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### Deltaker

Navn: Silje Magnetun Merødningen og Helene Stokka

### Informasjon fra deltaker

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*Helene Stokka*

Helene Stokka

*Silje Magnetun Merødningen*

Silje Magnetun Merødningen

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## **Abstract**

The following thesis examines how sustainable management education can empower individuals to foster sustainability engagement. While sustainability has been a topic of discussion for several years and has been incorporated into curricula, the focus in previous literature has primarily been on avoiding unsustainability rather than actively pursuing sustainability. Moreover, the emphasis has often revolved around the profitability of sustainability measures. A course called "Green Growth" at BI has gained positive feedback from many students who have experienced increased sustainability engagement. In this thesis, we aim to explore how this course and its participants engage with sustainability. Using a qualitative multiple case study approach, interviews were conducted to gather insights. The thesis identifies five keyways in which the course influenced the students: (1) strengthening their engagement, (2) enabling them to recognize diverse types of challenges, (3) imparting knowledge about various pathways and possibilities for action, (4) highlighting the importance of overcoming silo behavior, and (5) emphasizing the significance of cross-sectional collaboration.

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## 1.0 Introduction

The Executive Master course in "Green Growth" is designed to educate executives on how to lead their companies towards greater sustainability and will serve as the foundation of our study. The course emphasizes the interconnection between financial profitability and sustainability, and helps students distinguish between genuine "green value making" and "greenwashing". With sustainability increasingly becoming a top priority, organizations that successfully transition towards more environmentally friendly practices will have a competitive advantage. The course provides an overview of key concepts in green strategy, innovation, and green economy, and emphasizes the importance of making green initiatives financially profitable and sustainable. The students will gain the necessary tools to establish and lead a green economy within their organization, and to drive a change process towards a greener future. Moreover, "green growth" is designed to equip students with the knowledge and skills needed to successfully transition towards a more sustainable and profitable future for their organization.

The management education course has gained immense praise from its past students, solidifying its reputation. Its popularity among aspiring students aiming to thrive in the business world of tomorrow is a testament to its excellence. This has sparked our curiosity regarding the distinctive qualities that set this course apart and make it so popular. Perhaps it is the comprehensive curriculum, covering the sustainability aspect of management. Or maybe it's the experienced and dedicated faculty who guide students through real-world case studies and practical exercises. It could also be the emphasis on fostering critical thinking, innovation, and leadership skills, empowering students to navigate the complexities of the ever-evolving business landscape.

The literature on management education delves into the topic of how it can empower and engage students and professionals in sustainability. Scholars argue that sustainability should not be treated as a mere addition to the curriculum, confined to a couple of lecture hours. Instead, it should be integrated throughout the entire course (Allen et al., 2017). Additionally, an organization's perspective on sustainability plays a crucial role in employee engagement. It is essential to consider the different contexts and interpretations of sustainability as an organization progresses in its transition towards sustainability (Boons et al., 2013; Stouten et al., 2018; Bhattacharya et al., 2023). Therefore, those promoting

sustainability within organizations must take into account the dynamics and factors specific to each organization (Wickert and De Bakker, 2018).

Both management education and organizations often prioritize profit maximization, lacking a holistic perspective on sustainability (Hermundsdottir and Aspelund, 2021; Hoffman, 2021b; Dyck and Caza, 2021; Wickert and De Bakker, 2018). While all three aspects, economics, environment and social, are equally important in the context of sustainability, our master's thesis will specifically concentrate on the environmental dimension. The theory suggests that an exclusive emphasis on profits, without adopting a comprehensive holistic sustainability approach, results in less effective sustainability strategies (Hermundsdottir and Aspelund, 2021; Hoffman, 2021b; Dyck and Caza, 2021; Wickert and De Bakker, 2018). The theoretical notion discusses the perception of sustainability as an economic burden, and it is argued that this perspective lacks explanatory power (Hermundsdottir and Aspelund, 2021). By embracing sustainable innovations, it is further argued that organizations can create a win-win situation where both profitability and sustainability are prioritized (Hermundsdottir and Aspelund, 2021). Sustainable practices can lead to increased profits while simultaneously promoting long-term environmental and social well-being. This highlights the importance of shifting the focus towards integrating sustainability into organizational strategies, ultimately reaping the benefits of a more sustainable and prosperous future.

Furthermore, the value of management education holds significant importance for our thesis. The course “green growth” serves as a foundation of our research, and our interviews with several students have yielded compelling findings. The program encompasses the latest knowledge on the reasons behind and methods for adopting green growth practices in organizations to enhance profitability. By engaging with the concept of “green growth,” the students acquired knowledge and skills necessary to comprehend sustainability in its entirety. The objective of our thesis is to investigate the following question: *How can management education enable people in fostering sustainability engagement?*

The participants in this study have shared fascinating insights into their understanding of sustainability work and the impact of the “green growth” course on their professional endeavors. Several noteworthy findings emerged from the study: “I have to say that the engagement the lecturer possessed was completely unique, and I think that was something that converted me [...]”, “Sustainability



should not become something that is created as a small, isolated bubble within the company [...]” and “We have to dare to challenge the regulations, we have to work smarter, however, it depends on the attention the matter gets. It also depends on the majority's knowledge on the matter”. Therefore, this thesis aims to contribute to the theoretical notion on how management students engage in sustainability.

This thesis comprises seven chapters, including the introduction. Chapter two is dedicated to a comprehensive literature review, where we delve into the theoretical knowledge relevant to the topic. In chapter three, we provide a detailed explanation of the methodology employed for this multiple case study. Chapter four presents the findings of the study, organized into five sections. The chapter begins with a findings table that offers an overview of the key findings. Moving on to chapter five, we discuss and analyze the findings in relation to the theoretical knowledge presented in chapter two. Chapter six focuses on exploring the broader limitations of our study. Finally, chapter seven serves as the conclusion, summarizing the entirety of the thesis.

## 2.0 Literature review

This chapter aims to explore various theoretical concepts that are pertinent to our research question. We begin by defining sustainability engagement and explore how it is connected to Workplace Pro-Environmental Behavior (WPEB) as highlighted by Kennedy et al. (2015). Understanding the significance of pro-environmental behavior in the context of sustainability within organizations is vital. To gain insight into this area, we analyze articles by Howard-Grenville (2019), Wright and Nybert (2015), Nolan and Schultz (2015), among others.

Next, we delve into the topic of sustainability transformation, where we examine the prevailing societal belief that organizations can only be considered successful if they achieve economic growth. This belief poses challenges for sustainability initiatives to gain traction. To shed light on this issue, we review the works of scholars such as Wickert and De Bakker (2018), Aust and colleagues (2020), Ergene et al. (2021), and several others.

In the third part of this chapter, we delve into the influence of management education on sustainability. We investigate how management education can play a crucial role in integrating sustainability principles. By shaping the mindsets of managers, education programs can help them understand the importance of sustainability in organizational practices. This aspect is discussed in works by Berti et al. (2021), Hoffman (2021), Dyck and Caza (2021), and other notable researchers in the field.

These chapters collectively contribute to our thesis by elucidating the relevant theoretical concepts required to address our research question effectively.

### 2.1 Sustainability engagement

Sustainable engagement refers to intentional actions aimed at initiating positive change in the environment, with the goal of benefiting society. It encompasses proactive and responsible behaviors that seek to address environmental challenges and promote sustainability. This concept goes beyond individual actions and extends to collective efforts, recognizing the interconnectedness of social, economic, and environmental systems (Nolan and Schultz, 2015; Penner et al., 2005). By emphasizing the prosocial nature of sustainable engagement, it highlights the inherent concern and consideration for the well-being of others and future generations, emphasizing the importance of

working towards a more sustainable and equitable society. Consequently, we can assert that sustainability engagement is also a form of prosocial behavior (Nolan and Schultz, 2015).

In the context of professions, the concept of workplace pro-environmental behavior (WPEB) is frequently discussed. It refers to a deliberate and coordinated series of actions carried out by a collective network of individuals within an organization, spanning across departments, teams, and the overall value chain. This behavior stems from a shared commitment to a goal that transcends individual interests and imbues work with a sense of purpose (Kennedy et al., 2015; Van Tuin et al., 2020). WPEB can be considered as sustainability engagement in the workplace, as it encompasses positive and responsible behavior towards the environment. It represents a phenomenon that intertwines self-interest with prosocial behavior (Kennedy et al., 2015; Van Tuin et al., 2020; Nolan and Schultz, 2015; Penner et al., 2005).

The driving force behind sustainability engagement is often rooted in personal characteristics, particularly the sense of purpose individuals find in the subject (Van Tuin et al., 2020; Kennedy et al., 2015). The outcomes of workplace pro-environmental behavior (WPEB) can be observed through the level of employee involvement in sustainability-related practices and initiatives, which reflects their overall engagement in these endeavors. In addition to a sense of purpose, employees' beliefs, attitudes, personal and social norms, self-efficacy, self-interest, and past behavior can also influence their engagement (Kennedy et al., 2015; Lo et al., 2012; Nolan and Schultz, 2015; Osagie et al., 2016; Allen et al., 2017). This implies that sustainability engagement is a highly individualized matter, and therefore, different approaches may be required to effectively engage employees in this domain.

Sustainable behavior is often driven by intrinsic motivations and emotions. It emerges from a deep sense of personal values and concern for the well-being of the environment and future generations (Kennedy et al., 2015; Osagie et al., 2016; Allen et al., 2017). This suggests that individuals engaged in sustainability work are also undertaking emotional labor, as they navigate the intersection of their values and the sometimes conflicting business objectives they encounter. Sustainability actors may experience conflicting emotions in relation to their sustainability work (Wright and Nyberg, 2012; Pellegrini et al., 2018). These conflicting emotions may arise from the tension between their desire to advance

sustainability goals and the practical realities or constraints they face within their organizational context (Dyck and Caza, 2021; Hermundsdottir and Aspelund, 2021). Such emotional labor can pose unique challenges for sustainability actors, requiring them to navigate and manage their own emotions while striving to drive positive change within their work environments.

Furthermore, it has been observed that when employees experience a strong sense of purpose within their job, it positively enhances their work engagement (Van Tuin et al., 2020; Kennedy et al., 2015). Hence, it is crucial to consider organizational factors when examining sustainability engagement as these will affect the engagement of the employees (Bhattacharya et al., 2023). This includes the implementation of environmental policies, supportive leadership, creating a culture that values sustainability and implementing a corporate strategy that will contribute to sustainability engagement over time (Kennedy et al., 2015; Bhattacharya et al., 2023).

When an organization's top management and line managers value and promote sustainability, it increases the likelihood of employees understanding and embracing sustainability, resulting in higher sustainability engagement. It is crucial for managers to encourage and support employees in making sustainability-based decisions as part of their daily job responsibilities (Galpin et al., 2015). Employees should be empowered to help their colleagues embrace sustainability initiatives to the point where they view these efforts as integral to their job performance expectations. The success of an organization's sustainability strategy depends on the active engagement and commitment of its employees at all levels of the company.

However, based on the individuality of engagement, individuals with low initial interest in sustainability can be more effectively engaged through incentives, contests, and social norms, whereas those with a high level of interest in sustainability may respond better to education and feedback (Pellegrini et al., 2018; Schultz, 2014). Overall, the organization's role in signaling the importance of sustainability is crucial for fostering employee engagement in sustainability initiatives.

Promoting sustainability engagement can serve as a means to effective change within an organization. To truly embrace sustainability, organizations need to ensure that sustainability measures align with the entirety of the organization, through aspects such as HR practices (Galpin et al., 2015; Aust et al., 2020).

However, it is crucial to acknowledge that organizational factors alone cannot bring about change; rather, individual aspects are closely intertwined with the theory. In other words, organizational change cannot be achieved without the involvement of employees (Davis and Coan, 2015). Employees also have a significant role in promoting sustainability by advocating for change, sharing knowledge and expertise, and leading by example (Howard-Grenville et al., 2019; Kennedy et al., 2015).

While intentions to create positive change are crucial, the effectiveness of sustainable engagement also depends on the implementation of appropriate strategies and the ability to overcome barriers and challenges. It requires a deep understanding of the underlying motives and values that drive individuals' actions, as well as the consideration of broader systemic factors that influence sustainable behaviors. Meaning that all activities meant to enhance sustainability will not be effective, this is also based on the individuality of the engagement (Schultz, 2014; Kennedy et al., 2015; Nolan et al., 2015; Pellegrini et al., 2018; Galpin et al., 2015).

