg i hvert fall personlig for lite tro på.»

12. «Hypotetisk sett kunne man brukt det som en måte å kompensere, eller forsøke å kompensere, for spesielt Scope 3-utslipp som vi ikke klarer å gjøre noe mer med selv.»
13. «Utfordringen med karbonfangst direkte nå, er at det krever en del investeringer. Man må på en måte komme i gang. Det har jeg full forståelse for. Samtidig tenker jeg også at ved å bidra til å redusere år for år, slik som vi gjør og som Science Based Targets krever, da reduserer vi også behovet for karbonfangst i den andre enden.»
14. «Vi er med litt ulike slike nettverk på flere nivå. Vi er selvsagt også medlem i en bransjeforening.»
15. «I kontraktene våre stiller vi krav hvor vi ber om Environmental Product Declaration, altså miljøproduktdeklarasjon. EPD. Det er jo at alle produkter skal ha dokumenterte klimagassutslipp i alle fasene, fra råvarer til end of life.»
16. «I prosjekter kan vi ta initiativ til å diskutere med kunden hvilke tiltak vi kan gjøre. Da kan det også hende at vi kan bli enige om å gjøre tiltak som gjør at vi prioriterer leverandører som har de laveste utslippene. Men i tillegg løfter vi dette opp til bransjediskusjon, setter fokus på det i bransjesammenheng. Det er å jobbe på ulike plan. Det har jo også noe med at alt løses ikke ved krav, så vi prøver å bidra til at hele bransjen mobiliserer til å utvikle seg fort og raskt i riktig retning.»

IResp 4

1. «Hovedmålsetningen vår er å tjene penger.»
2. «Så det henger jo ihop, vi skal tjene penger med det vi gjør, og vi skal leve lenge. Vi har levd i 67 år, og skal gjerne leve 60 år til, så det er ikke noen døgnflue-mentalitet her. Det skal være bærekraftig, som jeg sier, og så er det de kravene som kommer i lov og forskrifter. Og å finne de løsningene, de tingene som vi ser gjør oss bedre enn de andre uten at det koster for mye, det spiller mye inn i hva vi tar tak i.»
3. «Den dag når du slutter å tjene penger, da er du på vei nedennom og hjem»
4. «I mars var jeg på ledermøte i (...) gruppen, og der ble vi presentert for årets store happening fra nå til sikkert evig tid, og det var begrepet bærekraftsrapportering. Og dette kommer inn for fullt nå, hvor alle store bedrifter må rapportere på faktorer og bærekraftsforhold, og i tråd med Parisavtalen. Det sidestilles med finansiell informasjon fra disse selskapene i lov fra EU. Og det treffer ikke oss direkte, for vi er litt for små til at vi skal rapportere, men det treffer (...) gruppen. Når du treffer (...) gruppen, så treffer du også oss, for da trenger de informasjon og input fra oss. Vi blir på en måte en del av det, siden vi er en del av (...) gruppen, og må begynne å rapportere på mange områder selv»

