



Understanding Sustainability in Norway, exploring two dimensions: Consumer Willingness to Pay and Talent attraction

Tobias Espolin Rosenberg

Dissertation written under the supervision of Professor Nuno Moreira da Cruz

Dissertation submitted in partial fulfilment of requirements for the MSc in Management with specialization in Corporate Finance, at the Universidade Católica Portuguesa, 12th of September 2024

Abstract

Addressing the environmental crisis is arguably the greatest challenge we are facing nowadays. To cope with this challenge, effective and well-tailored solutions should be detected and implemented. It necessitates an extensive comprehension of the context in which one will operate.

This study seeks to unravel the complexities of Norway's sustainability attributes by focusing on two domains, namely, consumers' willingness to pay (WTP) for sustainable products and sustainability as a talent acquisition tool.

Conducting a quantitative research technique, this study will address several research questions regarding the above mentioned dimensions.

The purpose is to provide useful information that may assist businesses, organisations, and other entities better understand how to best encounter sustainability issues in Norway. Finally, the aim of this thesis is to contribute to the larger debate of environmental sustainability and to facilitate the implementation of effective green initiatives in Norway.

Dissertation title: Understanding Sustainability in Norway, exploring two dimensions:
Consumer Willingness to Pay and Talent attraction

Author: Tobias Espolin Rosenberg

Keywords: Sustainability, credibility, talent acquisition, willingness to pay

Resumo

Abordar a crise ambiental é, sem dúvida, o maior desafio que enfrentamos atualmente. Para lidar com esse desafio, é necessário detectar e implementar soluções eficazes e bem ajustadas. Isso requer uma compreensão ampla do contexto em que se vai operar.

Este estudo procura desvendar as complexidades das características de sustentabilidade da Noruega, focando em dois domínios, a saber, a disposição dos consumidores em pagar (WTP) por produtos sustentáveis e a sustentabilidade como uma ferramenta de atração de talentos. Utilizando uma técnica de pesquisa quantitativa, este estudo abordará várias questões de pesquisa relacionadas com as dimensões mencionadas.

O objetivo é fornecer informações úteis que possam ajudar empresas, organizações e outras entidades a entender melhor como enfrentar os problemas de sustentabilidade na Noruega. Por fim, o objetivo desta tese é contribuir para o debate mais amplo sobre a sustentabilidade ambiental e facilitar a implementação de iniciativas verdes eficazes na Noruega.

Título: Compreendendo a Sustentabilidade na Noruega, explorando duas dimensões:

Disposição do Consumidor para Pagar e Atração de Talentos

Autor: Tobias Espolin Rosenberg

Palavras-chave: Sustentabilidade, credibilidade, aquisição de talentos, disposição a pagar

Acknowledgements

I am deeply thankful to Professor Nuno Moreira da Cruz for his invaluable guidance throughout my thesis journey. His insight and support were crucial to this project.

I am grateful to Católica for incorporating sustainability into their curriculum. Professors have emphasised the importance of sustainability today and in the future in an engaging and convincing manner through a wide range of courses. This sparked my interest in the field and convinced me that businesses, institutions, and individuals can make a positive impact.

A huge thanks to my family and parents for their endless support and love. In particular my uncle, for giving me invaluable advice on the analysis part. And to my all my friends and classmates, you have made this academic venture fun and challenging. I could not have asked for better company.

This thesis is a testament to the support and motivation from everyone mentioned above. I am eternally grateful for this.

Table of Contents

RESUMO.....	3
ACKNOWLEDGEMENTS	4
GLOSSARY	7
CHAPTER 1: INTRODUCTION	8
1.5 DISSERTATION OUTLINE	12
2.1 SUSTAINABLE PRODUCTS, SERVICES, AND COMPANIES	12
2.2 COMMUNICATING SUSTAINABILITY AND ITS CREDIBILITY	14
2.3 SUSTAINABILITY IN NORWAY	15
2.4 COST OF SUSTAINABLE PRODUCTS.....	17
2.5 CONCERN ABOUT SUSTAINABILITY AND WILLINGNESS TO PAY	18
2.6 SUSTAINABILITY AS A DRIVER IN TALENT ACQUISITION	19
2.7 HYPOTHESES & DATA ANALYSIS	21
CHAPTER 3: METHODOLOGY	23
3.1 RESEARCH APPROACH.....	23
3.2 PRIMARY DATA – ONLINE QUESTIONNAIRE.....	23
3.2.1 Data Collection.....	24
3.2.2 Research Design.....	24
3.2.3 Measurement/Indicators	25
CHAPTER 4: ANALYSIS AND RESULTS	28
4.1 SAMPLE DESCRIPTION	28
4.2 RELIABILITY OF SCALES	29
4.3 RESULTS.....	30
4.3.1 Research Question 1	30
4.3.2 Research Question 2	31
4.3.3 Research Question 3	32
4.3.4 Research Question 4	33
4.3.5 Research Question 5	33
4.3.6 Research Question 6	34
4.3.7 Research Question 7	35
CHAPTER 5: GENERAL DISCUSSION	38
5.1 MAIN FINDINGS (CONCLUSION)	38
5.2 MANAGERIAL IMPLICATIONS	40
5.3 ACADEMIC IMPLICATIONS	41
5.4 LIMITATIONS	41
5.5 FUTURE RESEARCH.....	42

BIBLIOGRAPHY.....	43
APPENDICES.....	50
APPENDIX 1: ONLINE QUESTIONNAIRE	50
APPENDIX 2: SAMPLE DESCRIPTION OUTPUT	57
APPENDIX 3: CRONBACH’S ALPHA TEST RESULTS	59
APPENDIX 4: RESEARCH QUESTION 1	59
APPENDIX 5: RESEARCH QUESTION 2	60
APPENDIX 6: RESEARCH QUESTION 4	61
APPENDIX 7: RESEARCH QUESTION 5	61
APPENDIX 8: RESEARCH QUESTION 7 (HYPOTHESIS 7A)	62
APPENDIX 9: RESEARCH QUESTION 7 (HYPOTHESIS 7B)	63
APPENDIX 10: RESEARCH QUESTION 7 (DATA ANALYSIS 7)	64

Tables and figures

FIGURE 1: EXAMPLE OF PRODUCT IMAGE	26
FIGURE 2: ILLUSTRATION OF ITEMS ACCOMPANIED BY AN EXAMPLE	27
FIGURE 3: BAR CHART OF PERCENTAGE PRICE PREMIUM BY PRODUCT CATEGORY	32
FIGURE 4: BAR CHART DISPLAYING THE MEDIAN AND AVERAGE SCORES OF CREDIBILITY FOR VARIOUS SUSTAINABILITY FACTORS	33
FIGURE 5: BAR CHART DISPLAYING THE MEDIAN AND AVERAGE SCORES OF IMPORTANCE OF VARIOUS CORPORATE SUSTAINABILITY ASPECTS	34
FIGURE 6: BAR CHART DISPLAYING THE MEDIAN AND AVERAGE SCORES OF IMPORTANCE OF A COMPANY’S SUSTAINABILITY AND WTP PREMIUM FOR SUSTAINABLE PRODUCTS BY AGE	37
FIGURE 7: BAR CHART DISPLAYING THE MEDIAN AND AVERAGE SCORES OF IMPORTANCE OF A COMPANY’S SUSTAINABILITY AND WTP PREMIUM FOR SUSTAINABLE PRODUCTS BY GENDER	37
FIGURE 8: BAR CHART DISPLAYING THE MEDIAN AND AVERAGE SCORES OF IMPORTANCE OF A COMPANY’S SUSTAINABILITY AND WTP PREMIUM FOR SUSTAINABLE PRODUCTS BY EDUCATION	37
FIGURE 9: BAR CHART DISPLAYING THE MEDIAN AND AVERAGE SCORES OF IMPORTANCE OF A COMPANY’S SUSTAINABILITY AND WTP PREMIUM FOR SUSTAINABLE PRODUCTS BY OCCUPATION	38
FIGURE 10: BAR CHART DISPLAYING THE MEDIAN AND AVERAGE SCORES OF IMPORTANCE OF A COMPANY’S SUSTAINABILITY AND WTP PREMIUM FOR SUSTAINABLE PRODUCTS BY INCOME	38
TABLE 1: OPERATIONAL MODEL	28
TABLE 2: SAMPLE DESCRIPTION OF DEMOGRAPHICS	29
TABLE 3: CRONBACH’S ALPHA OUTPUT	ERROR! BOOKMARK NOT DEFINED.

TABLE 3: CRONBACH'S ALPHA OUTPUT 30

Glossary

CSP Corporate Social Performance

DA	Data analysis
EV	Electrical Vehicle
GFI	Green Future Index
H	Hypothesis
n.d.	No date
PVC	Polyvinyl chloride
RQ	Research Question
WTP	Willingness to pay
PS	Problem Statement

Chapter 1: Introduction

1.1 Background

Loss of biodiversity, a breakdown of ecological communities, a constantly increasing temperature and an increased number of natural disasters like storms, droughts, and wildfires. These are just a few of the consequences of human-induced climate change that we – inhabitants of the earth - are already encountering, as outlined in a report by the Natural Resources Defence Council (Lindwall, 2022). These consequences have an impact on most people’s lives, to some extent. Some people lose their homes as a result of heavy storms, while others have to leave their village because their sources of food have disappeared due to a drought. It is not without good reason that the concern for climate change has significantly escalated in recent times – more profoundly outlined in chapter 2.4 (Faelli et al., 2023). There are also huge financial damage caused by the environmental changes. For instance, a study conducted by Dr. Oliver Schenker at Frankfurt School of Finance and Management shows that heat waves typically cause around 360 million US dollars in global losses, largely due to their impact on imports (Forbes, 2023). The big question therefore is: What can be done to counteract these negative impacts?

In 2015 United Nations stated in their “Transforming our world: The agenda for sustainable development” report that in order to insure a continuing global health and well-being of

society, sustainable business operations are pivotal. Sustainable business operations are more deeply described in chapter 2.1. There are currently over 8 billion people, thus the consumer patterns of all those individuals make a huge total impact (United Nations, 2022). An essential prerequisite for sustainable operations is that companies achieve profitability while adhering to sustainable practices. A lot of companies find it difficult to figure out a balance between the competitive structure of the markets they are targeting, profitability, and the concerns of consumers for the environment (D'Souza et al., 2006). Thus, being aware of the WTP of one's target group is valuable knowledge for a company when preparing profitability calculations, deciding strategy, and otherwise making informed operational decisions. The fact that the price of a product or service affects the demand, which in turn affects the supply (Gale, 1955), also highlights the importance of this knowledge – both for companies and to the advancement of sustainable offerings.