## 2.2 Sustainability Transformation

There is a prevailing belief in society that for an organization to be deemed successful, it must achieve economic growth every year. Unfortunately, this widely held perception has influenced the theoretical aspects of sustainability research, creating a challenge for implementing sustainable practices. One of the primary obstacles to achieving a more sustainable organization lies in the prioritization of short-term economic gains over long-term sustainability goals (Hermundsdottir and Aspelund, 2021; Wickert and De Bakker, 2018; Wright and Nyberg, 2017; Ergene et al., 2021; Bocken and Geradts, 2020). The tendency to prioritize short-term gains over long-term benefits has been recognized as a human bias, whereby we have a propensity to value immediate rewards rather than waiting for larger future benefits (Thaler, 2016; Bansal and Desjardine, 2014). As a result, the concept of sustainability often lacks immediate advantages and is consequently deprioritized.

Businesses are seen as economical institutions and therefore also have a natural and way back connection to the economical aspect (Wickert and De Bakker, 2018), which is rooted in common sense, as it is evident that without

economic success, an organization cannot sustain its existence. However, embracing a short-term mindset within organizations and strategies poses a significant threat to the long-term sustainability and survival of our planet (Ergene et al., 2021; Laverty, 1996; Bocken and Geradts, 2020). This emphasis on the economic aspect creates a tension between the economical aspect and the environmental aspect, as sustainability necessitates long-term commitment and offers long-term benefits, contrasting with the short-term gains provided by the economy (Cleveland and Kalamas, 2015; Ergene et al., 2021; Wright and Nyberg, 2017).

Organizations often find it easier to address environmental issues that can be resolved through technological activities, while grappling with the challenges posed by climate change proves more daunting (Wright & Nyberg, 2017). The long-term nature of climate change introduces tensions with the economic aspects of organizational decision-making, making it a complex problem to tackle. This type of work requires a longitudinal approach, recognizing the need for sustained commitment and efforts over an extended period (Wright & Nyberg, 2017). However, in the current management landscape, the prevalence of hierarchical power dynamics perpetuates the dominance of certain groups over others, hindering progress towards sustainable practices (Ergene et al., 2021). It becomes crucial to detach ourselves from such power imbalances and strive for more inclusive and equitable approaches to ensure a sustainable future. It can therefore be understood that within the perspective the economical aspect is the focus, if there are no or little economic gains the sustainability option will be overruled (Aust and colleagues, 2020).

Sustainability innovation generally has a positive impact on an organization's value creation, leading to a win-win situation for successful adopters of sustainable practices (Boons et al., 2013; Hermundsdottir and Aspelund, 2021). However, this is a complex matter that requires an integrated approach, and the existing gap between literature and practice adds further difficulty (Hermundsdottir and Aspelund, 2021; Baldassarre et al., 2020). Moreover, the uncertainty surrounding the outcomes of sustainability initiatives (Hermundsdottir and Aspelund, 2021; Baldassarre et al., 2020) makes it challenging for organizations to implement sustainable strategies.

The way an organization progresses in its transition towards sustainability is crucial, as the meaning of sustainability can vary in different contexts (Boons et

al., 2013; Stouten et al., 2018). Therefore, sustainability actors must pay attention to the dynamics within the organization itself (Wickert and De Bakker, 2018). This means that cooperation across the entire organization is necessary to successfully implement innovative sustainability actions. Both top management and middle managers play significant roles in driving sustainable change (Howard-Grenville et al., 2019; Wickert and De Bakker, 2018; Galpin et al., 2015). These roles contribute to the organization's readiness for change (Wickert and De Bakker, 2018; Stouten et al., 2018) and promote sustainability engagement at all levels, fostering a sustainable organizational culture (Howard-Grenville et al., 2019).

Sustainability actors have a challenging time conveying the message. This is connected to the skepticism towards the economic aspect and the fact that the soft gains are more difficult to prove and communicate than the hard facts in the economic aspect. Therefore, building relationships with important actors, especially within the middle management, where trust and openness is in the center will be important. We understand that the sustainability worker's integrity must be high for the person to communicate the message (Wickert and De Bakker, 2018; Schein, 2019; Brulle et al., 2012). It is also important that the sustainability actor tries to find immediate gains and resonate with the values and norms of the recipients (Wickert and De Bakker, 2018).

Commonly climate change is perceived as a distant problem, leading to a neglect of its present importance and a perception that it is beyond our control. Consequently, a diminished sense of personal responsibility emerges. The portrayal of the environmental crisis commonly emphasizes negative aspects such as doom, cost, and sacrifice, which fosters a pessimistic perspective. Communication surrounding sustainability frequently lacks sufficient opportunities for action, resulting in weakened attitudes due to cognitive dissonance. Messages often focus on fear and guilt, which can contribute to denial or avoidance. It is important to note that cultural identity plays a significant role in filtering climate messages (Brulle et al., 2012; Druckman and McGrath, 2019; Stoknes, 2014). Therefore, based on the above theories, when conveying information about sustainability, it is crucial to address and consider these factors. To effectively communicate, it is important to understand the appropriate manner and audience for the message. Consequently, it becomes essential to devise strategies to address the aforementioned challenges. A key element in this process

is establishing relatability with the individuals being communicated to. By considering these factors, the messages about sustainability can be effectively conveyed.

The current body of literature pertaining to sustainability transformation has neglected to critically examine the political and economic dimensions that are intricately linked to sustainability. As a result, the underlying root issues of the matter have not been adequately addressed. This highlights the pressing necessity for a significant shift in our understanding and approach to sustainability, as well as in the conduct of sustainability management research. The field has thus far fallen short in fully recognizing and confronting these fundamental issues, particularly in relation to their political and economic implications (Ergene et al., 2021).

### 2.3 Management Education and its impact on sustainability

Since the late 2000s, there has been a growing emphasis on integrating sustainability into management education. However, within management theories, the prevailing approaches of positive organizational scholarships (POS) and critical management studies (CMS) (Dyck and Caza, 2021; Hoffman, 2021a; Haigh and Hoffman, 2011; Spicer et al., 2009; Prichard, 2009) have been criticized as outdated in the literature. Both approaches have failed to adequately prioritize sustainability and the imperative of integrating it into the core of management. POS views sustainability as a means to enhance organizational profits, while CMS highlights the negative consequences of solely focusing on profit-driven objectives (Dyck and Caza, 2021; Haigh and Hoffman, 2011; Spicer et al., 2009; Prichard, 2009). By incorporating sustainability into business practices, long-term success and positive societal outcomes can be achieved (Lavery, 1996).

Management education plays a crucial role in shaping the mindset of managers by educating them to recognize sustainability as an integral part of organizational practice. This recognition is essential for the successful implementation of sustainability initiatives within organizations. Consequently, the literature has emphasized the need for a fresh perspective in management theories, one that places sustainability at the center and highlights the importance of effective management (Hoffman, 2021a; Hoffman, 2021b, Dyck and Caza,



2021). By incorporating sustainability into management education, students can actively engage with the subject matter and develop a broader understanding of its significance (Bratton and Bratton, 2015; Young et al., 2013; Hoffman, 2021b). Such education can also help shift the focus away from purely profit-oriented objectives (Dyck and Caza, 2021), promoting a more holistic and responsible approach to management practices, such as the “green growth” course offered in the executive master’s program at BI.

However, it is crucial for management education programs to go beyond viewing sustainability solely as a financial investment. It is beneficial to teach students various approaches and enable them to recognize which approach is most effective for their specific circumstances (Dyck and Caza, 2021; Allen et al., 2017). Emphasizing the maximization of social and ecological well-being while maintaining financial viability is essential to effectively educate students about the significance of a social and ecological approach (Dyck and Caza, 2021). Further, management education should focus on the positive aspects of sustainability and explore how organizations can become sustainable rather than simply avoiding unsustainability. Additionally, it is important to emphasize the importance of understanding and preserving nature itself (Allen et al., 2017; Hoffman, 2021b). By adopting a comprehensive approach that considers these factors, management education can instill in students a deeper understanding of sustainability and its positive implications for organizations and the environment.

More specifically, research has shown that experiential and social learning approaches have been successful in sustainable management education (Berti et al., 2021; Heiskanen et al., 2016; Allen et al., 2017). Therefore, a sustainable course should incorporate cooperative work that connects activities and case studies to real-world contexts, spanning multiple facets of organizational operations (Heiskanen et al., 2016; Berti et al., 2021). This approach enables students to develop a deeper understanding of the complexities associated with sustainability (Berti et al., 2021). Furthermore, it is important for the course to focus on how sustainability within organizations is intertwined with the political landscape of society. Recognizing the influence of politics, the course should highlight the significance of lobbying as an effective means to advocate for laws and legislation that guide sustainability efforts (Hoffman, 2021b). By emphasizing the connection between sustainability, organizational practices, and societal

politics, students can develop a comprehensive understanding of the broader context in which sustainability initiatives operate.

The ethical choices and understanding of students are significantly influenced by their personal character, values, actions, capabilities, and social connections. As a result, it is crucial to tailor education to meet the individual needs of students (Berti et al., 2021; Allen et al., 2017). Additionally, utilizing emotions as a learning approach can have diverse effects on students. While emotions can enhance engagement, they may also lead to stress for certain individuals. Thus, it is important to create a safe space where students can reflect on their feelings and experiences. This enables the addressing of negative emotions and their transformation into positive learning opportunities. Therefore, the management of emotional engagement should be approached with care to avoid negative experiences and promote effective learning (Berti et al., 2021).

When the students have completed a sustainability course students play a crucial role as the implementers and adopters of change within organizations towards sustainability. However, it is important to acknowledge that they may not instantaneously emerge as catalysts for swift change or proactive agents of transformation (Heiskanen et al., 2016). The process of implementing sustainable practices requires time, effort, and a gradual shift in organizational culture (Stouten, 2018). Students, armed with the knowledge and skills acquired during their studies, will be potential valuable assets in driving sustainable initiatives within their respective organizations. They can contribute to change by advocating for sustainable practices, influencing decision-making processes, and inspiring others through their actions and commitment to sustainability. Over time, their collective efforts and individual contributions can lead to significant progress in creating a more sustainable organization.

### 3.0 Research setting and method

This chapter provides a comprehensive account of the methodology employed to address our research question. Its primary aim is to present a clear and detailed overview of our step-by-step approach. To begin with, we outline the selection of our chosen methodology, clarifying the purpose of our investigation. Next, we elaborate on our qualitative research design, emphasizing our utilization of a case study approach and employing inductive reasoning. Subsequently, we delve into the data collection where we present a table with an overview of data, details on our semi-structured interviews, as well as including information on the pilot interviews used to refine our interview guide. Furthermore, we also present a table summarizing the interview data. Finally, we engage in a discussion regarding the reliability and validity of our research, as well as ethical considerations. We aim to ensure transparency and allow readers to critically assess the robustness of our research process and the credibility of the results obtained.

#### 3.1 Research setting – Green Growth Course

Our research focuses on analyzing case studies derived from the Executive Master of Management course titled «Green Growth as Competitive Advantage» offered at BI Norwegian Business School. Our primary objective is to highlight the valuable learning experiences gained by students and their subsequent contributions towards enhancing sustainability strategies within their respective organizations.

The executive master's course in «Green Growth» has been specifically developed to equip executives with the necessary knowledge and skills to lead their companies towards greater sustainability. A key focus of the course is to enable students to discern between genuine «green value making» initiatives and mere «green washing» practices. It is imperative for organizations to transition towards environmentally friendly practices in order to gain a competitive advantage in today's business landscape. The course itself has been created by two renowned experts who are widely recognized for their expertise in promoting green growth and driving sustainable change. Notably, one of the founders also serves as the main lecturer for the course, ensuring that students receive firsthand insights and guidance from a distinguished authority in the field.

Furthermore, the course spans over two semesters and comprises five gatherings, totaling 150 lecturing hours. Each gathering is designed to provide valuable insights and knowledge in different areas related to green growth. The first gathering addresses the challenges associated with green growth, while the second focuses on green business innovations. The third gathering takes a broader perspective, exploring the big picture and the long-term future of sustainable development. The fourth gathering concentrates on green accounting for the 21st century, and finally, the fifth gathering centers around green strategies and implementing theory into practice. These gatherings foster a group learning process, emphasizing experiential learning methodologies. Each gathering typically extends over approximately four days. The evaluation process includes a term paper accounting for 60% of the total grade, where students can demonstrate their understanding and application of the course material. Additionally, there is a 24-hour individual home exam, contributing to 40% of the final grade, which further assesses students' knowledge and critical thinking skills.