5. «Vi ser jo det, at skal vi overleve som bedrift i en sånn her bransje, så må vi på en måte drive mest mulig miljøvennlig, og det har vi hele tiden fokus på. Vi ser på hva vi kan gjøre for å være gode nok, og i kanskje noen sammenhenger bedre enn andre konkurrenter, for å være en foretrukket leverandør. Men det er ikke så enkelt. Anbudsprossessene nå, spesielt for det offentlige, blir mer og mer vinklet inn mot klima og miljø. Nå sitter vi og regner anbud og skal svare ut masse greier, hvor kanskje prisen teller bare 40 % og så teller klimatiltak 40 % og så teller organisasjonen vår 20%. Og da må vi jo skrive sider opp og sider ned i forhold til hvor flinke vi er på klima og miljø. Og så begynne å snakke om vi kan vise til tidligere prosjekter hvor vi har hatt klimareduksjon. Det kan vi jo ikke sånn uten videre, for vi har ikke hatt fokus på å dokumentere sånne her ting. Så det blir litt sånn snakk foreløpig. Men fremover nå så er det viktig for oss å begynne å spore og dokumentere det vi får til, slik at vi kan ha det som referanse videre fremover, sånn at det utvikler seg hele tiden. Vi må jo, og vi gjør det vi kan for å henge med.»
6. «Når vi konkurrerer lokalt med de mindre aktørene, så er det litt sånn at vi må forholde oss til det som (...) gruppen må forholde seg til av krav, mens denne lille lokale bedriften trenger ikke det. Blant annet derfor må vi balansere disse tingene, blant annet hvor mye ressurser man skal ha på for å svare ut alt, samtidig som vi ikke skal ha for mye ressurser som ikke er produktive, som bare utgjør en kostnad og en rapporteringsfunksjon. Men det er litt utfordrende plass å stå i, i alt det her, for vi blir truffet av noen av de her kravene, mens andre ikke blir det. Og så er det noen vi også slipper unna, men siden vi er en del av (...) gruppen, så slipper vi ikke helt unna likevel.»
7. «Vi skal henge med, for å si sånn, hvis det kommer et krav om at man skal være en nullutslippsbedrift innen et visst år, og hvis du ikke er det, så er du ferdig. Ja, da er vi nullutslippsbedrift innen den fristen. Men vi har ikke laget oss noen egne mål rundt det.»
8. «Du kan jo si at hvis det er en stor oppdragsgiver, som vi vet at «ok, fra og med nå vil (anonymisert oppdragsgiver) kreve det her på alle sine prosjekter», eller fylkeskommunen - hvis det er litt forutsigbarhet i det, da ville det påvirket våre vurderinger og konklusjoner. Hvis det er en gang vi hadde sett på å kjøpe klimakreditter, er det fordi vi hadde sett for oss at vi kommer til å få omsetning og bruk for (...) å ha kjøpt utstyret eller å ha gjort de tiltakene som trengs, for å svare på de kravene. Så det har med hvor stor forutsigbarheten i oppdragstilgangen er.»
9. «Hovedformålet må være å tilfredsstille et krav, for at vi skal fortsatt kunne være med, det sier jeg litt overordnet. Hvis en oppdragsgiver i en anbudskonkurranse hadde stilt et krav om at du enten kan oppfylle det her kravet enten med å ha nullutslippsmaskiner, eller å kjøpe klimakreditter, så ville vi ha gjort en vurdering på hva som er smartest for oss å gjøre i forhold til det.»
10. «Det som av og til gjør det litt vanskelig eller utfordrende, det er at det er forskjellige oppfatninger av hva som er gode tiltak. Og det går virkelig veldig mye på noen politiske, ideologiske tanker, at enten så skal

det være netto null-utslipp, eller så kan like gjerne bare være. Men det finnes mange løsninger mellom det å være netto null-utslipp, som man kanskje må kjøpe frivillige klimakreditter for å bli, og å ikke være netto null, og mange av løsningene som ligger utenfor mål om å bli nullutslipp vil også kunne bidra til et bedre klima. Men det er det ikke interesse for. Det får vi ikke honorert for.»