Not only being aware of the willingness to pay (WTP) is important, but it is also important to convey the consumer that the product or service is indeed sustainable. Trust leads to change in behaviour, which in turn influences consumer decisions (Reichheld et al., 2023).

1.2 Problem Statement

This thesis will be composed in order to get an understanding of how sustainability has been introduced into the decision-making of Norwegians both as consumers and employees for the future. In a few decades, sustainability has moved from an issue on the margins to a non-dispensable foundation of job choice and consumer behaviour. While Norway has the status of a leader in the environmental field and is therefore dedicated to sustainable development, there is still no clarity about what actually motivates individual behaviour in these specific areas. Thus, this thesis tries to contribute to giving a better explanation to the WTP of consumers for sustainable products and the sustainability profile as a talent-attracting tool in the Norwegian context. The problem statement is noted as follows:

PS: *How do Norwegians value sustainability in their consumer and employment decisions?*

From the problem statement, the following research questions can be derived:

RQ1: Are Norwegian consumers willing to pay a higher price premium for sustainable products than the global average?

RQ2: How does willingness to pay a premium for sustainable products vary across different product categories and price points in Norway?

RQ3: Which factors are most effective in credibly convincing Norwegian consumers of a product's sustainability?

RQ4: How important is a company's sustainability profile to Norwegian employees when selecting a workplace?

RQ5: Among various factors considered for employment decisions, where does a company's sustainability profile rank for Norwegians?

RQ6: How important are different aspects of corporate sustainability to Norwegian job seekers when considering a potential workplace?

RQ7: How do demographic factors such as gender, age, income level, and educational attainment influence the value placed on sustainability in consumer and employment decisions among Norwegians?

1.3 Relevance

This research study aims to contribute valuable insights to both academic discussions and managerial decision-making

Academically, while there is extensive literature on sustainability, this study fills a notable gap by examining specific aspects like credibility, willingness to pay (WTP), and the influence of sustainability on employment decisions within Norway. Despite global research in these areas, the Norwegian market has been relatively understudied. Already by the late 1980s, it was evident that strategies focused on differentiation or low-cost leadership were insufficient to offer companies a competitive advantage in the long run (D'Souza et al., 2006). This study provides new insights into how sustainability is valued by Norwegian consumers and job

seekers, offering a basis for further research, particularly in areas like cross-cultural analysis and long-term trend observation.

From a managerial standpoint, the findings deliver actionable insights for businesses in Norway. The clear preference of Norwegian consumers for paying more for sustainable products indicates a strategic opportunity for companies to introduce premium pricing models. Furthermore, the study emphasizes the importance of certifications and third-party validation in building consumer trust regarding sustainability. For employers, even though sustainability might not be the most critical factor in job selection, it remains influential, particularly for older and more educated candidates. Thus, underlining the necessity of communication by companies in employer branding to be very focused if they are going to attract and retain the best workforce.

These insights provide the managers with knowledge for making strategic informed decisions, hence companies stay competitive within a market which is now increasingly valuing sustainability.

1.4 Research Methods

This was mainly primary quantitative research on the influence of sustainability in the Norwegian consumer's willingness to pay for green products, with relevance also in talent acquisition. It used an online survey to collect data from a diversified group of Norwegian respondents. For this reason, the survey design is mixed and includes questions on the Likert scale, multiple-choice, and some open-ended questions to harvest a wide range of insights.

Then the data that was to be gathered needed to be analysed using different statistical tools. Descriptive statistics directed toward understanding what is at stake in the response trends; on the other hand, techniques more advanced such as regression analysis and ANOVA were used to go into further detail of the interrelation existing among the various variables. To make the survey results reliable, Cronbach's alpha was computed. Besides, the research attempted to determine how factors such as age, gender, income, and education might influence the willingness of individuals to pay and job preference regarding sustainability. This particular methodology was chosen so as to provide solid evidence that might have some use for business and policymakers in Norway.

1.5 Dissertation Outline

The dissertation is structured such that it will lead the reader through the process of the research step by step. It has introduced the reader to the topic of the research: importance and the methodology used. Chapter two took a deep view into theoretical backgrounds such as sustainability, consumer behavior, and how sustainability can shape talent acquisition in Norway. The third chapter gives the research methodology, detailing data collection and analysis. Chapter four presents and discusses findings in relation to the research questions. This final chapter concludes some findings, elaborates on their implications, and is finished with the limitations of the study and suggestions for future research.

Chapter 2: Theoretical Discussion

This section of the thesis aims to deepen the understanding of the field of sustainability, specifically within the context of Norway, by exploring relevant literature and characteristics unique to the Norwegian setting. Thus, a number of topics related to the RQ's will be discussed.

2.1 Sustainable products, services, and companies

Sustainability, a multifaceted concept with varying definitions, is fundamental to understanding its application within Norway's economic and social landscape. This thesis will delve into the various types of sustainable products and services and examine the nature of sustainable companies and institutions. Consequently, it is essential that both categories are clearly defined. As of now, there is not any established consensus on the definition of a sustainable or “green” product, service, or company (Reddy et al., 2023). Consumers also find it challenging to determine whether a product is more sustainable. About 75% of the time, customers were incorrect or lacked knowledge when asked to choose which of two goods produced larger carbon emissions (Faelli et al., 2023).

However, an effective and arguably accurate method of differentiation include determining whether a product or service has been classified as sustainable by an independent institution that specialises in sustainability certification. In 2007, D'Souza et al., established a framework

for environmental labels. Type I labelling relies on a system in which third-party environmental institutions offer an assessment. Various stakeholders agree on certain thresholds in relation to different product groups, that the relevant company has to exceed or reach to gain a certification. In contrast, Type II labels are issued by the provider itself and relates to various claims, often printed directly on the product or communicated through their own marketing channels. “Container made of recycled material” or “Less environmental impact” serve as examples. Lastly, a Type III label is to some extent similar to Type I. However, whereas Type I labelling offers environmental verification for any product, Type III labelling relies on independent third parties to evaluate products based on comprehensive life-cycle data and environmental performance across multiple indices such as for instance material input and chemical consumption.

"The Nordic Swan" is the official eco-label for products and services available in the Nordic countries. This is equivalent to the official EU certification called “EU Ecolabel”. The requirements to obtain the certification vary between different product groups. To illustrate, specific instances comprise energy effective production, prohibition against PVC, and a high proportion of renewable and/or recycled materials used. Equally important are the requirements pertaining social conditions. The Nordic Swan requires that the production of various ecolabel-certified products occur in factories adhering to the core conventions of the International Labour Organization (ILO), in which exclude discrimination, child labour and forced labour. There is a requirement for comprehensive documentation, as well as they conduct on site visitations (Svaneriket, n.d.). According to D’Souza et al.’s framework, Svaneriket would be categorized as a Type III label.

Establishing a distinct split between sustainable and not sustainable companies and institutions proves difficult. Nonetheless, The United Nations defines sustainable development in three different dimensions, in which provides a guiding framework. The first pertains to climate and environment, which covers emissions and degradation that come as a result of human activities. The second dimension resolves around the economy and how to protect the financial stability for individual and societal welfare in general, therefore within the limits of environmental tolerance. The last aspect is premised over the social settings and touches on critical parts of education, quality employment, equality, cultural diversity, among other sections, including the delivery of general health services (Forente Nasjoner, 2023). The

three dimensions align with the “Triple Bottom Line theory of sustainability”, brought to light by Elkington (1998), where he refers to planet, people, and profit.

The benefits of adopting sustainable business practices extend beyond ethical considerations, there are also corporate rewards to gain. According to Forte & Lamont (1998), choosing a green business practice comes with great advantages. To begin with, it promotes profitability, as well as enhancing the motivation and commitment of employees. On top of that, green business practice boosts customer loyalty (Forte & Lamont, 1998).

2.2 Communicating sustainability and its credibility

As illustrated in chapter 2.3 and 2.5, the consumers of the present have an intention to choose more sustainably. Hence, the first step for a business to reap this opportunity is to actually engage in more sustainable operations, like for instance reducing water consumption or choosing recycled material of packaging. However, it is crucial to convey to the consumer that they are making a sustainable choice in a trustworthy and effective way. When addressing talent acquisition, the same argument holds true. In this context, companies also need to be aware of greenwashing. The imbalance between environmentally conscious rhetoric and real actions is commonly referred to as "greenwashing" (Walker & Wan, 2012). In recent years, customers have become less convinced that company environmental promises are credible (Lyon & Montgomery, 2013). Given the present circumstances marked by intense scrutiny and doubt, engaging in greenwashing likely leads to a harmed reputation, consequently leading to a weakened legitimacy (Gatti et al., 2019).

Within the domain of sustainable communication, various channels exist for distributing information to consumers and potential employees. These channels encompass both direct messaging from companies themselves and external sources, including institutional bodies. In terms of direct messaging, product descriptions, sustainability reports, and information on websites serve as examples. Among external sources we find certifications, media coverage, third-party reviews, and consumer ratings.

Previous studies have investigated the credibility of some of the factors mentioned above. A joint study conducted by McKinsey and Nielsen IQ suggests that multiple certifications, in

contrast to a single one, enhance the perceived credibility of consumers (McKinsey, 2023). Despite that, the study did not measure the credibility of certifications seen in isolation. Furthermore, product descriptions on sustainability influence consumer perceptions of quality. The credibility is however dependent on how an individual see the broader corporate sustainable strategy (Borin et al., 2011). A study published in 2022, conducted by Stutz et al. came to the conclusion that external stakeholders might doubt the accuracy of the information that organizations voluntarily share about their sustainability practices (i.e. sustainability reports). This credibility gap can be affected by the organizational governance structure (Stutz et al., 2022). More concretely, the study clarifies that family firms have an advantage over non-family firms regarding the credibility of sustainability reports seen from an external stakeholder's perspective. When it comes to media coverage, there is, not surprisingly, proof that negative publicity on sustainability matters harm the overall perceived sustainability level of the company mentioned (Cho et al., 2012).

Another interesting point to mention is that sustainability initiatives are often poorly communicated, leading to potential employees and recruiters being unaware of a company's true sustainability profile (Klingenberg & Kochanowski, 2015). This lack of clear communication may have undesirable consequences, such as worse talent attraction and reputation. This underscores the importance of taking advantage of credible sources to communicate sustainability initiatives to various stakeholders.