### 3.2 Selecting methodology

The purpose of this study is to learn more about sustainability work in organizations and how sustainability actors influence the others among them to work more sustainable. To understand this phenomenon the predictive theory, or context independent knowledge, we already possess from previous readings and courses has given us a marginal understanding of the phenomenon (Flyvbjerg, 2006). In advance, the theoretical notion has given us an understanding of what sustainability engagement is. The context dependent knowledge on the other hand will provide an understanding of the experience and the heart of the case. The closeness to the real world contributes to a nuanced understanding of the phenomenon which is crucial when investigating human differences (Flyvbjerg, 2006; Bell, Bryman and Harley, 2019).

### 3.3 A qualitative approach

This multiple case study is conducted with a qualitative research design and a phenomenological approach to the multiple cases (Bell, Bryman and Harley, 2019; Yin, 2014). Flyvbjerg (2006, p. 240) states that “We need to explore the phenomenon firsthand rather than explore maps of them”. Through a

phenomenological understanding we aim to understand the human behavior of sustainability actors and how they are engaged in sustainability. How the subjects interpret the world, and their experiences will determine our findings (Bell, Bryman and Harley, 2019). Inductive reasoning aligns with the qualitative approach and multiple case study; therefore, we have taken an inductive approach to gather our data. Bell and colleagues (2019) describe this as a method where we go from specific to general, meaning that we start with specific observations and then aim to find patterns within the data. We aim to get this understanding through semi-structured interviews (Bell, Bryman and Harley, 2019).

### 3.4 Sampling

In our study, we adhered to the principles of purposeful sampling to select participants who would offer valuable insights into our research questions (Patton, 2002). By intentionally choosing information-rich cases, we prioritized depth of understanding over breadth of coverage. Unlike statistical sampling, which aims to minimize bias, qualitative sampling embraces the focused examination of specific cases as a strength (Patton, 2002). This deliberate selection process allowed us to gain profound insights into the intricate dynamics of sustainability engagement within organizations. To identify typical cases, we collaborated with key informants such as program staff and knowledgeable participants. Their expertise helped us identify cases that exemplified typical characteristics (Patton, 2002). Additionally, we employed snowball sampling, leveraging the connections and recommendations of previously interviewed participants. This approach expanded our network of informants and contributed to the richness of our data.

By employing purposeful sampling methodologies, our aim was to achieve a deep understanding of sustainability engagement rather than making broad generalizations. Through capturing the unique perspectives and experiences of our informants, we sought to uncover the complexities inherent in sustainability engagement within organizational contexts. Furthermore, by integrating theoretical frameworks with rigorous research methodology, we aimed to provide a comprehensive analysis of sustainability engagement, shedding light on its intricate dynamics and subtle nuances (Patton, 2002).

According to Patton (2002), sample size in qualitative inquiry does not adhere to fixed rules. Instead, it depends on various factors such as the research

objectives, the relevance of the information, the stakes involved, the desired credibility, and the available time and resources (Patton, 2002). In our study, we included a sample size of eight informants, which proved to be highly valuable. Although the number of participants was relatively small, it allowed us to delve deeply into the phenomenon of sustainability engagement and explore its diverse manifestations. By focusing on a smaller number of individuals, we were able to capture rich insights and understand the variations within the context of our research. This approach provided a level of depth and understanding that would have been challenging to achieve with a larger sample size (Patton, 2002).

### 3.5 Data

*Table 1: Overview of data*

<b>Interviews</b>	11 interviews
<b>Archive Data</b>	Course description, course syllabus list (see appendix five).

<b>Informant</b>	<b>Name</b>	<b>Position and company</b>	<b>Number of conducted interviews</b>
1	Ida	Consultant, Consultant house	1
2	Josefine	Account Manager, Food retailing	2
3	Chris	Sustainability Manager, Construction industry	1
4	Nora	CEO, Sustainability organization	1
5	Eva	Sustainability Manager, chemical industry	2

6	Isak	Consultant, Engineering industry	2
7	William	Sustainability Manager, Food retailing	2
8	Eskild	Consultant, Consultant house	1

### *Semi-structured interviews*

Before conducting our interviews, we developed a semi-structured interview guide that includes questions to address the key areas relevant to our research question. This approach provides a flexible framework for the interviews, allowing for spontaneous discussions and follow-up questions, while still ensuring that we gather the necessary information. The semi-structured format allows us to gather rich and in-depth data, while also providing a degree of structure to ensure the efficiency and consistency of the data collection process (Kvale, 1996). Further the format provides us with personal experiences and the informant's subjective understanding of the phenomena.

We created an interview guide, see appendix one and two, with questions that would help cover the topics needed to be able to answer our research question. To effectively address our research question, we crafted three core questions that are critical to understanding the experiences and stories of our informants. Our goal was to gather rich and meaningful data through these semi-structured interviews, which will provide valuable insights into the topics we are investigating.

### *Pilot interview*

As part of our master thesis, we conducted a pilot study in the first phase. This consisted of three semi-structured interviews with participants from the “green growth” course, who are currently working with sustainability in their organizations. The interviews were designed to shed light on their personal and organizational experiences with sustainability, and how the course may have

affected how they work with sustainability. By asking open-ended questions and encouraging the participants to talk about their experiences and form a timeline on how they have worked over the years.

### *Conducting the interviews*

The interviews were either held digitally on Microsoft Teams or physically at the informant's office. This was up to the informant, as we noticed that people after covid preferred having a digital interview. In advance of the interviews, we did not do any preparation except getting familiar with the interview guide and the questions we were to ask. In the beginning of the interview process, we confirmed that the participants received the consent form and requested their permission to record the interview using our phones. We also provided a brief explanation of our thesis and the study's purpose. While adhering to the interview guide to ensure that we covered all the intended topics, we allowed for natural conversation and elaborated on interesting points. Although each interview had some variations, we made sure to cover the same topics in each one. Each interview lasted approximately 40-50 minutes.

Upon complementing the first round of eight interviews, we noticed a pattern emerging from our findings. Consequently, we analyzed our data and determined that we require three additional interviews to achieve a form of theoretical saturation, as suggested by Guest et al. (2006). Conducting additional interviews until theoretical saturation is achieved can improve the reliability and validity of qualitative research findings. The analysis process is further detailed below.

During the second round of interviews, we aimed to discuss our findings with the informants in order to gain a deeper understanding of their perspectives. To facilitate this discussion, we selected quotations from the data that we found particularly interesting or relevant to our research question (Carlsen et al., 2014), see appendix two. We organized these quotations into categories, such as "Overcoming Silo Behavior", and created a presentation in Microsoft PowerPoint to share with the informants. During the interviews, we presented the categories and the corresponding quotation to the informants, and we asked them open-ended questions to encourage reflection and discussion. These questions included prompts such as "when you read the quotes, how does this make you feel?" and "can you reflect on these quotes and share your thoughts?". We also asked the



informants to discuss how they recognized themselves in the findings or if they had any additional insights or perspectives to offer. Overall, this approach allowed us to deepen our understanding of the informants' experiences and perspectives and helped to ensure that our findings were grounded in their perspectives.

### *Processing the data*

To analyze and identify important patterns and findings we applied a method similar to a thematic analysis (Braun and Clarke, 2006). Firstly, we transcribed the interviews from round one to ensure that all the information we collected during the interviews was accurately documented in written form. The process of transcription also facilitated the organization and management of the data we had gathered. The transcribed interviews consisted of approximately 120 pages. This contributed to us familiarizing ourselves with the data and gaining an understanding of what information is important.

Then we started to code our data, see appendix three, by firstly looking at what we found the most interesting in the interviews (Braun and Clarke, 2006). The codes were mostly inactive and not connected to the research question. We applied codes such as “Customer and Sustainability” and “Regulations” to the data as some of the first codes. Afterward, we reviewed the codes and searched for common themes that were connected to the research question (Braun and Clarke, 2006). We found that silo thinking, cooperation, personal motivation and engagement were some of the important themes that commonly occur in the interviews. Additionally, we also found that “changes of jobs” was an interesting theme. After finding the interesting themes we started to review how each of the themes answered the research question (Braun and Clarke, 2006). The code we then found was active and provided an understanding of the research question.

### 3.6 Validity and reliability

Reliability, replication, and validity are three essential criteria employed to evaluate the quality of research findings (Bell et al., 2019). Reliability pertains to the degree to which the outcomes of a study can be replicated. In order to enhance replicability, researchers must prioritize transparency regarding their data and methods to establish trustworthiness. Trustworthiness refers to the extent to which readers can evaluate the honesty of researchers in conducting their study and the

reasonableness of their conclusions. While practices that enhance methodological transparency and replicability are vital for establishing credibility (Pratt et al., 2020, p. 2), however, it has been noted that attempts to apply transparency and replication principles to qualitative research may have unintended consequences (Pratt et al., 2020). By imposing "gold standards" practices that are inappropriate or potentially harmful to qualitative methods to ensure trustworthy results, there is a risk of creating a two-tier system in terms of defining what constitutes good research (Pratt et al. 2020).

Furthermore, it is important to acknowledge that different research approaches have their own unique strengths and criteria for establishing trustworthiness. Lincoln and Guba (1985) addressed this matter within the context of a natural paradigm, proposing techniques like thick description and negative case inquiry to enhance the trustworthiness of data. Conversely, Yin (2014) approached trustworthiness assessment from a positive standpoint by providing qualitative counterparts to external validity, construct validity, and reliability. Furthermore, other scholars emphasize the significance of specific qualitative methodologies, such as persuasive ethnographic work or process studies, in producing high-quality qualitative research (Locke and Golden-Biddle, 1997; Langley, 1999).

Regarding validity, as defined by Bell et al. (2019), it pertains to the integrity of the conclusions derived from a research study. During our study, the data was collected through semi-structured interviews with eight informants from different organizations. While initially, we believed that we had achieved theoretical saturation in our interviews as no new categories were emerging, upon further reflection and conducting additional interviews, we realized that there was more depth to explore within the identified themes. These subsequent interviews provided us with deeper insights and perspectives, indicating that our initial saturation might have been premature.

To address this, we went back and conducted three more interviews with four different informants, we had the opportunity to delve deeper into the topics of interest, allowing for a richer understanding of the subject matter. This deeper exploration revealed nuances, complexities, and additional dimensions that were not initially apparent. Consequently, we recognized that our initial saturation point had not been reached, and there was still more to uncover. Acknowledging the potential for further in-depth discussions and interviews, we realized that a more

comprehensive theoretical saturation could have been achieved. This recognition highlights the importance of being open to iterative data collection and analysis processes, as well as the need to continually reassess the point of saturation in qualitative research to ensure a robust and comprehensive understanding of the phenomenon under investigation.

Our iterative process of data collection and analysis reflects our dedication to enhancing the trustworthiness and credibility of our study. By remaining receptive to further in-depth discussions and interviews, we recognize the significance of continually reevaluating the point of saturation in qualitative research. This approach ensures a thorough and comprehensive understanding of the phenomenon under investigation, contributing to the robustness and theoretical validity of our findings.

### 3.7 Ethical considerations

The ethical consideration of a study is crucial to obey and is to be integrated throughout the whole research. In the beginning of this research process the study was approved by NSD, see appendix six. The NSD approval gave us the possibility to gather data from the informants. However, ethical matters still needed to be considered during the research process. Four ethical considerations were especially regarded throughout the research. The four principles that must be considered are: whether there is harm to the participants, whether there is lack of informed consent, whether there is an invasion of privacy and lastly, whether deception is involved (Bell et al. 2019, p. 110-114).

The potential informants were provided with a consent form along with comprehensive information about the study. Appendix four contains the details shared with each informant. We found it important to inform the candidates why they received the request to participate in this study. The consent form clearly states that participation in the research is voluntary, and informants have the right to withdraw at any point.

Additionally, the form guarantees the preservation of the informant's privacy and anonymity. This is achieved by assigning pseudonyms to the informants and maintaining anonymity regarding the organizations they represent. The data provided about the informants is carefully anonymized, ensuring the

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informants right to privacy. Further, the transcription of the interviews was done in a manner so that anonymity was ensured.