11. «Alt er dyrere i forhold til det klimafokuset, alt blir dyrere.»
12. «Alle enheter har på en måte innsett at det her ikke er noe som går forbi, det her er sånn det kommer til å bli fremover, og det kommer til å bli mer og mer av det. Det her må vi eie. Det er viktig for å få oppdrag fremover.»
13. «Det blir vektlagt i anbudskonkurranser at vi klarer å kutte utslipp»
14. «Vi skal drive en finansielt bærekraftig bedrift, og da må vi være konkurransedyktige, vi må levere god kvalitet, vi må være en foretrukket leverandør og vi må ha et bra omdømme, og det er dette som driver målsettingene våre.»
15. «Jeg tror det er det rasjonelle og det logiske som vil være førende for hvilke beslutninger vi ender opp å ta også rundt klimakreditter. Så hvis vi ser at vi ikke skjærper oss eller endrer oss, at vi begynner å henge litt for mye akterut, da gjør vi det, selv om det kanskje er noen i bedriften som har den type respons til dette der de lurer på "hva er det ledelsen holder på med, har dere blitt helt gale? Fokuset har endret seg fullstendig!", men da, nei, til de må vi si at fokuset har faktisk ikke endret seg, vi bare må gjøre andre ting for å fortsatt være der vi mener vi skal være. Og da må kanskje flere endre mindsetet sitt da, framover.»
16. «Lokalt er vi ganske ledende på mye, men vi ønsker ikke å gå helt i front på alt mulig, som bærekraft og utslippskutt, det blir for kostbart»
17. «Vi som bransje har et ansvar. Vi er en del av en bransje som representerer veldig mye av forurensende aktiviteter. Da har vi også et moralsk ansvar i bransjen for å gjøre noe. Det er vi fullt innstilt på, både vi som bedrift og bransjen.»
18. «Jeg tenker at det å kunne bidra til at disse utviklingslandene kommer seg opp å stå, det synes jeg er noe som er viktig, fordi alt det vi nå snakker om, det setter utviklingslanda enda mer tilbake i forhold til de industrialiserte landa. Så de blir egentlig bare dårligere og dårligere stilt til å prøve å komme seg opp og stå. Men sånne typer prosjekter må man nok være litt mer kritisk til. Jeg tror veldig mye av de pengene forsvinner i andres lommer enn det de var ment for. Men karbonfangstprosjekter innenlands, eller i hvert fall karbonfangstprosjekter, det er veldig konkret.»
19. «Vi er en karbonintensiv virksomhet, altså vi produserer jo mye CO2 gjennom utslippet våre, og vi da tar jo av naturen for å bygge en vei eller lage en industritomt, eller hva det måtte være. Så det høres ut som at det ville vært fornuftig for oss og i vår interesse å kunne bidra til karbonfangst.»

20. «Vi har ikke meldt oss inn i eller er medlemmer i noen sånne spesielle organisasjoner om bærekraft, nei. Men alle har jo fokus på det i bransjen.»
21. «Hvis vi hadde kjøpt klimakreditter, så hadde vi aldri gått i avisa og bedt om å få lov til å få en reportasje på det. Vi hadde bare gjort det, ferdig med det. Det er leveransene våre som på en måte skal tale for seg, som vi bruker å si. Det er det vi leverer, og andres omtale av det, som på en måte skal være vår omdømmebygging. Det kunne jo selvfølgelig ha gitt oss litt goodwill å si til en oppdragsgiver at vi faktisk har såpass høyt fokus på bærekraft at nå har vi besluttet å kjøpe klimakreditter som gjør at det blir plantet litt mer skog, eller at vi bidrar til karbonfangst, eller hva det måtte være. Det kan sikkert hende at noen hadde sett på det som veldig positivt, men utover det, så hadde ikke vi profilert oss så mye på det, tror jeg.»
22. «Vi har ikke utarbeidet et eget kontraktsunderlag med klima- og miljøkrav fra vår side, som vi sender til våre underentreprenører, men vi viderefører alle krav som en oppdragsgiver har i en anbudsprosess. De lager et konkurransegrunnlag, og der står egentlig alle krav. Så i den graden det stilles krav der, så gjelder de samme kravene også for våre underentreprenører. Vi selv er vi på vei til å begynne å konkretisere ting mer, men det tar litt tid. De største har dette på plass på lenge siden.»
23. «Vi skal og må hele tiden være relevante og attraktive for arbeidsoppdragsgivere. Men det nytter jo ikke at et eller annet lokalt næringsforum finner ut at dette og dette var veldig lurt. Det må uansett være mye mer forankret og omforent opplegg rundt det, sånn at det ikke er tilfeldigheter. Hvis ikke sitter vi som entreprenører med en kjemperegning for å tilfredsstille noen sånne luftige krav om utslippskutt og sånt som bestemmes av folk som aldri trenger å forholde seg til det allikevel. Det er litt sånn hverdagen er. Det er utrolig mange som kan sitte og diskutere og prosedere og beslutte masse hårete mål som folk liker å snakke om. Men de som til slutt ender opp med å måtte ta konsekvensen av det her, det er det ytterste ytterste leddet, det er enten en forbruker eller en leverandør. Men igjen, vi er nødt til å følge med og henge med, hvis vi skal overleve. Så det vil påvirke våre beslutninger.»