Despite finding some studies looking at the relation between credibility and some of the factors, any research comparing these factors in contrast to one another, and their credibility could not be found. In addition, none of them were aimed at the Norwegian population specifically.

2.3 Sustainability in Norway

In order to make sustainable and competent business decisions in Norway, a general overview of its sustainability characteristics is beneficial to outline. In terms of sustainability, Norway is an excellent focal point, but it's crucial to consider this from a global perspective as well. How does Norway's sustainability strategy compare against that of other nations?

The acknowledged university "Massachusetts Institute of Technology" annually a comprehensive ranking that assesses the environmental performance of countries globally.

The ranking, entitled “The Green Future Index” (GFI), evaluates countries based on a thorough methodology that involves five pillars, namely carbon emissions, energy transition, green society, clean innovation, and climate policy. The GFI ranks Norway as number 3, following Iceland and Finland, number 1 and 2 respectively. In Pillar 2, energy transition, Norway is currently ranked third, having ascended 23 positions on the leaderboard since last year. This means that renewable energy contributes to a high share of the total energy mix, in addition to a high paced growth on the area. Furthermore, Norway is ranked 7th in Pillar 5, climate policy, in which is evaluated on carbon pricing, suitable agriculture and pandemic pivot indicators. A high rank (6th) is also obtained in pillar 4, clean innovation. This indicates a high number of green patents, investment in cross-border clean energy initiatives, and investment in sustainable food tech. However, in pillar 1 (carbon emissions), and pillar 3 (green society), Norway falls short of making the top 10. Consequently, there is room for improvement on recycling, meat and dairy consumption, and curbing carbon dioxide emissions (O’Brien, 2023).

To point out a couple of specific aspects contributing to the strong position, electrical vehicles (EVs) and financial aid for sustainable projects are among them. As of 2023, Norway is the world's leading consumer of electric vehicles (EVs) on a per capita basis (O’Brien, 2023). Furthermore, in 2022, it came to light that Norway will pay Indonesia 56 million USD under a climate agreement for its effective reduction of carbon dioxide emissions through the preservation of its extensive tropical rainforests (Jong, 2022).

A 2022 study conducted by GreenMatch analysed the greenest countries in the world. They combined different well-known reports, including the abovementioned GFI, to make the ranking. The other reports taken into account were the Environmental Performance Index by Yale University, a report from EU’s Joint Research Centre, and the IQ Air information platform. Based on a weighted calculation on the 4 reports, Norway was ranked 9th (McClelland, 2022).

On the behalf of Boston Consulting Group, Prösch & Ziesler conducted a survey on Norwegian consumer behaviour during the COVID pandemic. First of all, 25 to 30% of the respondents stated an increased importance of sustainability during the pandemic. 20% made it clear that, during the pandemic, they started buying more sustainable – and expect to do the same after its end. Lastly, over 40% claimed that it is either important or very important that a product/service is a sustainable choice. During the first 16 months of the pandemic, rating of

household savings doubled (Prösch & Ziesler, 2021). Considering that the WTP depends on the financial situation of a consumer (Breidert, 2005), a higher level of saving might have biased the abovementioned results. Thus, research of a non-pandemic context will come helpful.

As has been noted, Norway is among the most sustainable countries in the world. Whether this is reflected in Norwegian consumers' WTP and as a way to attract talent remains unanswered.

2.4 Cost of sustainable products

Unfortunately, producing products and offering services sustainably often incurs higher costs. For perspective, products marketed as sustainable in the U.S. typically carry an average premium of 28%, according to Faelli et al. (2023). This is due to a variety of reasons.

One of the main reasons is due to higher material cost. For instance, the average price of Sustainable Aviation Fuel throughout 2022 were around 2.5 times more expensive than conventional jet fuel in the same period, according to International Air Transport Association (2023), thus making sustainable flights more costly per se. Given the fact that the aviation industry is characterized by many players, thus high competition, their margins are not particularly high (Merkert & Swidan, 2019). The relatively low margins imply that the companies would be forced to put the additional cost of the sustainable fuel on the customer price. This mechanism – that higher material costs increase the price offered to consumers - is transferrable to most industries. Other examples include organic cotton versus conventional cotton and organic food versus conventional food (Brown & Sperow, 2005).

Secondly, there is an additional cost related to research and development (R&D). To create sustainable products in novel ways that minimise harm to the environment, more innovation and creativity are often necessary. R&D activities commonly requires financial funding for a company to conduct (Hall, 2002). Hence, developing new sustainable methods of production, discovering less harmful raw material, and enhancing the knowledge level on sustainability comes with a cost premium in terms of both monetary investments and time consumption.

Similarly, certification and regulation contribute to additional cost. To prove that a product is eco-friendly and sustainable, products or services have to fulfil various standards and principles. Often the institutions that provide such certificates are third-party organizations that have either prepared internal guidelines and/or put governmental frameworks into practice. In chapter 2.1, some of the specific requirements are mentioned. Even if excluding the cost premium assignable to more expensive material input and R&D activities, there is a cost of preparing the documentation needed. On top of that, the third-party organization usually charges an amount for their work. The price often depends on the size of the company requesting the certification. To illustrate, imagine a company that sells furniture and would like to get one of their sofa's svanemerket certified. If their turnover of the product is 10 000 000 EUR and the production location is outside the Nordics, the price required for one year of certification is approximately 31 500 EUR (Svanemerket, n.d.).

Collectively, all these factors contribute to the premium pricing of sustainable products, making them more expensive compared to their non-sustainable counterparts.

2.5 Concern about sustainability and willingness to pay

WTP can be characterised as the maximum price a particular customer is willing to accept for a good or service (Le Gall-Ely, 2009). Various empirical studies have demonstrated that even small changes in prices and the corresponding purchasing patterns of consumers can have a significant impact on profits and revenues (Marn et al., 2003). This advocates for companies to pay great attention to the matter. Thus, when measuring the turnover of a product or a service, being aware of the consumers WTP is crucial.

There have been conducted several studies on consumers' WTP for sustainable products. As stated in chapter 2.3, buying green products usually comes with a price premium. With regard to Wasik's paper (1992), consumers are not willing to pay this premium. In addition, consumers are price-sensitive when considering to choose a sustainable alternative (Mandese, 1991). Rather than sustainability being one of the most essential attributes of a product, customers prioritise price, convenience, and value as the most important purchase factors (Roberts, 1996). However, the international consulting company Bain & Company conducted a survey with more than 23 000 participants in 2023 which gave an up-to-date insight on some of this matter (Faelli et al., 2023). First of all, the report concluded that 64% of

consumers worldwide are highly concerned around climate concerns, at the same moment as the concerns have elevated significantly the last two years with 60% experiencing a growing fear. Perhaps surprising to some, the difference across generations is quite small. On average 68% of boomers (people born between 1946 and 1964) are worried, compared to 72% of gen-Zs (people born between 1997 and 2012). In the context of consumers WTP, the global average is on a 12% premium. Among those with the highest WTP we find India (20%) and Indonesia (19%). At the opposite end of the scale, UK (8%) and Japan (6%) can be found. It is worth noting that this corresponds well with the level of concerned people of the population. Consumers in fast-growing markets are more than 20 percentage points more concerned about environmental sustainability than those in developed markets (Faelli et al., 2023).

A contrast to Roberts' (1996) finding is that 50% of the consumers surveyed stated that sustainability is among the 4 most important purchase criteria when acquiring a product or service. This aligns well with more recent research, that have come to the conclusion that people in general constantly become more and more aware of the environmental footprint of their actions (Close, 2021).

Other institutions have conducted research resulting in similar outcome. According to a 2019 online survey, 50% of participants worldwide claimed they changed goods or services considering a business went against their ethical standards. The primary justification given for the change was to promote goods or services that "protect the environment" (WWF, 2020).

In essence, the literature indicates that consumers are more sustainable aware than ever before. Seen in isolation, this aspect implicitly indicates a greater WTP. On the other hand, the results are, to a certain extent, inconsistent. Another crucial point is that there is a lack of studies like the abovementioned focused on the Norwegian market specifically.

2.6 Sustainability as a driver in talent acquisition

The recruiting procedures employed by organisations have received attention recently, due to the widespread recognition of humans as valuable assets that organisations can utilise to achieve competitive advantage, and thus experiencing a higher likelihood of organisational success (Deakins & Bensemman, 2019; Hiltrop, 1999). Notably, Ghavidel et al. (2020) emphasized the need for more research from the perspective of firms to understand the matching patterns and factors that attract high-quality talent, suggesting that this area remains

underexplored. Already in the late 1990s, numerous researchers conducted a thorough review of publications on environmental management and related topics. They highlighted an important link between sustainability and human resources management (Ehnert & Harry, 2012). In human resources management, talent acquisition is an essential part. A precise definition has been widely discussed over the years. Regardless the absence of a standard definition, it is commonly understood as the process of identifying and hiring the most suitable and competent applicant for a position in one's company (Rozario et al., 2020).

Already in 1997, Turban & Greening investigated both the correlation between corporate social performance (CSP) - a subcategory of CSR which measures a company's performance on environmental and social actions going beyond the mere compliance with legal requirements - and competitive advantage, as well as the link between CSP and the ability to attract quality employees. Findings from the study showed that companies with elevated CSP scores were viewed as more desirable by potential employees and had a greater chance of achieving a competitive advantage. These advantages encompass a cut above financial performance, improved reputation as well as increased employee motivation. This aligns well with the findings from Forte & Lamont's research (1998), mentioned in chapter 2.1. It is important to emphasize that this study specifically targeted undergraduate business students (Turban & Greening, 1997). Furthermore, a research conducted by Students for Responsible Business, as reported by Forbes, found that more than 50% of 2100 MBA student surveyees were willing to take a pay cut to work for a socially responsible company (Albinger & Freeman, 2000). Consistent with the results of Turban and Greening, another study discovered that CSP is more crucial for well-educated candidates who have numerous job opportunities (referred to as "high choice group"). Thus, the most attractive job seekers are those whose employment choices are strongly affected by an employer's CSP. Part of this disparities between the low- and high-choice group might arise from the absence of choice by the low-choice group, which prioritizes securing any job over considering CSP. Another theory possibly accounting for the difference could be access to information. Higher-choice job seekers often encounter CSP information through various media, academic resources, and recruitment efforts, which may not be as targeted towards lower-choice groups (Albinger & Freeman, 2000). Lastly, a qualitative study conducted by Hanson-Rasmussen et al. (2014) reached the conclusion that those who place significant importance on a range of sustainable environmental practices and demand high levels of environmental accountability from

businesses are more likely to have a positive perception of and intentions toward companies with a strong environmental reputation during their job search.