The consent form and the informant's anonymity work together to prevent harm and deception throughout the research process.

## 4.0 Findings

This chapter presents the findings of the study, including quotations from the informants and our interpretation of these quotations. Firstly, we highlight the most significant finding that enhances engagement in sustainability. Secondly, we discuss the identified types of challenges that informants have learned to recognize. Thirdly, we present the findings related to pathways of activities and potential solutions to address these challenges. Fourthly, we address the findings related to overcoming silo behavior within organizations. Lastly, we discuss the importance of inviting and involving in collaboration for sustainability. By presenting these findings, this chapter offers valuable insights and practical implications for individuals and organizations seeking to understand how management education enables people in fostering sustainability engagement.

*Table 2: Findings Table*

Description	Examples that concretize
<b>Finding 1: Strengthening engagement in sustainability</b>	
<p>"Green growth" has inspired and provided guidance in the informant's sustainability work. The course empowered them to make a positive impact by advocating for sustainability and motivating others. Personal motivation can be beneficial, however not a requirement for improving sustainability.</p>	<p><i>The lecturer's passion for sustainability was a significant factor in the informant's engagement with sustainability work. They feel emotionally connected to the "green growth" journey, looking back on it with a sense of personal investment and pride.</i></p>
<b>Finding 2: Recognizing types of challenges</b>	
<p>Various obstacles that accompany sustainability work are acknowledged. The knowledge gained from the course has made the informants more cognizant of how to handle challenges. The course has enabled them to establish networks of like-minded individuals, with whom they can discuss challenges, fostering a sense of solidarity and encouragement.</p>	<p><i>The absence of industry standards makes navigating environmental issues challenging. Without a clear roadmap it is difficult to address these concerns effectively. It is challenging to balance their economic goals with sustainability objectives, which adds complexity to the decision-making process. Frustration with the implementation of new regulations is expressed.</i></p>

<b>Finding 3: Learning about pathways of activities and possibilities</b>	
The informants have acquired knowledge that has boosted their self-efficacy in their job. Acquiring this knowledge has equipped them with the necessary skills and confidence to make sustainability decisions and feel confident in their decision-making process.	<i>The green stairs were frequently used to gain a comprehensive understanding of a situation. It was crucial to maintain a positive tone and emphasize innovation while communicating sustainability. The lecturer's focus on opportunities was significant.</i>
<b>Finding 4: Overcoming silo behavior</b>	
Breaking down silos leads to successful implementation of sustainability strategy. Employees can influence by playing an active role in promoting innovation, encouraging innovation and fostering cooperation. Employees can help create a culture prioritizing sustainability and ensure integration into every aspect of the organization.	<i>Several informants emphasized the importance of involving all employees in the implementation of sustainability within an organization. This underscores the need for a collaborative effort toward creating and maintaining a sustainability strategy, rather than relying solely on the sustainability department.</i>
<b>Finding 5: Inviting and involving in collaboration for sustainability</b>	
Implementing a sustainability strategy requires cooperation at all levels. Knowledge sharing is emphasized as a means of achieving cooperation. Sustainability work is a collective effort that cannot be accomplished by a single individual or department alone.	<i>Achieving sustainability within an organization is a collective endeavor that necessitates the active engagement of all individuals. For successful cooperation there is a need for knowledge-sharing, idea exchange, and best practice promotion among employees and across departments.</i>

#### 4.1 Strengthening engagement in sustainability

The informants indicate that "Green growth" has been a source of inspiration and guidance in their sustainability work. As a result of completing the course, they feel empowered to make a positive impact by advocating for sustainability and encouraging others to participate in the process. While personal motivation from "Green growth" can be advantageous, it is not mandatory for contributing to the company's sustainability efforts. The informants emphasize the significance of the lecturer's intrinsic motivation in their sustainability education. They indicate that the lecturer's passion for sustainability was a crucial factor in their engagement with sustainability work. Many informants express a deep emotional connection to the "green growth" journey and reflect on it with a sense of personal investment and pride.

The role of the lecturer was highlighted as a crucial factor in the informant's learning experience, with their engagement positively influencing the informant's own level of engagement in the subject matter. In the case of one informant, the course was suggested by their leader, who recommended that their employee should take the course to benefit the organization, as stated by Isak:

“I have to say that the engagement the lecturer possessed was completely unique, and I think that was something that converted me. I didn't really know what I was getting myself into. I read the course description and thought, 'It has all the right terms about green growth', but I guess I didn't fully understand what it actually meant. The engagement from the lecturer really rubbed off on me, and it was just such an incredible journey that I think was greatly influenced by him as a person.”

The statement indicates that the course has been an important and crucial part of the sustainability journey. The course enabled this informant to work with a new passion. However, the engagement from the lecturer was also regarded as too much and led to a lack in the course's credibility. One of the informants states “If you look at that subject, it can be argued it was designed like some kind of sect, with perhaps little substance.” For some of the informants, the preaching conveying of the message was perceived as excessive and the focus was taken away from the important topics, such as the profitability of sustainability. It can be understood as a course that focuses a lot on feelings and psychology, rather than how to argue for the profitability of sustainability. Which we have seen presented as a challenge in finding one, as Isak states:

“I was highly motivated and determined to shift the organization's perspective on sustainability. I saw the taxonomy coming and I recognized the need to take action. I, therefore, aimed to play a part in the transition towards a more sustainable company. [...] I wanted to inform the management about the consequences of what they did, because they did not possess knowledge about sustainability [...] I thought for a long time that I had gotten the management on board with this, but I didn't”.

The informant stating this also left the organization after a short amount of time. When talking to the informants several of the course participants changed jobs after finishing the course. Furthermore, Eskild stated:

“I know that there are several who have taken the subject and end up changing jobs or have a desire to change jobs. [...] Often because many individuals feel compelled to apply their newly acquired knowledge and skills but find that the framework, they need is not available in their current job.”

The fact that several of our informants changed jobs after the course may suggest a sense of helplessness in their previous roles, and a new engagement for

sustainability. However, it is important to note that there might not be a causality between the course and participants wanting to quit their job, there might be other factors influencing the participants' decisions. Therefore, one significant finding is that after participating in the course, the informants found difficulties implementing the knowledge of sustainability within their organizations.

## 4.2 Recognizing types of challenges

The informants recognize the presence of both internal and external obstacles in their sustainability work. Nevertheless, the course has equipped them with the knowledge and expertise needed to navigate these challenges effectively. Additionally, the course has facilitated the formation of a network of individuals who share a common interest in sustainability. This network provides a platform for discussing sustainability-related issues and serves as a source of support and motivation for the informants. According to the informants, the lack of industry standards for sustainability creates difficulties in navigating environmental and social issues. For example, one informant emphasizes «The problem also lies in the fact that there is no way, or there is insufficient data, to calculate the carbon footprint».

Additionally, the informants struggle to reconcile their economic goals with sustainability objectives, adding complexity to the decision-making process. The introduction of new regulations and conflicting policies further complicates matters and results in frustration among the informants. As one informant emphasizes, «So we see that the environmental legislation that we are used to sometimes throws a spanner in the works for a sustainable approach in projects».

When the informant meets the business world, they find it especially difficult to maneuver through the laws and regulations set by the government. The informants recognize that implementing new regulations can be particularly challenging, as it requires a deep understanding of the regulations and how to effectively integrate them into existing processes. Some of the regulations have been found to contradict each other. One informant emphasized the importance of meeting the political industry and conducting lobbying. The informant states: «We have to dare to challenge the regulations, we have to work smarter, however, it depends on the attention the matter gets. It also depends on the majority's knowledge on the matter». The matter is further elaborated by the quotation



«some of the challenges we see with the Environment Council are that they [...] do not see the societal benefit or the climate emissions or the other following parts». The quote suggests that there is a need for strategic engagement with politicians, as the laws are contradictory and contribute to ineffective sustainability work.

When finishing the course, the informants understood the importance of standardization as sustainability covers a lot and is understood differently. Some focus on environmental emissions and others focusses more on the societal part of the matter. Moreover, the use of diverse metrics for assessing sustainability across an industry creates confusion for consumers and customers, making it difficult to determine what products are truly sustainable. It is emphasized by Josefine that:

“In several instances, price is a decisive factor, almost 9 out of 10 times I would say, and therefore it is important that the economic factors are considered. For it to make sense in our industry I believe that we need a standardization for what is sustainable and what is not, this will make it equal”.

Furthermore, Josefine stated that:

"When I say 50,000 tons of plastic, they ask 'What is that?' None of my clients would understand it. However, if I say one million kroner, that's great. If you save one million kroner by choosing a particular product and reducing x amount of plastic, that's impressive."

This quote emphasizes the importance of using relatable and understandable terms when communicating sustainability efforts to customers. The informants suggest that while large amounts of plastic waste may be significant in terms of sustainability impact, it may not resonate with customers as much as financial savings would. Therefore, by communicating the financial benefits of sustainable choices, such as reduced costs or increased profits, and coupling it with tangible sustainability outcomes, such as reduced plastic waste, it becomes easier to convey the value of sustainable products or practices to customers.

It is further discussed in the interviews that the economic aspect of sustainability is not covered by the green growth course in a satisfactory manner. The informants lack the ability to communicate with the part of the organization that focuses on profitability. Further, this may indicate that the sustainability strategy is not successfully implemented across the organization.

### 4.3 Learning about pathways of activities and possibilities

From the course the informants have gained knowledge that has enhanced their belief in their ability to perform their job effectively. Obtaining this knowledge has equipped them with the necessary skills and confidence to make decisions related to sustainability and to feel assured in their decision-making abilities. The lecturer's Green Stairs framework was often referenced as a tool for achieving a thorough comprehension of a situation. In terms of communicating sustainability, it was vital to maintain a positive tone and prioritize innovation. Moreover, the lecturer's motivation and emphasis on possibilities were important factors.

During the course, the students developed an increased sense of self-efficacy, as indicated by an anticipated and significant finding. According to one of the informants, they now feel confident in their ability to utilize the knowledge gained from the course to explain to their superiors and colleagues that although a particular action may not make economic sense in the short term, it is still crucial to pursue it in the long term. Specifically, Eva stated,

"I feel that I can use everything I learned in the course to explain to my superiors and employees that; OK, it doesn't make economic sense right now, this quartal, or this year, but it is the most important thing to do anyway".

It seems like they exhibited a greater perceived authority in making decisions on the matter. Furthermore, the stairway to Green Growth has been highlighted as the theory most used after the course as it functions as guidance and analysis providing the informant with an overview of the case. Ida establishes this by stating: "I use the stairway to green growth as an understanding of where, when, and how to implement different measures in the organization." This specific theory has provided the informants with the possibility to analyze and sort information from the different cases they are to handle. One informant used it when forming the sustainability report of the organization they work for.

During the interviews, it was clear that the lecturer stood out to the students by communicating positively, but realistically. He was motivational and made them feel like they were able to do everything. One informant stated: "First and foremost, the lecturer's appearance in the lecture makes it hard to forget what he is talking about. He is so engaged". Further, Isak supplied: "I have to say that the motivation from the lecturer in the course was unique [...] and because of that

it was an incredible learning experience.” It was emphasized that one of the most important parts of the lecture was: “[...] both poems and activities that were based on the emotional aspects and the philosophical. It was several opportunities to reflect on what was happening in the world and how we could help through our job.”

When considered collectively, these statements indicate that the lecturer plays a crucial role in facilitating the student's learning process. By being motivating, and empathetic towards the students, and maintaining a positive tone in his communication, the lecturer has been able to empower the students to see possibilities in their work. During our interview, Isak stated that:

“One of the most positive aspects of the course was that we should not put all the breaks on (about growth) we should do it smarter. [...] We are to continue to generate profit and pay wages. We are to continue all of this, but not in the matter we have done before. This might have been the fact that made me believe in the significance of sustainability work”.

This statement indicates how the focus on innovation has been regarded as crucial for the motivation in continued work with sustainability. A crucial point to note is that all the informants highlighted the positive aspects and cases presented on the course. This underscores the significance of avoiding communication that portrays a sense of doomsday.