IResp 5

1. «Kunder har definitivt blitt tunge til å komme på banen. Også ser vi at det å ha mål og rapporter på det og vise fremgang også er viktig i forhold til revisjoner som vi blir utsatt for.»
2. «Hvis vi skal stille med utstyr som er utslippsfritt, så har det en ekstra kostnad for oss. Og det er en bransje med veldig lave marginer, så er vi helt avhengig av at kundene etterspør denne typen tjenester og at det er en del av konkurransegrunnlaget.»
3. «Vi har sendt inn en forpliktelse til det som heter Science Based Targets Initiative, som er der du kan, det er vel de per dags dato som kan validere at du har satt et vitenskapsbasert mål. Og så jobber vi med den søknaden. Når man har sendt inn en forpliktelse, så har man to år til å få godkjent den søknaden. Så det

betyr at vi helt faktisk skal kutte direkte utslipp. (...) Og så er det et langsiktig mål om at vi skal være netto null i 2045.»

4. «Det er jo på en måte et veldig umodent marked. De aller fleste kreditter som man kan kjøpe er jo veldig billige, og av veldig lav kvalitet. Jeg tror man kan stille ganske store spørsmålstegn til hvor mye utslipp en del av de faktisk kutter. Blant annet en del av de treplantingsprosjektene som har vært gjort langt vekk fra Norge: man har sikkert plantet det visse antallet trær, men man har liksom ikke fulgt opp i etterkant hvor mange som har overlevd, og hvor mye CO2 de faktisk absorberer. Jeg tenker at man skal komme et godt stykke lengre med noen av de produktene for å sikre at det faktisk absorberer CO2 før det er der man skal putte pengene sine.»
5. «Hvis det kommer typer produkter som faktisk fjerner karbon som allerede er sluppet ut, og det er beviselig at de fjerner det, så kan det også være mer interessant enn veldig mye av det som er på markedet i dag. Så jeg tror på en måte at kvaliteten på mye av det som tilbys nå ikke er god nok.»
6. «Det ene er jo at vi har mange tiltak som vi kan gjøre for å kutte våre egne utslipp. Og mange av dem har en ekstra kostnad. Så alle midler vi bruker på å kutte utslipp, de tenker jeg er best brukt på noe som vi helt tydelig kan se faktisk kutte utslipp.»
7. «Vi har et stykke å gå før vi er der. Forhåpentligvis sammenfaller det med at det kommer litt bedre produkter på banen etterhvert også, hvor det er mer beviselig at det faktisk kutter utslipp. For det synes jeg mangler litt i dag.»
8. «Om vi ser at vi faktisk ikke kommer videre, at vi ikke får utført det vi skal gjøre, annet enn med fossile maskiner, og det er veldig lite vi kan gjøre med utslippene på andre måter, så kanskje man skal ta opp den dialogen om andre avbøtende tiltak da.»
9. «Ja, vi er medlem av flere ting med bærekraftsfokus.»
10. «Vi stiller krav på klima og miljø til leverandører, og da er det også veldig fint å ha helt spesifikke egne mål å peke til. Når vi har møter med våre leverandører, så kan vi si at vi skal kutte så og så mye frem til 2030, og da er det viktig for oss at dere er med på denne reisa. Så det har vi med i alle møter med de større leverandørene. Vi har klima og miljø med i innkjøpsrunder, hvor vi for eksempel har større rammeavtaler, så vil det alltid være en del krav som går på klima og miljø.»
11. «Jeg tenker også egentlig at vi er jo veldig synlige i samfunnsbildet, ikke sant? Hvis vi skulle kutte utslippet av at det plantes trær i Afrika har jeg ikke noe tro på at det hadde blitt noe positivt mottatt i samfunnet da. Og hva andre aktører hadde tenkt om vi hadde kjøpt sånne, da tror jeg man hadde blitt sett på som litt useriøs.»