Norway's labor market today is characterised by a low level of unemployment (2% in April 2024), in which people with more than 4 years of education is representing the smallest percentage (Norwegian Labour and Welfare Administration, 2024). This indicates intense competition for highly educated employees, highlighting the importance of having a profile that attracts this scarce resource.

2.7 Hypotheses & Data Analysis

Some of the RQ's - that can be found in chapter 1.2 - will be answered by conducting statistical testing of hypothesis (H), while others will be answered with exploratory data analysis (DA).

Based on the theoretical discussion the following hypothesis and data analysis have been chosen to answer the RQ's:

RQ1

H1: Norwegian consumers are willing to pay a higher price premium than 12% for sustainable products compared to identical non-sustainable alternatives

H1₀: Norwegian consumers are willing to pay a price premium of 12% or lower for sustainable products compared to identical non-sustainable alternatives

RQ2

H2: Consumers are willing to pay a higher premium for sustainable products at lower price points (<1 000 NOK) compared to higher price points (>1 000 NOK)

H2₀: There is no difference in the willingness to pay a higher premium for sustainable products between lower price points (<1 000 NOK) and higher price points (>1 000 NOK)

DA2: The distribution of average willingness to pay premiums across the chosen product categories

RQ3

DA3: Data analysis identifying which sustainability factors are most strongly associated with a credibly consumer perception of sustainability

RQ4

H4: A company's sustainability profile is important when choosing a workplace, i.e. a score higher than 5 on the 10-Point Likert scale

H4₀: A company's sustainability profile is not important when choosing a workplace, i.e., the score is less than or equal to 5 on the 10-point Likert scale

RQ5

H5: A company's sustainability profile is a top-two factor for a majority of Norwegian employees when selecting a workplace

H5₀: A company's sustainability profile is not a top-two factor for a majority of Norwegian employees when selecting a workplace

RQ6

DA6: Data analysis identifying which corporate sustainability aspects are most important for Norwegian job seekers when evaluating potential workplaces

RQ7

H7a: Higher income levels i.e. above 499 999 NOK, are associated with a greater willingness to pay for sustainable products

H7a₀: Higher income levels (i.e., above 499,999 NOK) are not associated with a greater willingness to pay for sustainable products

H7b: Younger age groups (18-34) place higher value on a company's sustainability profile in employment decisions compared to older age groups (35 and above)

H7b₀: Younger age groups (18-34) do not place higher value on a company's sustainability profile in employment decisions compared to older age groups (35 and above)

DA7: Subgroup data analysis of perceived value placed on sustainability

Chapter 3: Methodology

In this chapter, the research methods implemented in the study are described, focusing on creating a solid scientific foundation to obtain a dataset fit for assessing the hypotheses and create exploratory data analysis. Furthermore, the process of acquiring the primary data is described.

3.1 Research Approach

The main objective of this study is to gain insight on how Norwegians value sustainability in their consumer and employment decisions, in addition to a number of factors' perceived credibility. To accomplish this, exploratory, descriptive and explanatory research methods were adapted.

The exploratory method involves a theoretical discussion aimed at deepening the understanding of areas related to the problem statement, as well as data analysis. The theoretical discussion maps out existing knowledge and identifies areas requiring further examination. The following aspects were studied; the definition of sustainability, the credibility of sustainability, sustainability in Norway, the cost of sustainability, concern for sustainability and willingness to pay and lastly Sustainability as a driver in talent acquisition. The data analysis will be used to answer some of the RQ's.

The ensuing step involved creating a clearer picture through an online survey, utilizing the descriptive research method. The next chapter will offer a more comprehensive analysis of this part.

An explanatory research method will be utilized to thoroughly examine the hypotheses.

3.2 Primary Data – Online Questionnaire

An online survey was conducted to create a dataset suitable for testing the hypotheses. A quantitative method was desirable to get data across different demographics, as the thesis seeks to get a better understanding of the Norwegian population. The benefits of this approach include the ability to reach a diverse and extensive population, efficiency in terms of time, and

minimal costs. However, it also comes with some liabilities. First, self-selection bias. People who choose to respond to a certain survey may have stronger opinions or be more engaged in the topic, which might skew the results. Besides, clarification issues may arise due to the lack of opportunity to clarify questions (Wright, 2017).

To cope with the latter issue, a test study with 10 participants was undertaken. The participants selected represented a variety of genders, ages, educational backgrounds, and levels of digital comprehension to ensure the questionnaire was understandable and with the least amount of ambiguity to a broad demographic. Following the test study the participants were interviewed, with the aim of mapping out potential misleading questions, technical difficulties or other problems. The feedback led to several alterations.

The questionnaire aimed at reaching at least 200 valid responses. 200 responses make the findings more reliable and increase the likelihood of detecting true effects or differences in the chosen population. It also mitigates the impact of noise and variability in the data (Hibberts et al., 2012). To process the data, STATA SE 18.5, a programming software for statistics, data management and, and graphics was utilized.

3.2.1 Data Collection

Created in Qualtrics, the survey was published on April 24, 2024, and remained open for one month. The language available for the survey was English only (Appendix 1). It was distributed across several communication channels, including WhatsApp-groups, Facebook, Instagram, personal network as well as in-person “recruiting”. Hence, the data collection is conducted in a non-random manner. At the time of the closing, 313 participants had responded. All responses with a completion percentage less than 100 were removed (111). Additionally, 2 responses were left out due to not fulfilling the requirement of being Norwegian. As a result, the goal of 200 valid responses was met.

3.2.2 Research Design

The abovementioned main data collection is composed of six different blocks (in which all of them can be seen in Appendix 1). Block 1 simply served as an introduction containing general information to the participant, including the estimated time, contact information, anonymity,

as well as a thank you for participating. In the second block the participant had to state whether they were Norwegian or not. Block 3 focused on evaluating participants' willingness to pay for sustainable products across diverse production categories and their assessment of the credibility of different sustainability indicators. The next block was about sustainability as a talent attracting tool. Participant demographics were addressed in Block 5, with a simple thank you and notice that the survey was ending in the final block, Block 6.

3.2.3 Measurement/Indicators

When it comes to examining consumers' WTP, the best techniques to observe real purchase behaviour is either market data analysis or experiments (Breidert et al., 2006). However, this research, focused on consumers' willingness to pay more for sustainable products, encountered difficulties in locating two identical products, with one being sustainable and the other non-sustainable. Thus, utilizing the market data approach was ruled out. When it comes to the experiment approach, it was not possible due to constraints on both time and resources. With these two techniques ruled out, the better suited method is a direct approach. A direct approach to measuring WTP is one that asks respondents directly about acceptable prices (Breidert et al., 2006). A direct approach was chosen to answer the RQ's regarding WTP. First, a question about the premium participants were willing to pay for a sustainable product compared to an identical non-sustainable product was asked. To facilitate the comparison between the results of the Norwegian consumer market against the global market (Faelli et al., 2023), a percentage-based scale was utilized on this particular question. For the remaining WTP questions, participants were asked to specify the premium they would be willing to pay for a sustainable product compared to an identical non-sustainable version across various product segments. A starting price was provided, and participants could choose from 20 price points, ranging from no premium (i.e., the same price as the non-sustainable product) up to double the price. Due to the number of price points, the method is defined as the open-ended approach rather than the discrete choice experiment (Marjon van der Pol et al., 2008). The open-ended approach is valuable for generating valid WTP estimates at a low cost. It also provides a higher finesse compared to the discrete choice experiment (Donaldson et al., 1997). In addition, an image of the specified product was included for reference in this section of the survey questions (figure 1 serves as an example). The use of visual representation in WTP surveys reduces biases, ensuring that the stated WTP more closely aligns with actual

purchasing behavior, thus improving the reliability of the survey results (Schmidt & Bijmolt, 2019).

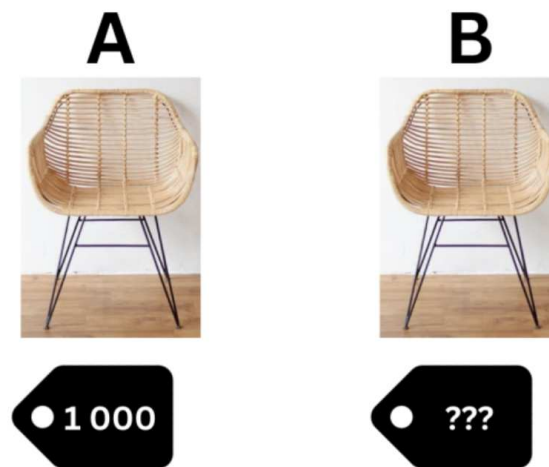


Figure 1: Example of product image

The next section aimed at measuring the credibility of different aspects of sustainability factors. To measure the credibility, a Likert scale was used. Likert scales are thoroughly tested for its effectiveness in capturing attitudes and perceptions. The method also facilitates statistical analyzation. In addition, the scale is easy to understand and well-known for participants (Kusmaryono et al., 2022). More precisely, a 10-point Likert scale, where 0 means “Not at all credible/important” and 10 means “Extremely credible important”, was utilized due to several advantages. A 10-point Likert scale can minimize central tendency bias (where respondents might avoid extreme options). It also leads to more accurate and detailed data compared to the 5- or 7-point Likert scale. Lastly, the 10-point Likert scale improves the reliability (Cummins & Gullone, 2000). As the mentioned method also serves well in measuring the perceived importance of participants, it was also used for the last section (Lanctot & Duxbury, 2022). In many of these survey questions, a specific example is provided to clarify the context. For instance, when asking respondents to rate the importance of various sustainability aspects in evaluating a potential workplace, the item "positive efforts abroad" is accompanied by an example, such as “reforestation of Amazonas”. See figure 2 for additional examples. Specific examples come with a number of advantages. In the first place, it enhances comprehension and reduces ambiguity by clarifying the intent and context. Furthermore, examples can make the questions more relatable and engaging, which encourages respondents to participate thoughtfully and seriously. Lastly, it can trigger memories of the participants, enabling them to answer more accurately (Alessi & Martin, 2010).