#### 4.4 Overcoming silo behavior

The importance of breaking down organizational silos for successful sustainability implementation was a common theme identified in interviews with key informants. Participants noted that silos hinder communication, collaboration, and the sharing of information and resources across different departments or divisions, leading to a fragmented approach to sustainability. This issue is exemplified in the following quote:

“Many of those who work with sustainability, work with sustainability, and those who work with finance, logistics, or sales, work with that, they know nothing about sustainability. It's simply siloed. It's silo thinking, they don't work together, they don't talk together, there's no natural harmony between sustainability and economics.”

Our informant Josefine clearly states a frustration towards the silo thinking in the organization. Sustainability is interrupted by this silo thinking and causes sustainability work to be something related to only one department. Further, this lack of coordination creates a gap between sustainability and other

departments, leading to sustainability not being implemented at the triple bottom line.

Several participants also emphasized the importance of involving all employees in sustainability efforts, with one stating that “Sustainability work should not be done by the sustainability responsible or sustainability department”. This emphasizes the need for a collective effort toward creating and maintaining a sustainability strategy rather than relying solely on the sustainability department. The statement also points at the need for cooperation and highlights that employees who carry out the organization's core activities play a vital role in achieving sustainability. It is vital for all departments to contribute to sustainability efforts, promoting cross-functional teamwork and collaboration. This type of approach can foster a culture of sustainability, ensuring that sustainable practices are embedded in the organization's operations. Furthermore, involving all employees in sustainability efforts can help create a culture of sustainability within the organization.

Other informants noted that sustainability should be integrated into every aspect of the organization, not just a standalone initiative, as Eva stated:

"I want everyone in my organization to be responsible for sustainability because it needs to be part of who we are and how our corporate culture is, taking it as economics for example, you wouldn't want anyone who doesn't care about the financial framework of the company."

The statement underlines the importance of sustainability. The informants draw attention to the situation by comparing it to the economic department. No department within an organization has the freedom to act independently in economic matters, as all departments are bound by budget constraints. Similarly, Eva further states that it is crucial for all departments to be obligated to the sustainability activities and incorporate them into their respective strategies.

Additionally, William highlights the importance of extending sustainability responsibility to corporate management. It is stated that: “[...] So I said “OK, but I, as the sustainability manager, will not talk about those points, the managing director will be there and have to do the presentation”. With this statement, William points out a specific example where the chance to interrupt and challenge the silo thinking within the organization. Furthermore, achieving harmony between sustainability and other departments requires a shift in mindset. Companies must acknowledge that sustainability is an integral constituent of their business strategy and not a separate entity. This requires promoting collaboration

and communication between departments to break down silos and foster the integration of objectives in the company's overall strategy.

#### 4.5 Inviting and involving in collaboration for sustainability

Successful implementation of a sustainability strategy within an organization is contingent on the cooperation and collaboration of all stakeholders across various levels. Our informants highlighted the significance of knowledge sharing as a critical element in promoting cooperation toward sustainability. The informants emphasized that sustainability work is a collective effort that requires the active involvement of all individuals and departments within the organization. Effective cooperation toward sustainability requires the sharing of knowledge, ideas, and best practices among employees and departments. This sharing of knowledge can occur in many ways, for example through workshops, training, or other communication channels. By exchanging knowledge, employees can gain a deeper understanding of the organization's sustainability goals and the role that they can play in achieving them.

During our interviews with several informants, a recurrent theme was the importance of knowledge sharing and the inclusion of every employee in order to foster collaboration towards sustainability goals. One noteworthy quote that emerged from these discussions with Ida was:

“Sustainability should not become something that is created as a small, isolated bubble within the company. In order to achieve a change, you must involve people who can succeed. Involve everyone from top to bottom where you are.”

This quote underscores the significance of involving employees across all levels of the organization to promote sustainable practices, rather than limiting such initiatives to a particular sustainability department. Ida also emphasizes the importance of listening to the employees working with the core activities in the organization. They possess knowledge about which processes can be effectively transformed into more sustainable alternatives, as well as identifying the processes that might present challenges in achieving sustainability. It is crucial to value their insights and ensure their inclusion to foster the successful implementation of sustainable activities. Additionally, Eva further elaborates on this aspect: "It's about involving people very early. I think if we can develop sustainable plans that are actually perceived as something we develop together, and not something that is forced upon us from the headquarters." The statements indicate the importance

of involving the whole line of the organization in the sustainability decision. That will lead to the employees feeling some ownership of the activities applied.

Indeed, a widespread engagement strategy is deemed essential to foster a collective commitment to sustainability throughout the organization. However, our informant Josefine pointed out the challenge of balancing sustainability with economic considerations:

“We can have as good cooperation as we want, and everyone wants to, but we still can't make it happen because ultimately it's the price that wins.”.

As previously presented, this quote highlights the tension that often exists between sustainability and economic consideration. While cooperation is important, it is not always sufficient to overcome economic constraints. Josefine also pointed out that there are often other barriers to sustainability besides cooperation “There are other things that cause it to stop. It's not the cooperation that makes it happen, it's the price and who we're going to sell it to.”. It is emphasized here that there often are structural and systematic barriers to sustainability that go beyond the cooperation of employees and departments. This could be market conditions, regulatory framework, or other factors beyond the control of employees or departments. It again discusses the economic issues considering sustainability.

It may therefore be essential for companies to incorporate a broad-based approach to sustainability initiatives that include input and participation from all stakeholders. In this way, sustainability efforts can be fully integrated into the organization, and they achieve the intended goals. Furthermore, Eva summed up the need for innovation and experimentation in sustainability initiatives “(...) and then we tried to figure it out together, because all sustainability work is pioneering work. If it were easy and if it were just a matter of doing it, we would have done it already.”

This quote highlights the challenges and complexities involved in implementing sustainability initiatives within an organization. It suggests that there may not be a clear roadmap or established best practices for achieving sustainability goals. Therefore, organizations must have an innovative mindset and be willing to experiment, learn from failures, and continuously improve their sustainability practices.

## 5.0 Discussion

Our study introduces a novel approach to empower students in management education to advocate for enhanced sustainable strategies within organizations. Our findings robustly support the notion that management education equips students with the requisite knowledge to address sustainability challenges and develop strategies that align with sustainable goals. Furthermore, we noted a growing imperative among the informants to incorporate sustainability into the fundamental strategy of the organization. The study's primary contributions include firstly, identifying recurring issues and pathways to action; secondly, evaluating the impact of management education; thirdly, acknowledging the positive influence of sustainability role models; and fourthly, promoting cross-organizational collaboration to overcome silo mentality. Our results strongly suggest that promoting further management education among students will augment organizational proficiency in sustainability and pave the way for a future where sustainability strategies are seamlessly integrated across all levels. The discussion will aim to answer the research question: *How can management education enable people in organizations to foster sustainability engagement?*

### 5.1 Pathways of actions and issue recognition

Aust and colleagues, (2020); Cleveland and Kalamas, (2015); Ergene et al., (2021); Wright and Nyberg, (2017), have all underscored the prevailing economic perspective that frequently prioritizes financial gains, potentially overshadowing the adoption of sustainable options when the economic benefits appear limited or insufficient. Sustainability necessitates long-term commitment and offers long-term benefits while the economy provides short-term gains. This results in challenges for implementing sustainable practices, as organizations may not be able to offer sustainable products at the same or lower prices, perpetuating the dominance of the economic perspective (Hermundsdottir and Aspelund, 2021; Wickert and De Bakker, 2018; Wright and Nyberg, 2017; Ergene et al., 2021; Bocken and Geradts, 2020).

According to one informant, it is crucial to make sustainability more accessible to customers and clients, especially when negotiating with individuals who lack understanding or knowledge about sustainability. This necessitates alternative methods of communication that incorporate sustainability into

everyday language and actions. Instead of explicitly stating the amount of CO<sub>2</sub> saved through a particular action, the informant modified their approach. Instead, they emphasized the financial benefits by highlighting that the action saved the company one million NOK, in addition to reducing a significant amount of CO<sub>2</sub> pollution. This example highlights the importance of framing sustainability efforts in relatable and meaningful terms (Stoknes, 2014). By communicating the financial benefits alongside the environmental impact, the informant engaged employees more effectively.

While economic considerations are undoubtedly important, some of the informants emphasized that barriers to sustainability go beyond purely economic factors, and cooperation factors. Structural and systematic barriers, such as market conditions or regulatory frameworks, may pose challenges beyond the control of individual employees or departments. As emphasized by Ergene et al. (2021), these sustainability challenges, intertwined with political and economic dimensions, have not been adequately addressed. Thus, recognizing and addressing such structural and systemic barriers becomes crucial in advancing sustainability efforts.

For example, when trying to sell a product, the customers expect something. It is emphasized that there is often no predetermined roadmap or established practices for attaining sustainability goals. This is also emphasized in Stoknes (2014), when talking about psychological barriers in climate change communication. By framing sustainability in terms of financial benefits and tangible outcomes, such as reduced costs or increased profits, organizations can better convey the value of sustainable choices to customers. Effective communication strategies that address customer's values, aspirations, and concerns can help overcome psychological barriers and engage customers in sustainable practices. Another identified obstacle is the absence of industry standards for sustainability, which hinders effective navigation of environmental and social issues. This challenge aligns with Laverly's (1996) argument regarding the threat of short-termism to sustainability. Furthermore, Ergene et al. (2021), Laverly (1996), and Bocken and Geradts (2020) emphasize the peril that embracing a short-term mindset within organizations and strategies poses to the long-term sustainability and survival of our planet.

Without clear guidelines and benchmarks, organizations may struggle to effectively address sustainability concerns and implement meaningful changes. As



highlighted by several informants, strict rules and regulations in society can pose a significant barrier to adopting a more sustainable approach in different projects. Organizations must navigate these regulations and ensure compliance, which can restrict their ability to implement sustainable practices effectively. This finding underscores the challenges organizations face in reconciling sustainability objectives with regulatory requirements. To overcome this obstacle, one informant emphasized the importance of engaging with political influences and conducting lobbying efforts, which aligns with Hoffman (2021b). They stressed the need to challenge existing regulations and highlighted the perceived lack of understanding by the environmental council regarding the societal benefits and climate emissions. This suggests a need for strategic engagement with politicians to address regulatory inconsistencies and enhance the effectiveness of sustainability efforts. The informant's perspective underscores the importance of proactively engaging with policymakers to advocate for regulations that align with sustainability goals. By participating in policy discussions, organizations can communicate the societal benefits of sustainable practices and influence the development of supportive regulations. This strategic engagement with politicians can contribute to a more effective and coherent sustainability work.

The informants in this study not only highlighted the challenges they faced in their sustainability work, but also emphasized the positive impact of the “green growth” course in helping them overcome these challenges and effectively address them in their daily work. The green stairs framework by Stoknes (2020), which was frequently mentioned during the interviews, emerged as a valuable tool for gaining a comprehensive understanding of the situation and navigating sustainability issues. One key aspect where the green growth course made a significant difference was when communicating sustainability. The informants emphasized the importance of maintaining a positive tone when communicating sustainability efforts (Stoknes, 2014). By focusing on the benefits and opportunities associated with sustainable practices, organizations can engage stakeholders more effectively and promote a positive perception of sustainability initiatives. It is crucial to acknowledge that cultural identity significantly influences the reception of climate messages (Brulle et al., 2012; Druckman and McGrath, 2019; Stoknes, 2014). Therefore, when the lecturer communicated messages about sustainability, the emphasis was placed on highlighting benefits and opportunities rather than invoking fear and guilt associated with the issues.

Furthermore, having a motivational lecturer and his emphasis on possibilities were also important factors for how to handle challenges (Stoknes, 2014). The students developed an increased sense of self-efficacy and felt more confident in their ability to use the knowledge gained to explain to their superiors and colleagues that although a particular action may not make economic sense in the short term, it is still crucial to pursue it in the long term. Which is also emphasized by Thaler (2016) where it is stated that humans tend to have a bias towards valuing immediate gains rather than waiting for larger future benefits. Moreover, the students feel empowered to contribute to the strategy in their company because they have the knowledge of sustainability to know how to handle a situation. The lecturer played a crucial role in the course by being motivating and empathic, as well as maintaining a positive tone in his communication, which has empowered students to see possibilities in their work with sustainability.

It is essential to acknowledge the wider implications of the research, particularly in relation to economic factors. Sustainability is increasingly recognized as a means to gain a competitive advantage in organizations, it is important to explore sustainability and how it can contribute to innovation and increase profits. Investigating these implications can provide valuable insights into the practical implications of the study.