1. «Man må jo velge ut fra hva som er hensiktsmessig i en kost-nytttevurdering, det må man, sånn er det for alle valg man tar.»
2. «Det er selskap i mange andre bransjer vi jobber tett med, og de er pålagt krav, mange. Og jeg tror det kommer til å bli mer og mer av det også. De har krav om bærekraftsrapportering på seg. Det er jo mange som rett og slett nå må begynne å rapportere på en del mer av dette på sin ende, og da må vi innfri de kravene de kommer med til oss om å gi de noen tall og sånt på fotavtrykk og sånt, og det prøver vi å tilrettelegge mer for nå, det må vi jo. Ikke sånn direkte krav kanskje, men ja, vi får jo på en måte også de kravene litt indirekte overført på oss siden de har de kravene på seg»
3. «Vi har ikke på en måte ikke fastsatt de reduksjonsmålene våre i stein. Vi har ikke uttrykt at vi skal være klimanøytrale eller noe sånt, vi har ikke formulert det helt klart eller tydelig, men vi skal redusere utslipp, og på sikt er jo målet å ha lavest mulig utslipp. Vi har satt mål som har med andre ting som har med klima- og miljø og gjøre. Det hadde kanskje vært lurt å ha satt seg et tidsfestet mål om å bli klimanøytrale, men det føles veldig ambisiøst for oss foreløpig, så derfor vil vi bare gjøre så godt vi kan.»
4. «Kort sagt gjør vi det fordi vi bryr oss om å prøve å få ned utslippene og prøve å gjøre noe for miljøet. Det handler mest om å få ned utslippene, det et klimatiltak for det, å hjelpe med å få ned utslipp som vi ikke får ned ellers med de andre tiltakene våre. Og vi har ikke så god tid på å få de utslippene ned. Det er mest snakk om det.»
5. «Vi vil ikke være dårligere enn andre på en måte, jeg tror nok at mange legger litt press på hverandre i bransjen, vi pusher liksom hverandre og følger jo så klart med på det hverandre gjør. Og man må henge med i svingene»
6. «Jeg tror det er bra å være en bedrift som tydelig prøver å bli mer bærekraftige, det tror jeg de ansatte kanskje kan være litt stolte av.»
7. «Det er fordi vi bryr oss om å prøve å få ned utslippene i bransjen og prøve å gjøre noe for miljøet. Det handler mest om å få ned utslippene, det et klimatiltak for det, å hjelpe med å få ned utslipp som vi ikke får ned ellers med de andre tiltakene våre.»
8. «Når jeg tenker på det, så er det jo også sånn at man for eksempel kan få anbefalinger om ulike kreditter gjennom konsulentfirmaer og sånt, og det synes jeg man kan være litt kritisk til, for man vet jo ikke om de bare anbefaler noen spesielle typer prosjekter bare fordi det er noe de har i sin portefølje, for eksempel. Det er jo også noe som kan spille inn. Det kan jo gjøre det ekstra vanskelig å vite hva man skal stole på, og hva som faktisk har effekt.»
9. «De klimakredittene vi kjøper er tilknyttet karbonfangst- og lagring.»
10. «Vi skal jo kunne holde oss i live, og da må man jo tenke langsiktig i de valgene man tar, og følge godt med på utviklingene som skjer rundt seg. Vi opererer jo ikke i et vakuum, så da må vi jo følge med på hva

som forventes og kanskje hva som vil forventes framover, og ta valg ut fra det. Man må faktisk være litt tilpasningsdyktige.»

11. «Før vi kjøpte derfra visste vi også at det er flere andre i bransjen som også kjøper av de, så det er noe til å stole på.»
12. «Vi er med i et par nettverk med fokus på bærekraft sånn rent overordnet, jeg tror et av dem er direkte knyttet til bærekraft i spesifikt vår bransje.»
13. «Vi stiller ikke egentlig krav til at leverandørene selv om at de skal ha sånn og sånn nivå av utslipp.»

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