Figure 2: Illustration of items accompanied by an example

The final section of the survey focused on collecting demographic information from the participants, such as age, gender, and income. All questions were designed to ensure that every participant could find an applicable option. For example, the income question began with an "under" option, followed by various income brackets, and concluded with an "or above" option, to ensure this. While an open-ended "state your..." question might yield more precise responses, the chosen method offers several advantages when processing the data. Using multiple-choice questions provides a standardised approach, facilitating easy categorisation and analysis of the data. Additionally, this method simplifies comparisons between different demographic segments.

To summarise, the chosen methods/scales for each topic is illustrated in the table below (table 1).

Operational Model			
Measures	Scale/Method	Number of Items	Literature
Willingness to Pay	Direct approach (open-ended)	8	(Donaldson et al., 1997; Marjon van der Pol et al., 2008)
Credibility	10-point Likert Scale	7	(Kusmaryono et al., 2022; Cummins & Gullone, 2000)
Importance	10-point Likert Scale	7	(Kusmaryono et al., 2022; Lanctot & Duxbury, 2022)
Demographics	Multiple choice	5	N/A

Chapter 4: Analysis and Results

In this chapter, the results derived from the comprehensive analysis of the quantitative data collected through the survey will be covered. This section aims to provide a profound examination of the statistical findings emerged from the dataset through detailed charts, tables, and statistical tests.

4.1 Sample description

This research is based on Norwegian consumers, as earlier mentioned. Thus, all of the 200 respondents are valid, and there is no need to present nationality representation. Gender is spread very equally: 53.5% are men and 46% are women. The greatest part of the surveyed population is at the age of 25-34 years old, in which constitutes 26%. As for the level of education, it is given for 39% of them having a bachelor's degree as the highest completed education level, closely followed by 35.5% holding a master's degree. Additionally, 61% of the respondents are employed full-time. The most common range of income in respondents is between 550,000 and 699,999 NOK, with 22% of the respondents. That accounts for the mean annual salary of a Norwegian, which is 676,000 NOK (SSB, 2024). More profound details can be seen below (table 2).

		Frequency	Percent
Age	18 - 24	36	18
	25 - 34	52	26
	35 - 44	14	7
	45 - 54	44	22
	55 - 64	37	18,5
	65 - 74	5	2,5
	75 or older	5	2,5
	Under 18	7	3,5
Gender	Female	92	46
	Male	107	53,5
	Prefer not to say	1	0,5
Education	Bachelor's degree	78	39
	High school	39	19,5
	Master's degree	71	35,5
	PhD / Doctorate	6	3
	Primary school	6	3
Employment Status	Other	1	0,5
	Retired	8	4
	Student / pupil	37	18,5
	Unemployed	1	0,5
	Working full-time	122	61
	Working part-time	31	15,5
Income	1 000 000 NOK or above	27	13,5
	100 000 - 249 999 NOK	33	16,5
	250 000 - 399 999 NOK	15	7,5
	400 000 - 549 999 NOK	17	8,5
	550 000 - 699 999 NOK	44	22
	700 000 - 849 999 NOK	33	16,5
	850 000 - 999 999 NOK	13	6,5
	Do not want to disclose	7	3,5
	Under 100 000 NOK	11	5,5

Table 2: Sample description of demographics

4.2 Reliability of Scales

To ensure internal consistency and thus validity, before conducting the statistical tests, the Cronbach's alpha was calculated for each scale/method – except demographics, as the output did not contain numerical values and thus were not computable. According to Tavakol & Dennick (2011); “Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the interrelatedness of the items within the test”.

Although, as the academic literature offers different benchmarks for what is considered acceptable levels of the coefficient of Cronbach's Alpha, a consensus exists regarding the

classification of these levels: Questionable (0.5-0.6), Acceptable (0.6-0.7), Good (0.7-0.9), and Excellent (> 0.9) (Nunnally, 1967; Peterson, 1994; Tavakol & Dennick, 2011). STATA SE was used to compute the alphas. The derivations of the results are systematically presented in “Table 3” below.

Measures	Number of Items	Cronbach’s Alpha	Quality Level
Willingness to Pay	8	0,6534	Acceptable
Credibility	7	0,8135	Good
Importance	7	0,9241	Excellent

Table 3: Cronbach’s Alpha output

As can be seen in “Table 3”, all the alphas are at an acceptable level. Albeit “Willingness to Pay”, preferably could have been a bit higher.

4.3 Results

In this section, the data analyses and hypothesis testing of the research questions that can be found in chapter 2.7 are presented. To reject the null hypothesis, a significance level of 5% (p-value < 0.05) is used as the threshold. All the null hypotheses can be observed in chapter 2.7.

4.3.1 Research Question 1

H1: Norwegian consumers are willing to pay a higher price premium than 12% for sustainable products compared to identical non-sustainable alternatives

A Shapiro-Wilk Test was performed to check whether the variable “PercentageIncreaseWTP” (results from Q3.2 in the survey [Appendix 1]) was normally distributed. The test yielded a W-value of 0,8227 (Appendix 4). Values significantly differing from 1 indicated non-normality (Razali & Wah, 2011). The null hypothesis - which is that the data is normally distributed - is rejected as the p-value is 0,0000, which is significantly less than the chosen significance level of 0,05. Given the significant deviation from normality, a Wilcoxon Signed-Rank test was chosen, as it is a non-parametric test that does not assume normality (Wilcoxon, 1945). It is apparent by the results of the test that the median percentage increase in WTP to sustainable products, $z = 9,521$, $p < 0,0001$ (Appendix 4), is significantly larger than the

hypothesized value of 12%. In other words, we reject the null hypothesis (H_{10}). To conclude, **H1 was confirmed.**

4.3.2 Research Question 2

H2: Consumers are willing to pay a higher premium for sustainable products at lower price points (<1 000 NOK) compared to higher price points (>=1 000 NOK)

Enabling a basis of comparison, a calculation of the percentage premiums was completed on the output from Q3.4-Q3.11 (Appendix 1), and new variables were generated accordingly. Thereafter, the variables were assigned to two categories – “under 1000” and “1000 and above”. Following the procedure from chapter 4.5.1, the Shapiro-Wilk Test was conducted to check the relevant variables for normality. The output from STATA presented W-values in the range between 0,806 and 0,92, none of which confirming normality (Appendix 5). A Q-plot and histogram was also created to confirm the conclusion, in which they did. As a result, the Wilcoxon Signed-Rank test was used to compare the two abovementioned categories. The result yielded $z = 10,429$, $p < 0,0001$. Thus, the H_{20} was rejected and **H2 confirmed.**

DA2: The distribution of average willingness to pay premiums across the chosen product categories

The variables required for the data analysis were pre-generated for hypothesis testing. Thus, the primary task was to input the appropriate commands into STATA. A bar chart was chosen for easier comparison. In the chart below, products are sorted from the lowest to the highest price, allowing visualization of the trend line that confirms hypothesis H2. Also, it is interesting to see the varying percentage premium among products with the same original price, such as “Food” and “Delivery.

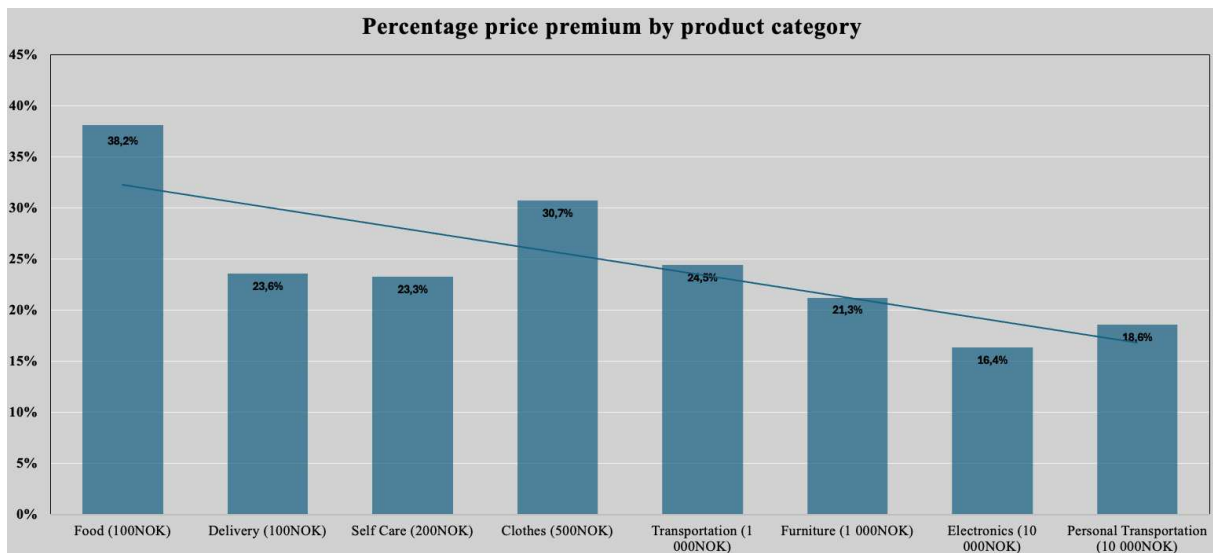


Figure 3: Bar chart of percentage price premium by product category

4.3.3 Research Question 3

DA3: Data analysis identifying which sustainability factors are most strongly associated with a credible consumer perception of sustainability

Data preparation and computation of the average and median were conducted using STATA. The results were then imported into Excel for layout adjustments. For instance, the upper bound was changed from 8,0 to 10,0 to highlight the use of a 10-point Likert Scale, and to avoid artificially amplifying the perceived credibility. Further, the colours on the two bars showcasing the median and average was chosen to be in sharp contrast to one another in order to enhance readability. A bar chart was chosen to effectively present the two statistics per variable, as presented below in figure 4.