## 5.2 Management Education – and how it contributes to sustainability engagement

The course “Green Growth” has proven to be instrumental in fostering a deeper understanding of sustainability and generating innovative solutions among the students. Through knowledge-sharing and experiential learning, the students have disseminated valuable insights and untapped perspectives within their organizations (Berti et al., 2021; Howard-Grenville et al., 2019). Individuals can play a significant role in promoting sustainable practices within their organizations, influencing their company’s sustainability engagement and strategy. By sharing knowledge, expertise, and leading by example, the students may contribute to shaping the organizational culture and promoting sustainability engagement (Howard-Grenville et al., 2019).

Furthermore, we can say that the course has successfully achieved the goal of fostering a deeper understanding of sustainability as well as encouraging students to think critically and creatively about sustainable solutions (Dyck and Caza, 2021; Haigh and Hoffman, 2011; Prichard, 2009). Several informants have highlighted a significant increase in their knowledge and their newfound ability to engage in meaningful discussions about sustainability with fellow students. They feel that attending the course has provided them with a fresh perspective, enabling them to approach sustainability-related challenges more effectively in their work.

Management education plays a crucial role in shaping the mindset of managers by educating them to recognize sustainability as an integral part of organizational practice (Bratton and Bratton, 2015; Young et al., 2013). The informants in our study have also emphasized the importance of implementing sustainability into the company's strategy and making it a part of their daily work routines to embed sustainability into the organizational culture. They believe that everyone in the organization should be aware of the sustainability strategy and actively contribute to its implementation. By incorporating sustainability into business practices and making it a fundamental aspect of organizational strategy, long-term success, and positive societal outcomes can be achieved as emphasized by Laverly (1996).

Furthermore, WPEB is often characterized as a combination of self-interest and pro-social behavior, offering benefits for both individuals and organizations (Kennedy et al., 2015). However, despite organizations encouraging their employees to take sustainability courses and expressing a desire to benefit from them, our informants faced challenges when attempting to implement sustainability practices in their respective workplaces. As a result, a significant number of students decided to change jobs after experiencing a notable increase in their level of sustainability engagement. Many students encountered difficulties when trying to integrate sustainability practices within their organizations, which potentially influenced their decision to seek new job opportunities that better aligned with their sustainability values and aspirations.

The situations described above highlight the development of self-interest and pro-social behavior among the informants during the course. It can be argued that the informants who underwent the program exhibited higher levels of engagement and WPEB compared to their respective organizations, leading to a mismatch in sustainability commitment. This suggests that the organizations were

unprepared for the desired level of change, while the informants, having been exposed to the course for a year, were ready for organizational transformation. Assessing an organization's readiness for change is crucial for successful organizational transformation (Stouten et al., 2018). In this case, the pace of change initiated by the informants surpassed the organization's readiness, ultimately resulting in the informants choosing to change jobs. The emphasis on integrating sustainability into management education and practices (Hoffman, 2021a; Dyck and Caza, 2021) aligns with the informants' experience of being well-prepared and committed to sustainability after completing the course. However, the challenges faced in implementing sustainability within their organizations also highlight the need for organizations to adapt and be prepared for the changes that arise from management education initiatives.

It is evident that the informants had an experience of increased WPEB, and their decision to change jobs reflects the importance of organizational receptiveness to sustainability initiatives. As an implication, organizations need to facilitate a culture that supports and encourages sustainable practices, taking into account the knowledge and aspiration of their employees that have undergone management education with a focus on sustainability. The organization should be more ready to effectively harness the enthusiasm and commitment of employees and avoid mismatches that can lead to employee turnover.

### 5.3 The positive imperials of role models

Sustainability engagement, which is connected to the employees' WPEB can be enhanced through various strategies. One effective approach is to facilitate learning activities for the employees. By providing opportunities for growth and development, organizations can foster a sense of purpose and engagement among employees, encouraging their active participation in sustainable practices (Kennedy et al., 2015; Penner et al., 2005). However, it is worth noting that individual engagement also plays a significant role in enhancing sustainability engagement, as highlighted by one of the informants. This informant expressed a desire to participate in the course “green growth” to increase their own learning, which was not facilitated by their organization. This emphasizes that employees' own motivation and initiative can also contribute to sustainability engagement

(Kennedy et al., 2015; Van Tuin et al., 2020; Nolan and Schultz, 2015; Penner et al., 2005).

It is essential for managers to actively foster and empower employees to incorporate sustainability principles into their daily job responsibilities (Howard-Grenville et al., 2019; Wickert and De Bakker, 2018; Galpin et al. 2015). This will further ensure that the organization's sustainability efforts are integrated throughout the company. Throughout the interviews, we came to learn that several of the informants had been provided with the course “green growth” by their manager in order to take the sustainability in the organization a step further. Facilitating learning activities for employees is not only a means to ensure high engagement (Bratton and Bratton, 2015) but also serves as a powerful tool to inspire other colleagues in embracing sustainability initiatives. By integrating sustainability practices into their job performance expectations, organizations can foster a culture where sustainable actions become an integral part of everyday work, creating a ripple effect that extends beyond individual employees (Howard-Grenville et al., 2019; Kennedy et al., 2015; Galpin et al. 2015).

Further, the informants have emphasized the significant role of the lecturer in their engagement with sustainability matters, highlighting the lecturer's importance in shaping their WPEB. One key aspect contributing to this impact is the lecturer's positive communication style, which focuses on presenting possibilities rather than dwelling on problems. By adopting this approach, the lecturer aligns with the principles of sustainability barriers discussed by Stoknes (2014). As a result, the course led by the lecturer has become an essential part of the informants' sustainability journey, providing them with an opportunity to explore and work with a newfound passion in this field. The lecturer's ability to foster a positive and empowering learning environment has significantly contributed to the informants' engagement and motivation in the pursuit of sustainability goals.

Moreover, the creation of WPEB reflects a commitment to sustainability engagement, demonstrating a positive attitude towards the environment. This phenomenon combines self-interest with prosocial behavior, as supported by studies conducted by Kennedy et al. (2015), Van Tuin et al. (2020), Nolan and Schultz (2015), and Penner et al. (2005). Moreover, the sense of purpose that individuals derive from their involvement is often the underlying motivation for their engagement. In this case, it could be attributed to the lecturer's ability to

inspire and make a significant impact on the students. When employees experience a strong purpose within their job, it positively enhances the work engagement. (Van Tuin et al., 2020; Kennedy et al., 2015). It is imperative to acknowledge that when examining sustainability engagement, organizational factors like policies, leadership, culture and strategy emerge as critical determinants in shaping employee involvement (Bhattacharya et al., 2023; Kennedy et al., 2015).

Despite an overall high engagement for sustainability matters, there is a variation in whether this engagement is personally motivated or motivated due to job activities and goals. This finding aligns with the theory of WPEB saying that engagement for sustainability is influenced by several factors like beliefs, attitudes, personal and social norms, self-efficacy and self-interest, among others (Kennedy et al., 2015; Lo et al., 2012; Nolan and Schultz, 2015; Osagie et al., 2016; Allen et al., 2017). This variation in factors influencing the engagement may help explain why some informants perceive the green growth course as resembling a sect, while others feel inspired by the lecturer's own passion and dedication. Those who view it as a sect may have personal beliefs and/or previous experiences that clash with that way of conveying a message, leading them to perceive it as a course with significant lack of substance. On the other hand, individuals who are inspired by the lecturer likely resonate with the positive and influential behavior demonstrated, causing their engagement to be further positively influenced. This is connected to Berti et al. (2021) findings that the student's ethical choices and understanding are significantly influenced by their personal character and capabilities. Effecting organizational change is a complex endeavor, often met with numerous challenges. A critical aspect of driving such change lies in ensuring the active engagement of employees, as their involvement is vital for its successful implementation (Davis and Coan, 2015).

It is crucial to consider the broader implications when examining the influence of an inspiring role model on student engagement and their ability to drive change in the sustainability strategy of their business. Our study has identified a gap in the existing literature, highlighting the significance of this area of research, which appears to be underrated. Moreover, it suggests that practical experience and real-world application may hold greater importance than theoretical knowledge alone. Consequently, these findings underscore the need for more comprehensive research to be conducted in this field. By delving deeper into

this topic, we can gain a more thorough understanding of the mechanisms at play and their potential implications.

#### 5.4 Collaboration to break silo mentality

For an organization's sustainability efforts to permeate all levels of the company, it is crucial for managers to encourage and support employees in making sustainability-based decisions as part of their daily job responsibilities (Galpin et al., 2015). This entails involving everyone in the organization from the initial stages and fostering a collective effort toward creating and maintaining a sustainable strategy. However, interviews conducted for this study revealed a prevailing frustration regarding silo thinking within organizations, which hampers the effective integration of sustainability practices throughout the organization and confining them to a single department rather than being embraced by the entire company. These sentiments may arise from the inherent tension between employees' aspirations to advance sustainability goals and the practical realities or constraints they encounter within their organizational context (Dyck and Caza, 2021; Hermundsdottir and Aspelund, 2021).

One approach highlighted during the interviews is the inclusion of corporate management in challenging and interrupting silo behavior within the organization. By involving key stakeholders, such as the managing director when presenting sustainability initiatives, the perception that sustainability is solely the responsibility of the sustainability department can be disrupted. Both top management and middle managers can play significant roles in driving sustainable change in the organization, this can increase the likelihood of employees to understand and embrace sustainability (Howard-Grenville et al., 2019; Wickert and De Bakker, 2018; Galpin et al., 2015). However, engagement is individual, and if there is no initial interest in sustainability it can be more effective through incentives, contests, and social norms (Pellegrini et al., 2018; Schultz, 2014). It is also important to emphasize that every activity to enhance sustainability will not be effective as it is based on the individuality of the engagement (Schultz, 2014; Kennedy et al., 2015; Nolan et al., 2015; Pellegrini et al., 2018).

This aligns with the need for cross-functional teamwork and collaboration to ensure that sustainable practices are embedded in the organization's overall strategy. It also sends a powerful message that sustainability is a priority for the entire organization, not just a specific department. Furthermore, involving

corporate management and key stakeholders demonstrates leadership and creates employee engagement at all levels of the organization to promote sustainability practices. This helps shape a culture that is aimed towards sustainability, as emphasized by Howard-Grenville et al. (2019). The cultivation of a sustainability-oriented culture, the implementation of innovative approaches that engage stakeholders, and the promotion of collaborative work are essential components of creating a work environment that embraces sustainability, as highlighted in the concept of WPEB by Kennedy et al. (2015). Through cross-functional teams and collaborative efforts, organizations can effectively implement sustainability initiatives and engage in discussions that align with strategy planning and goal setting. This widespread integration of sustainability practices throughout the entire organization addresses the frustration expressed by informants during the interviews. By fostering collaboration across departments and involving all stakeholders, organizations can establish a culture that embraces sustainability that aligns with the strategic goals of the organization.

Additionally, employees can contribute to promoting sustainability within their organization by advocating for change, sharing knowledge and expertise, and leading by example, by practicing knowledge sharing across the organization this will lead to effective cooperation toward sustainability (Stouten, 2018). This is also emphasized throughout many interviews, where cross-functional teams are mentioned as a way to share knowledge and build a stronger culture within the organization. Sharing knowledge fosters elective cooperation and empowers employees to develop a profound understanding of how to advance sustainable strategies within the organization. This collaborative approach not only promotes a collective effort toward sustainability but also equips individuals with the necessary insight to sustainably drive the organization forward. It has been emphasized by several informants that integrating sustainability into an organization's values and daily practices is of paramount importance.

Furthermore, according to Galpin et al. (2015), it is crucial to empower employees to encourage their colleagues to embrace sustainability initiatives to the extent that these efforts become integral to their job performance expectations. The implementation of sustainability requires the establishment of clear goals and the seamless integration of sustainability efforts into all aspects of an organization's operations (Schultz, 2014; Kennedy et al., 2015; Nolan et al., 2015; Pellegrini et al., 2018; Galpin et al., 2015). Additionally, several informants have



highlighted the need to discuss and value sustainability on par with economics within the organization. Just as no one would expect individuals to disregard the financial framework of the company, sustainability should also be embraced and prioritized. To achieve a holistic sustainability strategy, it is crucial for every individual within the organization to take responsibility for contributing to more sustainable activities. This can be accomplished by integrating sustainability into the goals and overall strategy of the organization. By aligning sustainability with the organization's objectives, it becomes a collective effort where everyone recognizes their role in advancing sustainability and actively participates in its integration within their respective areas of work. This aligns with the crucial role of active engagement and commitment from employees at all organizational levels in both the development and implementation of the sustainability strategy (Hermundsdottir and Aspelund, 2021; Baldassarre et al., 2020; Galpin et al., 2015).