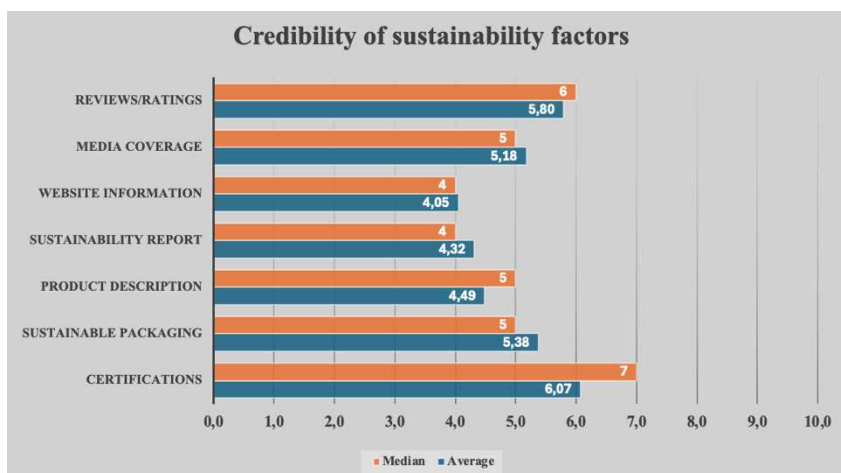


Figure 4: Bar chart displaying the median and average scores of credibility for various sustainability factors

4.3.4 Research Question 4

H4: A company's sustainability profile is important when choosing a workplace, i.e. a score higher than 5 on the 10-Point Likert scale

The Shapiro-Wilk test yielded a W-value of 0,989 and a p-value of 0,163 (Appendix 6). The p-value of 0,163 is greater than the chosen significance level of 0,05. Therefore, we fail to reject the null hypothesis (that the data is normally distributed). Thus, the variable derived from Q4.1 (Appendix 1) was indicated to be normally distributed. A visual check using a Q-plot and a histogram confirmed this (Appendix 6). Given the normality of the data, a t-test was applicable. Since the hypotheses involve testing whether the mean score is greater than a specific value, a one-sample one-tailed t-test was conducted, focusing on the null hypothesis that the mean score is less than or equal to 5. The test provided a p-value of 0,213. 0,213 is greater than the significance level of 0,05, and therefore the null hypothesis (H4₀) could not be rejected. Thus, the alternative hypothesis **(H4) could not be validated**.

4.3.5 Research Question 5

H5: A company's sustainability profile is a top-two factor for a majority of Norwegian employees when selecting a workplace

To test the hypothesis, a binomial probability test was conducted. First, a variable derived from Q4.2 was used to capture the rankings. From this, a new binary variable was generated. This new variable assigned a value of 1 to all respondents who ranked a company's sustainability factor as either 1st or 2nd (i.e., top-two), and 0 otherwise. The binomial probability test then examined whether the probability of a majority (greater than 50%) of respondents ranking the sustainability factor as top-two is statistically significant. The results were as follows: Observed k (respondents who ranked sustainability top-two) was 44. Expected k (given an assumed probability (p) of 0.5, the expected number of respondents ranking sustainability top-two) was 100. Observed p (proportion of respondents ranking sustainability as top-two) was 0,22 (Appendix 7). Further, $\Pr(k \geq 44) = 1$ (one-sided test).

Since the observed proportion (22%) is much lower than 50%, and the p-value for the one-sided test where $k \geq 44$ is 1, we fail to reject the null hypothesis. **Accordingly, H5 could not be validated.**

4.3.6 Research Question 6

DA6: Data analysis identifying which corporate sustainability aspects are most important for Norwegian job seekers when evaluating potential workplaces

Correspondingly to chapter 4.5.3, data preparation and computations of the average and median were conducted utilizing STATA. Furthermore, Excel was used to create the bar chart, as well as making aesthetic and informative adjustments. The bar chart effectively ensures a high level of readability when presenting two statistics on one variable. Two distinctly different colours on the average- and median bar also contributes to this. The upper bound was set to 10,0, aligning with the 10-point Likert scale, to prevent visually exaggerating the perceived results. The results are presented on the bar chart below (figure 5).

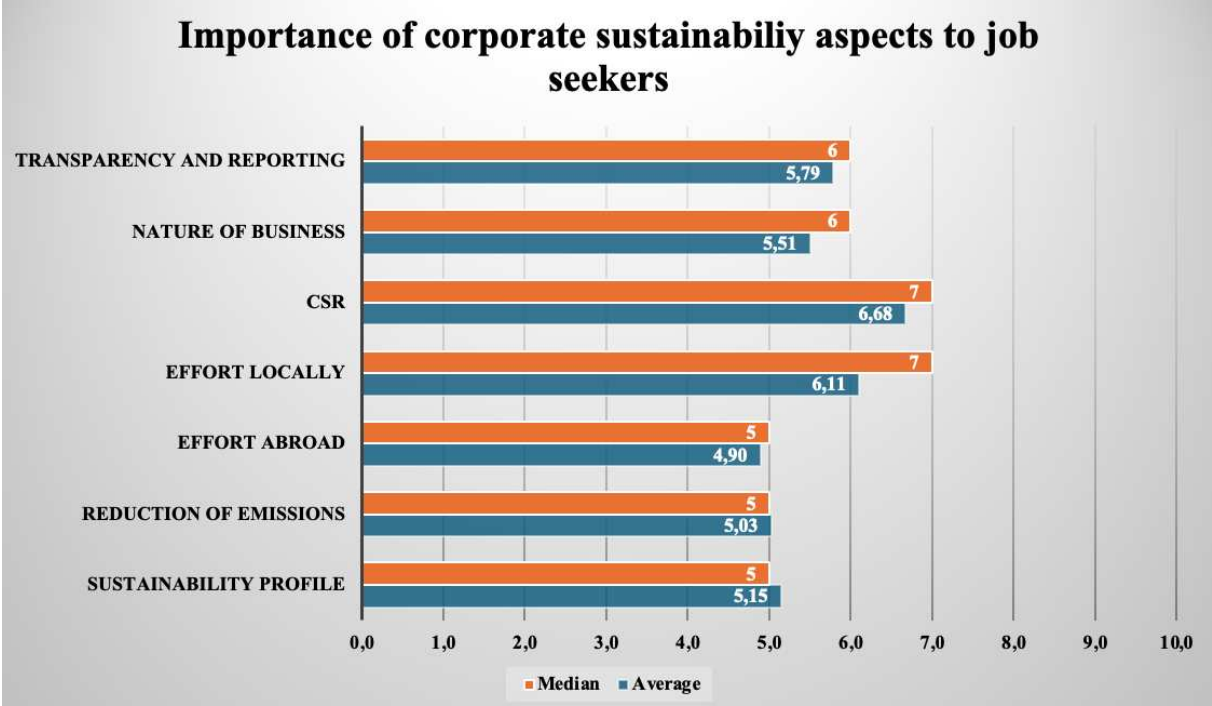


Figure 5: Bar chart displaying the median and average scores of importance of various corporate sustainability aspects

4.3.7 Research Question 7

H7a: Higher income levels i.e. above 499 999 NOK, are associated with a greater willingness to pay for sustainable products

First, each response was categorized as either "1" for high-income (above 499 999 NOK) or "0" for low-income (below 499 999 NOK) to create a clear distinction for statistical analysis. Additionally, the "drop if" command was used to remove responses from participants who selected "do not want to disclose" for their income, ensuring the dataset was free from incomplete information.

To check whether the data followed a normal distribution - a requirement for conducting a t-test - a Shapiro-Wilk test on the willingness to pay (WTP) variable, because this is the dependent variable, was performed. The test came back with a p-value of 0,000 and a W-value of 0,82, both indicating that the WTP data does not fit the normality assumption (Appendix 8). This conclusion was further supported by a Q-plot and histogram, which also demonstrated deviations from normality (Appendix 8).

Given the non-normality, regression analysis was chosen as the more appropriate method. Although the WTP variable is technically discrete, with values ranging from 0% to 100% in 5% increments, it was treated as continuous for this analysis. To address potential non-normality and possible heteroskedasticity, a linear regression with robust standard errors was used.

The initial regression, which included only high income as an explanatory variable, yielded a very low R-squared value. To improve the model's explanatory power, additional demographic variables were included. Since these demographic variables were initially stored as string data (i.e., containing text), they were first converted to numerical form using the encode command. The inclusion of these variables increased the R-squared from 2,6% to 7,37%, although it remained relatively low (Appendix 8).

The low R-squared can be partly explained by the fact that only three variables - high income ($p=0,002$), gender ($p=0,02$), and occupation ($p=0,012$) - were statistically significant at the 95% confidence level. The positive and statistically significant coefficient for high income (9,03) **suggests that we should reject the null hypothesis (H7a0)**. However, the low R-squared value indicates that caution should be exercised before drawing definitive

conclusions. Worth noting, the coefficient indicates that respondents with high income are willing to pay a premium that is 9,03 percentage points higher than those with low income.

***H7b:** Younger age groups (18-44) place higher value on a company's sustainability profile in employment decisions compared to older age groups (44 and older)*

First, each response was categorized as either "1" for young age group (44 and younger) or "0" for old age group (45 and older) to create a clear distinction for statistical analysis. A Shapiro-Wilk test ran on the dependant variable "importance on a company's sustainability profile" indicates normal distribution, with a W-value and a p-value of 0,99 and 0,16 respectively (Appendix 9). A visual inspection of a Q-plot and a histogram confirmed the same (Appendix 9). Due to equal variance on a 95% confidence interval (Appendix 9), a normal t-test was performed. The one-tailed p-value is 0,0055, which indicates that the difference between the two groups is statistically significant. However, looking at the average value of each group (old age group 5,65; young age group 4,72 [Appendix 9]), tells that the difference is the opposite direction of the alternative hypothesis. Therefore, **H₁ could not be validated.**

***DA7:** Subgroup data analysis of perceived value placed on sustainability*

To gather information on each subgroup of the dataset, STATA-commands were used (Appendix 9). The two main variables of interest were percentage WTP for sustainable products and the perceived importance of a company's sustainability profile in employment decisions. Both the average and median were calculated and is presented on each of the demographic factors. On the demographic "gender", "prefer not to say" was removed. The same applies to the demographic factor "occupation" for the "unemployment" and "other" responses. These answers were only chosen by 1 respondent each, thus an average and median does not offer any valuable insight.

As explained in some of the chapters above, the scale of importance is presented as 0 to 10, although none of the bars exceed 8,0. Since the WTP-variable is not a fixed scale per se and none of the bars exceed 40 it was chosen to go from 0 to 40 for an easier interpretation and comparison. All of the results are presented in the charts below.