As an implication, organizations must adopt an innovative mindset and be open to experimentation with various approaches. As one of our informants pointed out, sustainability work is pioneering in nature, and if there were simple solutions, they would have been implemented already. This underscores the inherent complexities of sustainability implementation and underscores the importance of embracing innovation in this process. Innovation plays a vital role at this level, and fostering a culture of exploration is essential which is emphasized by Bansal and Desjardine (2014), Stoknes (2020) and Bocken and Geradts (2020). The objective here is to optimize resource productivity within the organization (Stoknes, 2020).

## 6.0 Limitations

Our study encountered several limitations that need to be acknowledged. Firstly, the sample size of interviews conducted was small, with four participants being interviewed two times. As a result, the findings presented in this study offer a limited perspective on the phenomena under investigation. Moreover, the lack of long-term observation impedes our ability to discern the sustained impact of the course on the students. Secondly, the sample composition exhibited limited diversity, primarily comprising individuals from the same cohort. This homogeneity suggests a potential bias in the results, as participants may have undergone similar educational experiences and share similar perspectives. This restricts the generalizability of the findings to a broader population.

Thirdly, the course the students attended was conducted during the covid-19 pandemic, which might have influenced the participants' perceptions and responses. The remote learning context and potential disruptions to regular academic activities could have impacted their experiences and perspectives, possibly influencing the outcomes. Furthermore, there was a limited variation in the voices and perspectives represented in the study. The absence of a broader range of participants from different backgrounds and disciplines restricts the comprehensiveness and inclusivity of the findings. This may limit the transferability of the study's conclusions to a wider context. Lastly, the study acknowledges the inherent subjectivity and potential biases introduced by us researchers. The choice of interview questions, interpretation of responses, and our presence may have influenced the participant's perspectives and the data collected.

Given these limitations, future research endeavors could address these limitations by employing larger and more diverse samples, conducting longitudinal studies, and incorporating various data collective methods to enhance the robustness and generalizability of the findings. Additionally, to achieve a comprehensive understanding of the correlation between organizational and individual engagement in sustainability, it would be valuable to examine both aspects simultaneously, including accessing organizational data. This comparative approach would provide deeper insights and a more holistic understanding of the topic.

## 7.0 Conclusion

Our study on the course "Green Growth" highlights the significance of management education in promoting sustainability engagement among our informants. We have found that the course plays a crucial role in inspiring and empowering students to make a difference in the pursuit of a greener future. The presence of an inspirational and empathic lecturer further enhances the engagement levels of students, fostering a genuine desire to effect positive change upon completing their studies. However, we also recognize the need for further research in this field to better understand and refine the impact of the lecturer's role in creating sustainable engagement among students.

In addition, we would like to emphasize the significant challenge faced by students when they return to their organizations and attempt to implement greener changes. Our research highlights the lack of tools and resources available to students, hindering their efforts to translate their theoretical knowledge into practical action. It is crucial for the course "Green Growth" to address this issue by creating additional materials that specifically support students in their implementation endeavors. By equipping students with the necessary tools, the course can bridge the gap between knowledge acquisition and practical implementation, enabling students to drive meaningful and sustainable change within their organizations.

Overall, our study underscores the value of management education, an inspirational lecturer, and the need for preparedness in fostering sustainability engagement. We hope that our research contributes to the growing body of knowledge in this field and serves as a catalyst for further exploration and action towards a more sustainable future.

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## 9.0 Appendix

### Appendix 1: Interview guide 1

<p><b>Phase 1</b></p>	<p style="text-align: center;"><b>Introduction</b></p> <ul style="list-style-type: none"> <li>• Introduction of us and purpose of study</li> <li>• Informed consent/confidentiality – permission to record</li> <li>• How did you get involved with sustainability work/What is your experience with sustainability work?</li> </ul>	<p style="text-align: center;"><b>Purpose</b></p> <p>This part should develop a safe environment for the respondent. The question is easy to answer and is meant to warm them up.</p>
<p><b>Phase 2</b></p>	<p style="text-align: center;"><b>Organizational experiences</b></p> <ul style="list-style-type: none"> <li>• How do you work with sustainability in your organization?</li> <li>• What are the most important experiences from this work?</li> <li>• Which elements have you succeeded with</li> <li>• Is there something that is more difficult than other things in this work?</li> <li>• Have there been any turning points?</li> <li>• What focus had innovation for sustainable work in this process?</li> <li>• Do you have examples of areas that it influenced</li> <li>• How do you think the knowledge from the course could influence your work?</li> <li>• Is there any structure for knowledge sharing within your organization</li> <li>• How does your organization allow you to apply your learnings from the course?</li> </ul>	<p style="text-align: center;"><b>Purpose</b></p> <p>In this phase we want to investigate the very core of RQ. We want stories of projects where the respondents influenced the choice based on their knowledge from the course and how they proposed the changes.</p>

<p><b>Phase 3</b></p>	<p style="text-align: center;"><b>Personal experiences</b></p> <ul style="list-style-type: none"> <li>• Can you give us some reflections on how the course was useful for you personally?</li> <li>• Do you have any stories about experiences from the course? Something you remember especially well?</li> <li>• Has the course in any way affected how you view and think about sustainability? Examples/stories?</li> </ul>	<p style="text-align: center;"><b>Purpose</b></p> <p>In this phase we want to investigate whether the respondent has any personal changes due to the course. Maybe a personal change is needed for it to be effective.</p>
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<p><b>Phase 4</b></p>	<p style="text-align: center;"><b>Sustainability</b></p> <ul style="list-style-type: none"> <li>• Can you tell us about your motivation for why you decided to attend the course?</li> <li>• What influenced your choice?</li> <li>• What motivates you when working with sustainability? Stories/examples?</li> </ul>	<p style="text-align: center;"><b>Purpose</b></p> <p>Get stories about the background of the respondent and the motivation they have for developing within the field of sustainability.</p>
<p><b>Phase 5</b></p>	<p style="text-align: center;"><b>Conclusion</b></p> <ul style="list-style-type: none"> <li>• Summarize the interview</li> <li>• Did we understand you correctly when (...)</li> <li>• Is there anything we did not ask that you expected us to ask?</li> <li>• Do you know others that could contribute to this project?</li> <li>• Is it OK for us to follow up regarding access to your organizations if that is appropriate</li> <li>• Is there anything the candidate would like to add?</li> </ul>	<p style="text-align: center;"><b>Purpose</b></p> <p>This phase is to wrap up and double-check if we have covered and understood everything correctly.</p>

## Appendix 2: Interview guide 2

### Silotenking

«Bærekrafts arbeidet må ikke gjøres av bærekraftsansvarlig eller bærekrafts avdeling på noe som helst vis.»

«Mange av de som jobber med bærekraft, de jobber kun med bærekraft, og de som jobber med økonomi, eller logistikk de jobber med det. Det er rett og slett siloer. Det er silotankgang, de jobber ikke sammen, de snakker ikke sammen, det er ingen naturlig harmoni.»

«Det hjelper ikke at jeg bare finner på masse kule mål når det er prosjektene som skal drive det fram. Det er jo avdelingene som skal følge det opp, og menneskene i organisasjonen som skal flytte oss. Jeg er helt avhengig av å ha alle i organisasjonen på laget.»

### Samarbeid

«Vi prøver å finne ut av det sammen, fordi alt bærekraftsarbeid er nybrottsarbeid. Hvis det var lett og hvis det bare var å gjøre det, så hadde vi gjort det allerede.»

«Det her må ikke bli noe sånn som skapes av en isolert kapsel i bedriften. For å få til en endring, så må du involvere. Du må involvere folk som kan lykkes. Involvere alt fra topp til bunn.»

«Vi skjønner jo at vi ikke klarer det alene og nå de målene. Vi må samarbeide med verdikjeden, og samarbeid det er jo FNs bærekraftsmål nr. 17, Samarbeidet det er nøkkelen til alt [...]»

The infographic is set against a dark green background with a decorative pattern of lighter green leaves on the right side. It is divided into two main sections. The top section, 'Personlig påvirkning og motivasjon', contains three white rounded rectangular boxes with teal borders, each containing a quote. The bottom section, 'Utfordringer med bærekraft', also contains three similar boxes with quotes. The text is in a clean, white sans-serif font.

### Personlig påvirkning og motivasjon

«Et suksesskriterier er at (...) du lever og ånder for å få bærekraft til.»

«Jeg vet jo at det er veldig mange som har tatt dette faget som ender med å bytte jobb eller har et ønske om å bytte jobb.»

«Jeg har barn, jeg føler ikke at jeg kan se de i øynene og si at jeg gjorde ingenting.»

### Utfordringer med bærekraft

«Også er det også mye intern motstand, ikke bare eksternt, det handler om å endre vaner og vilje.»

«Bærekraft det er litt sånn to skritt fram og ett tilbake, så man må tåle å få litt motstand, og så må man ikke gi seg.»

«Vi må tørre å utfordre regelverket, vi må jobbe smartere. Men det krever at det blir blest, og det krever at folk flere får kunnskap om det.»

Questions we asked during the interviews:

- When you are reading these quotes, how are you experiencing it?
- Can you reflect on these quotes?
- Do you identify with these quotes?
- How does the road ahead look in relation to the challenges you are facing now?
- Which theories and knowledge from the course can be most useful to you in the future
- Is there anything you wish you had learned but did not through the course?

Appendix 3: Coding process

<b>First time coding</b>					
Experience from the course	Cooperation	Silo-thinking	Laws and regulations	Challenges with sustainability	Personal experience and motivation
<b>Second time coding</b>					
Learning about pathways of activities and possibilities	Inviting and involving in collaboration for sustainability	Overcoming silo thinking	Recognizing types of challenges	Strengthening the student's engagement in sustainability	



## Appendix 4: Consent form

### **Vil du delta i forskningsprosjekt?**

I dette brevet vil du finne informasjon om formålet med prosjektet og hva det vil si å være en deltaker i et prosjekt som dette.

### **Formål**

Formålet med studien er å få kunnskap om ditt bærekraftsarbeid i praksis og få innsikt i hvordan dine ulike erfaringer påvirker din tilnærming til arbeidet.

### **Hvem er ansvarlig for forskningsprosjektet?**

Handelshøyskolen BI ved veileder Arne Carlsen er ansvarlig for prosjektet.

Prosjektgruppen består av følgende personer: Helene Stokka, Silje Magnetun Merødningen og Rune Schanke Eikum. Arne Carlsen ved Handelshøyskolen BI, Institutt for Ledelse og organisasjon, er veileder.

### **Hvorfor får du spørsmål om å delta?**

Du blir spurt om å delta i prosjektet fordi du har deltatt/ deltar i faget grønn vekst ved Handelshøyskolen BI og har i løpet av faget og ditt yrke, tilegnet deg erfaring som er relevant for det vi forsøker finne ut av.

### **Hva innebærer det for deg å delta?**

Deltakelse i studien vil innebære at du deltar i et individuelt intervju der vi ønsker å få vite mer om dine erfaringer relatert til bærekraftsarbeid.

Intervjuet tar ca. 45-60 minutter. Det inneholder spørsmål knyttet til dine erfaringer om bærekraft, både tidligere erfaringer og din rolle i dag. Vi tar lydopptak og notater fra intervjuet.

### **Det er frivillig å delta**

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykke tilbake uten å oppgi noen grunn. Alle opplysninger om deg 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.

- Prosjektgruppen nevnt ovenfor vil ha tilgang til datamaterialet.
- Navnet og kontaktopplysningene dine vil vi erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Ved prosjektslutt blir personopplysninger og lydopptak slettet. Transkribert material vil bli anonymisert og beholdt for videre forskning.

Deltakerne og deres studiested/arbeidsplass vil ikke kunne gjenkjennes i publikasjoner knyttet til prosjektet.