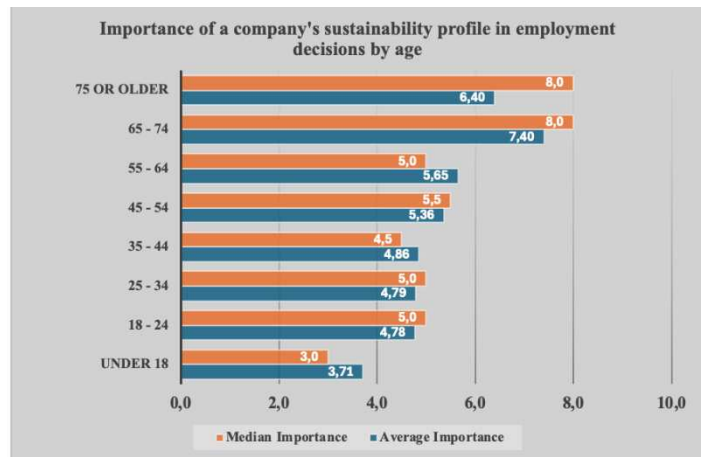
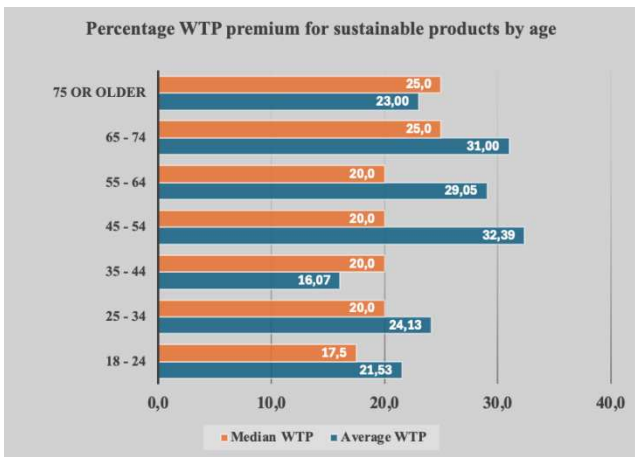


Figure 6: Bar chart displaying the median and average scores of importance of a company's sustainability and WTP premium for sustainable products by age

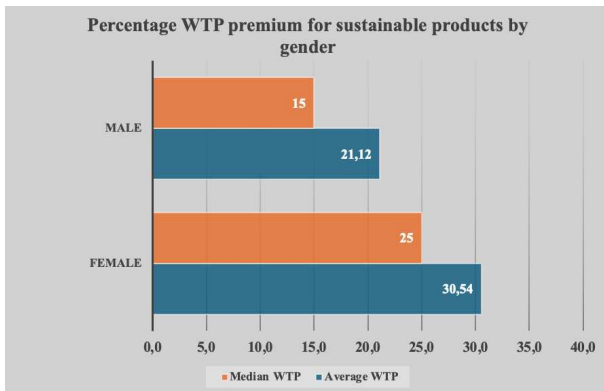


Figure 7: Bar chart displaying the median and average scores of importance of a company's sustainability and WTP premium for sustainable products by gender

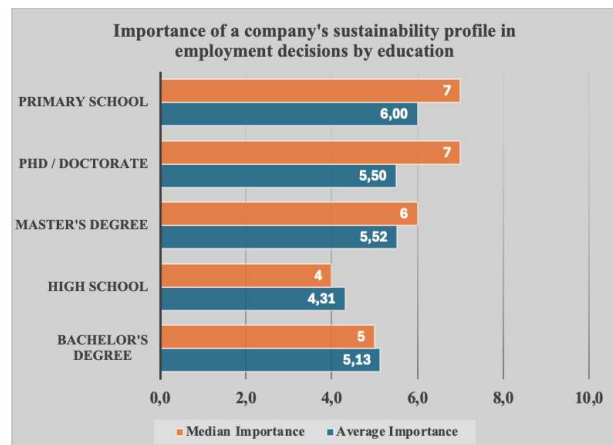
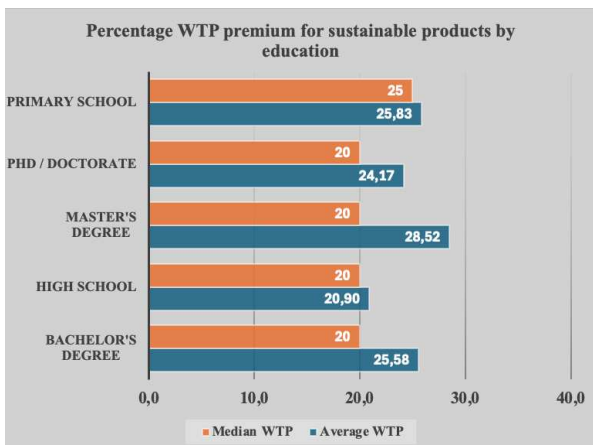


Figure 8: Bar chart displaying the median and average scores of importance of a company's sustainability and WTP premium for sustainable products by education

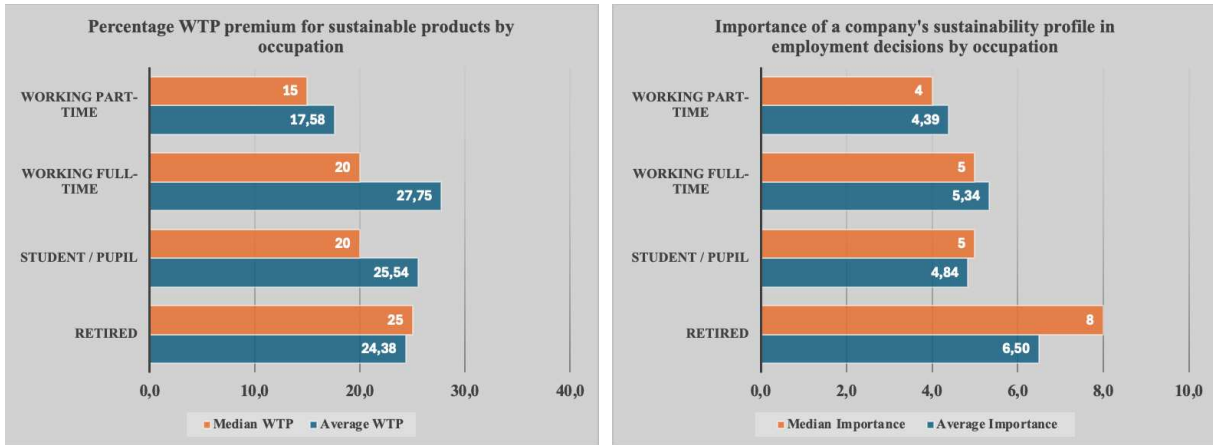


Figure 9: Bar chart displaying the median and average scores of importance of a company's sustainability and WTP premium for sustainable products by occupation

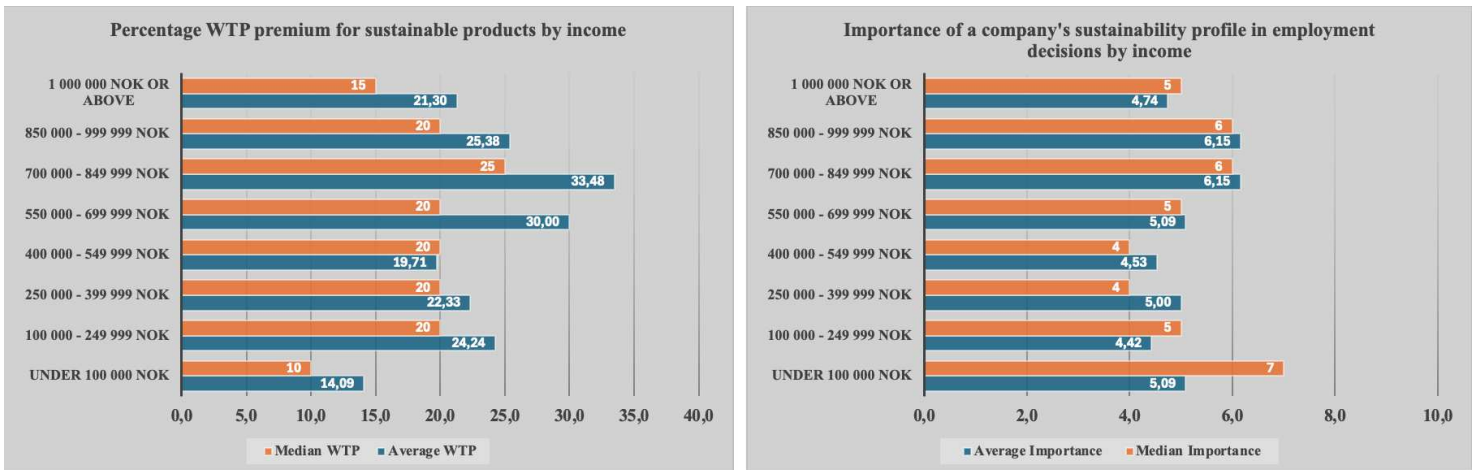


Figure 10: Bar chart displaying the median and average scores of importance of a company's sustainability and WTP premium for sustainable products by income

Chapter 5: General Discussion

The final chapter of this study presents a conclusion of the main results. In addition, the managerial and academic implications are mentioned along with limitations and future research.

5.1 Main Findings (Conclusion)

RQ1:

The statistical analysis of the hypothesis for this question was clear and was validated at a 1% significance level. The average willingness to pay (WTP) among Norwegian consumers is 25.68%. Both the average and the statistical analysis of H1 indicates that Norwegian consumers are willing to pay a higher price premium for sustainable products compared to the global average of 12%.

RQ2:

Hypothesis 2, confirmed at a 1% significance level, indicates a greater willingness to pay premium for products at lower price points. This finding is further supported by Data Analysis 2, which demonstrates a clear trendline. DA2 also allows for a comparison of product categories within the same price range. Specifically, there is a higher willingness to pay for food over delivery in the 100 NOK category, a higher willingness to pay for transportation services compared to other transportation options in the 1,000 NOK category, and a slightly higher willingness to pay for personal transportation over electronics in the 10,000 NOK category.

RQ3:

Certifications represent both the highest average and median score, 6,07 and 7 respectively. Reviews/ratings followed closely with an average of 5,8. On the lower end, website information scores an average score of 4,05 and a median of 4. Hence, certifications and reviews/ratings serve as the most effective factors in credibly convincing Norwegian consumers of a product's sustainability. A commonality of these two factors is that both are provided by external stakeholders of the producing company.

RQ4:

The t-test conducted on hypothesis 4 delivered a p-value of 0,213, which is quite clearly higher than the chosen significance level of 5%. The average score of 5,1 on the relevant variable further supports this conclusion. Therefore, we cannot conclude that a company's sustainability profile is important for Norwegian employees when selecting a workplace.

RQ5:

With a p-value of 1 from the binomial probability test, Hypothesis 5—which proposed that a company's sustainability profile would rank among the top two on a top-five list—was not

confirmed. The average position of 3,7 on the list aligns with the statistical analysis results. As a result, a company's sustainability profile ranks in the lower half compared to other factors influencing employment decisions.