#### **Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?**

Doktorgradsprosjektet skal etter planen avsluttes innen juni 2025. Personopplysninger og lydopptak vil slettes ved prosjektslutt. Transkribert materiale vil bli anonymisert og beholdt for videre forskning.

Masteroppgaven vil bli avsluttet 3. juli, 2023. Personopplysninger, lydopptak og transkribert materiale som masterstudentene, Silje og Helene, sitter på vil bli overlevert til prosjektansvarlig Arne Carlsen.

#### **Dine rettigheter**

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

- innsyn i hvilke personopplysninger som er registrert om deg,
- å få rettet personopplysninger om deg,
- få slettet personopplysninger om deg,
- få utlevert en kopi av dine personopplysninger (dataportabilitet), og
- å sende klage til personvernombudet eller Datatilsynet om behandlingen av dine personopplysninger.

#### **Hva gir oss rett til å behandle personopplysninger om deg?**

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra *Handelshøyskolen BI* har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

#### **Hvor kan jeg finne ut mer?**

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

- Handelshøyskolen BI:
  - Phd kandidat Rune Schanke Eikum, rune.s.eikum@bi.no, 40046345
  - Professor Arne Carlsen, arne.carlsen@bi.no, 930 87 712
  - Data Protection Officer Ingrid H Østensen, Ingrid.ostensen@bi.no, 9322 3638
- NSD – Norsk senter for forskningsdata AS,
  - E-post (personverntjenester@nsd.no) eller telefon: 55 58 21 17.

## Appendix 5: Syllabus list

02/06/23

MAN 5075 Grønn vekst og konkurransekraft | BI Norwegian Business School

**MAN 5075 Grønn vekst og konkurransekraft**  
(Academic Year 2022-2023)

Green Growth and Competitiveness

View Online



29 items

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**Obligatorisk litteratur / Compulsory reading** (23 items)
 

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**Grønn vekst: en sunn økonomi for det 21. århundre** - Per Espen Stoknes, Per Espen Stoknes, 2020

[Book](#) | **Obligatorisk/Compulsory**

**Our future in the Anthropocene biosphere** - Carl Folke, Stephen Polasky, Johan Rockström, Victor Galaz, Frances Westley, Michèle Lamont, Marten Scheffer, Henrik Österblom, Stephen R. Carpenter, F. Stuart Chapin, Karen C. Seto, Elke U. Weber, Beatrice I. Crona, Gretchen C. Daily, Partha Dasgupta, Owen Gaffney, Line J. Gordon, Holger Hoff, Simon A. Levin, Jane Lubchenco, Will Steffen, Brian H. Walker, 2021-04

[Article](#) | **Obligatorisk/Compulsory**

**Redefining green growth within planetary boundaries** - Per Espen Stoknes, Johan Rockström, 2018-10

[Article](#) | **Obligatorisk/Compulsory** | For Module 1

**Economics in a Full World** - Herman E. Daly, 2005

[Article](#) | **Obligatorisk/Compulsory** | Module 1

**Det vi tenker på når vi prøver å ikke tenke på global oppvarming** - Per Espen Stoknes, 2017

[Book](#) | **Obligatorisk/Compulsory** | Module 1, 5

**The Upcycle: beyond sustainability - designing for abundance** - William McDonough, Michael Braungart, cop. 2013

[Book](#) | **Obligatorisk/Compulsory** | Module 2

**What drives eco-innovation? A review of an emerging literature** - Jana Hojnik, Mitja Ruzzier, 2016-06

[Article](#) | **Obligatorisk/Compulsory** | Module 2

**Greening Goliaths versus emerging Davids — Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship** - Kai Hockerts, Rolf Wüstenhagen, 2010-9

[Article](#) | **Obligatorisk/Compulsory** | Module 2

**Sustainable innovation, business models and economic performance: an overview** - Frank Boons, Carlos Montalvo, Jaco Quist, Marcus Wagner, 2013

[Article](#) | **Obligatorisk/Compulsory** | Module 2

**Å planlegge for store samfunnsomveltninger: Paradigmeanalyse som fremsynsmetode** - Bjørn Brunstad, 2008

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[Article](#) | [Obligatorisk/Compulsory](#) | Module 3

**Earth4All - Upgrading the economic system for the 21st century** - Club of Rome, 2022-06-01

[Document](#) | [Obligatorisk/Compulsory](#) | Module 3

**Vision 2050: The new agenda for business** - World Business Council for Sustainable Development, 2010

[Document](#) | [Obligatorisk/Compulsory](#) | Module 3

**Doughnut economics: seven ways to think like a 21st-century economist** - Kate Raworth, 2017

[Book](#) | [Obligatorisk/Compulsory](#) | Module 3

**Six capitals: the revolution capitalism has to have - or can accountants save the planet?** - Jane Gleeson-White, 2014

[Book](#) | [Obligatorisk/Compulsory](#) | Module 4. Kan også bruke Isbn: 9781760876784

**Accounting as reality construction: Towards a new epistemology for accounting practice** - Gareth Morgan, 1988

[Article](#) | [Obligatorisk/Compulsory](#) | Module 4

**Firms and social responsibility: A review of ESG and CSR research in corporate finance** - Stuart L. Gillan, Andrew Koch, Laura T. Starks, 2021-02

[Article](#) | [Obligatorisk/Compulsory](#) | Module 4

**Samfunnsansvar, etikk og bærekraft** - Caroline Ditlev-Simonsen

[Chapter](#) | [Obligatorisk/Compulsory](#) | Module 4

Kapittel 18, s. 518-541

**Twenty years of ecosystem services: How far have we come and how far do we still need to go?** - Robert Costanza, Rudolf de Groot, Leon Braat, Ida Kubiszewski, Lorenzo Fioramonti, Paul Sutton, Steve Farber, Monica Grasso, 2017-12

[Article](#) | [Obligatorisk/Compulsory](#) | Module 4

**Nature as an asset, Chapt. 1** - P. Dasgupta

[Chapter](#) | [Obligatorisk/Compulsory](#) | Module 4

**Findings all psychologists should know from the new science on subjective well-being.** - Ed Diener, Samantha J. Heintzelman, Kostadin Kushlev, Louis Tay, Derrick Wirtz, Lesley D. Lutes, Shigehiro Oishi, 2017

[Article](#) | [Obligatorisk/Compulsory](#) | Module 4

**Leadership for sustainability: strategies for tackling wicked problems** - Robert Bruce Hull, David P. Robertson, Michael Mortimer, 2020

[Book](#) | [Obligatorisk/Compulsory](#) | Module 5

**Corporate Sustainability at a Crossroads** - David Kiron, Gregory Unruh, Martin Reeves, Nina Kruschwitz, Holger Rubel, Summer 2017

[Article](#) | [Obligatorisk/Compulsory](#) | Module 5

"How Leaders Can Move Beyond Greenwashing Toward Real Change." - C. Love, R. G.

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Eccles, January 25, 2022

[Webpage](#) | [Obligatorisk/Compulsory](#) | Module 5

### Anbefalt litteratur / Recommended reading (6 items)

**Unlocking the inclusive growth story of the 21st Century: Accelerating climate action in urgent times** - The Global Commission on the Economy and Climate, 2018

[Document](#) | [Anbefalt/Recommended](#) | Module 1, 2, 3 and 5

**Penger og sjel: en ny balanse mellom finans og følelser** - Per Espen Stoknes, 2007

[Book](#) | [Anbefalt/Recommended](#) | Module 3, 4

**Regeneration: ending the climate crisis in one generation** - Paul Hawken, 2021

[Book](#) | [Anbefalt/Recommended](#)

**The green executive: corporate leadership in a low carbon economy** - Gareth Kane, 2011

[Book](#) | [Anbefalt/Recommended](#) | Module 5

**The Dasgupta Review deconstructed: an exposé of biodiversity economics** - Clive L. Spash, Frédéric Hache, 2021-05-26


[Article](#) | [Anbefalt/Recommended](#) | Module 4

**Restart: 7 veier til bærekraftig business** - Sveinung Jørgensen, Lars Jacob Tynes Pedersen, cop. 2017

[Book](#) | [Anbefalt/Recommended](#) | Module 1, 2, 5

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## Appendix 6: NSD consent

25/05/2023, 11:54	Meldeskjema for behandling av personopplysninger	
		
<a href="#">Meldeskjema</a> / <a href="#">Complex issues as the new normal: Innovating for a sustainable fut...</a> / Vurdering		
<h2>Vurdering av behandling av personopplysninger</h2>		
<b>Referansenummer</b> 444485	<b>Vurderingstype</b> Standard	<b>Dato</b> 05.11.2021
<b>Prosjekttittel</b> Complex issues as the new normal: Innovating for a sustainable future		
<b>Behandlingsansvarlig institusjon</b> Handelshøyskolen BI / BI Oslo / Institutt for ledelse og organisasjon		
<b>Prosjektansvarlig</b> Arne Carlsen		
<b>Prosjektperiode</b> 15.11.2021 - 31.12.2025		
<b>Kategorier personopplysninger</b> Alminnelige		
<b>Lovlig grunnlag</b> Samtykke (Personvernforordningen art. 6 nr. 1 bokstav a)		
Behandlingen av personopplysningene er lovlig så fremt den gjennomføres som oppgitt i meldeskjemaet. Det lovlige grunnlaget gjelder til 31.12.2025.		
<a href="#">Meldeskjema</a>		
<b>Kommentar</b> Our assessment is that the processing of personal data in this project will comply with data protection legislation, so long as it is carried out in accordance with what is documented in the Notification Form and attachments, 05.11.2021, as well as in correspondence with NSD. Everything is in place for the processing to begin.		
<b>TYPE OF DATA AND DURATION</b> The project will be processing general categories of personal data until 31.12.2025.		
<b>LEGAL BASIS</b> The project will gain consent from data subjects to process their personal data. We find that consent will meet the necessary requirements under art. 4 (11) and 7, in that it will be a freely given, specific, informed and unambiguous statement or action, which will be documented and can be withdrawn.		
The legal basis for processing general categories of personal data is therefore consent given by the data subject, cf. the General Data Protection Regulation art. 6.1 a).		
<b>PRINCIPLES RELATING TO PROCESSING PERSONAL DATA</b> NSD finds that the planned processing of personal data will be in accordance with the principles under the General Data Protection Regulation regarding:  lawfulness, fairness and transparency (art. 5.1 a), in that data subjects will receive sufficient information about the processing and will give their consent purpose limitation (art. 5.1 b), in that personal data will be collected for specified, explicit and legitimate purposes, and will not be processed for new, incompatible purposes		
<a href="https://meldeskjema.sikt.no/617ec3bc-0b6a-4c18-97a0-45793d8abc790/vurdering">https://meldeskjema.sikt.no/617ec3bc-0b6a-4c18-97a0-45793d8abc790/vurdering</a>		
		1/2

data minimisation (art. 5.1 c), in that only personal data which are adequate, relevant and necessary for the purpose of the project will be processed

storage limitation (art. 5.1 e), in that personal data will not be stored for longer than is necessary to fulfil the project's purpose

#### THE RIGHTS OF DATA SUBJECTS

As long as the data subjects can be identified in the data material, they will have the following rights: access (art. 15), rectification (art. 16), erasure (art. 17), restriction of processing (art. 18), data portability (art. 20).

NSD finds that the information that will be given to data subjects about the processing of their personal data will meet the legal requirements for form and content, cf. art. 12.1 and art. 13.

We remind you that if a data subject contacts you about their rights, the data controller has a duty to reply within a month.

#### FOLLOW YOUR INSTITUTION'S GUIDELINES

NSD presupposes that the project will meet the requirements of accuracy (art. 5.1 d), integrity and confidentiality (art. 5.1 f) and security (art. 32) when processing personal data.

To ensure that these requirements are met you must follow your institution's internal guidelines and/or consult with your institution (i.e. the institution responsible for the project).

#### NOTIFY CHANGES

If you intend to make changes to the processing of personal data in this project it may be necessary to notify NSD. This is done by updating the Notification Form. On our website we explain which changes must be notified: <https://www.nsd.no/en/data-protection-services/notification-form-for-personal-data/notify-changes-in-the-notification-form>

Wait until you receive an answer from us before you carry out the changes.

#### FOLLOW-UP OF THE PROJECT

NSD will follow up the progress of the project at the planned end date in order to determine whether the processing of personal data has been concluded.

Good luck with the project!