RQ6:

“CSR” and “Effort Locally” are distinguished for having both the highest average and median scores, with CSR representing the top spot, achieving an average of 6,68 and a median of 7. “Nature of Business” rounds out the top three. On the other end, “Effort Abroad” has the lowest scores, with an average of 4.9 and a median of 5. “Reduction of Emissions” and “Sustainability Profile” finish the bottom three. More detail can be seen in figure 5.

RQ7:

Due to the very low R-squared value in the statistical analysis for Hypothesis 7a, no conclusions will be drawn directly from it. Additionally, Hypothesis 7b was not validated. However, the p-value indicated that the difference between the younger group (under 45) and the older group (45 and older) was significant at the 1% level. Although this finding was in the opposite direction of the hypothesis, it confirmed that the older age group places a higher value on sustainability in employment decisions compared to the younger group. Furthermore, data analysis 7 revealed that the demographic group placing the highest value on sustainability in consumer decisions (i.e., willingness to pay) consisted of individuals aged 45-54, female, holding a master's degree, working full-time, and earning between 700,000 and 849,999 NOK. In terms of the value placed on sustainability in employment decisions, the highest scores were found among those aged 65-74, female, with a primary school education, retired, and earning between 850,000 and 999,999 NOK. The rest of the details can be seen on the charts in chapter 4.5.7.

5.2 Managerial Implications

It is possible to derive several recommendations from these findings. First of all, the significant higher WTP among Norwegian consumers on sustainable products emphasises the opportunity Norwegian companies have in the future. They can leverage this by strategically pricing their sustainable products and services at a premium. Especially, this applies to companies offering products at lower-priced products. As the factors certification and review ratings by third parties proved to be the most credible factors in convincing consumers that

the products offered are indeed sustainable, significant effort and resources should be allocated to these areas.

Although H4 and H5 were rejected, still 22% ranked a company's sustainability profile among the top-two places out of a 5 places list, 33% of whom women. This suggests that some attention should be put on the matter. When communicating this to potential employees, CSR and local effort are the two areas proved to have the highest importance of Norwegian consumers.

In an economy where obtaining highly skilled and highly educated employees continues to become more critical to an organization's ability to compete, the implication of these findings is significant (Albinger & Freeman, 2000).

5.3 Academic Implications

As highlighted in the theoretical discussion, while extensive research exists in the field of sustainability, there is less focus on the three specific dimensions of credibility, willingness to pay, and employment decisions. This thesis contributes to the broader fields of consumer behavior, communication, and talent management through the lens of sustainability. In the Norwegian context, research on these dimensions is particularly limited, making this study a valuable addition. Additionally, since similar research has been conducted outside Norway, this study provides an opportunity for comparative analysis. The methodology employed in this thesis, including the use of Likert scales and direct WTP measurements, serves as a useful foundation for future research. Furthermore, the findings related to demographic variations can be contextualized and compared with insights from other academic disciplines.

5.4 Limitations

While this thesis serves as a starting point for exploring sustainability in Norway across the mentioned dimensions, it has several limitations. Firstly, the sample size could have been larger to obtain a more representative sample. The survey was primarily distributed through the author's network, which likely influenced the selection process. For example, the network mainly covers the central eastern region of Norway, which could skew the results.

Additionally, even when consumers express their true valuations of a product, these

valuations do not always translate into actual purchasing behaviour (Breidert et al., 2006). The method of distributing the survey through personal networks may have led to a non-response bias, where individuals less interested or informed about sustainability chose not to participate. This could skew the results towards more sustainability-conscious individuals, thereby not accurately representing the general population.

Moreover, the author's statistical analysis skills are limited, as this is not the author's primary academic field. This suggests that more advanced analyses could have been conducted, potentially leading to more robust results. Additionally, the study's quality may have been affected by the limited resources and time available, which could have influenced the findings. For instance, the use of Likert scales and direct questions to measure complex constructs like credibility and willingness to pay might have oversimplified these concepts, failing to capture the full nuances of consumer behaviour and attitudes. Employing more sophisticated measurement tools could have provided richer, more detailed data."

There are also inherent disadvantages to using an online survey. Respondents may struggle to accurately imagine themselves in hypothetical scenarios. For instance, retired individuals ranked a company's sustainability as highly important when asked to imagine applying for a new job. It is likely easier to claim that sustainability is a priority in employment decisions when it is not a realistic concern. This is just one example of the potential discrepancies that can arise in such surveys. Further, the survey should also have been offered in Norwegian. Even though Norwegians in general obtain a high level of English, some respondents may have encountered problems in that regard.

Lastly, the study is cross-sectional, capturing responses at a single point in time. This design limits the ability to observe changes in attitudes or behaviours over time, which could provide deeper insights into trends in sustainability preferences.

5.5 Future Research

It has been observed that when responding to environmental issues, consumers may sometimes exaggerate their intentions to buy or amplify their emotional commitment to socially responsible behaviour (McGougall, 1993). This indicates that practical experiments, such as observing in-store purchases or analysing actual purchase data, could be valuable for

validating and refining the results of this study. Additionally, employing qualitative methods like in-depth interviews could provide deeper insights into these behaviours. Future research might also explore how various corporate strategies for promoting sustainability—such as marketing, employee engagement, or corporate governance—impact consumer and employee perceptions. This could help identify the most effective approaches for enhancing a company’s sustainability profile.

Bibliography

- Albinger, H. S., & Freeman, S. J. (2000). *Corporate Social Performance and Attractiveness as an Employer to Different Job Seeking Populations*. *Journal of Business Ethics* 28: 243–253, 2000
- Alessi, E. J., & Martin, J. I. (2010). *Conducting an Internet-based Survey: Benefits, Pitfalls, and Lessons Learned*. *Social Work Research*, 34(2), 122–128.
- Borin, N., Cerf, D. C., & Krishnan, R. (2011). *Consumer effects of environmental impact in product labeling*. *Journal of Consumer Marketing*, 28(1), 76–86.
- Breidert, C. (2005). *Estimation of willingness-to-pay. Theory, measurement, and application*. [Doctoral thesis, WU Vienna]
- Brown, C., & Sperow, M. (2005). *Examining the cost of an all-organic diet*. *Journal of Food Distribution Research*, 36(1), 20-26.
- Breidert, C., Hahsler, M., & Reutterer, T. (2006). A REVIEW OF METHODS FOR MEASURING WILLINGNESS-TO-PAY. *Innovative Marketing*, 2(4).
- Cho, C. H., Guidry, R. P., Hageman, A. M., & Patten, D. M. (2012). *Do actions speak louder than words? An empirical investigation of corporate environmental reputation*. *Accounting, Organizations and Society*, 37(1), 14–25.
- Close, C. (2021). *The global eco-wakening: how consumers are driving sustainability*. World Economic Forum. Retrieved April 10, 2024, from <https://www.weforum.org/agenda/2021/05/eco-wakening-consumers-driving-sustainability/>
- Cummins, R.A. & Gullone, E. (2000). *Why we should not use 5-point Likert scales: The case for subjective quality of life measurement*. Proceedings, Second International Conference on Quality of Life in Cities (pp.74-93). Singapore: National University of Singapore.
- Deakins, D., & Bensemam, J. (2019). *Achieving innovation in a lean environment: how innovative small firms overcome resource constraints*, *International Journal of Innovation Management*, Vol. 23 No. 4, pp. 1-36.
- Donaldson, C., Thomas, R., & Torgerson, D. J. (1997). Validity of open-ended and payment scale approaches to eliciting willingness to pay. *Applied Economics*, 29(1), 79–84.
- D’Souza, C., Taghian, M., Lamb, P., & Peretiatkos, R. (2006). *Green products and corporate strategy: an empirical investigation*. *Society and Business Review*, 1(2), 144–157.
- D’Souza, C., Taghian, M., Lamb, P., & Peretiatko, R. (2007). Green decisions: demographics and consumer understanding of environmental labels. *International Journal of Consumer Studies*, 31(4), 371–376.

Elkington, J. (1997). *Cannibals with forks: the triple bottom line of 21st century business*. New Society Publishers.

Ehnert, I., & Harry, W. (2012). *Recent Developments and Future Prospects on Sustainable Human Resource Management: Introduction to the Special Issue*. *Management Revue*, 23(3), 221–238

Faelli, F., Blasberg, J., Johns, L., & Lightowler, Z. (2023). *Selling Sustainability Means Decoding Consumers*. Bain & Company. Retrieved March 16, 2024, from <https://www.bain.com/insights/selling-sustainability-means-decoding-consumers-ceo-sustainability-guide-2023/>

Forbes. (2023). Forbes.com. *How Business School Research Can Serve The World Today*. Retrieved May 19, 2024, from <https://www.forbes.com/sites/mattsymonds/2023/05/09/how-business-school-research-can-serve-the-world-today/?sh=7941ab95fd1d>

Forente Nasjoner. [United Nations]. (2023). Fn.no. *Bærekraftig utvikling*. [Sustainable Development]. Retrieved March 13, 2024, from <https://fn.no/tema/baerekraftig-utvikling-fattigdom-og-befolkning/baerekraftig-utvikling#2>

Forte, M. and Lamont, B. (1998). *The bottom-line effect of greening (implications of ecological awareness)*, *The Academy of Management Executive*, Vol. 12 No. 1, pp. 89-91.

Gale, D. (1955). *The law of supply and demand*. *Mathematica scandinavica*, 155-169.

Gatti, L., Seele, P., & Rademacher, L. (2019). *Grey zone in – greenwash out. A review of greenwashing research and implications for the voluntary-mandatory transition of CSR*. *International Journal of Corporate Social Responsibility*, 4(1).

Ghavidel, B.M., Nasirpour, K. and Asgari, A. (2019). *Identifying and explaining the dimensions of teacher talent management using the grounded theory*, *International Journal of Schooling*, Vol. 1 No. 2, pp. 23-36.

Hall, B. H. (2002). *The financing of research and development*. *Oxford review of economic policy*, 18(1), 35-51.

Hibberts, M., Burke Johnson, R., Hudson, K. (2012). *Common Survey Sampling Techniques*. In: Gideon, L. (eds) *Handbook of Survey Methodology for the Social Sciences*. Springer, New York, NY.

Hanson-Rasmussen, N., Lauver, K., & Lester, S. (2014). *Business Student Perceptions of Environmental Sustainability: Examining the Job Search Implications*. *Journal of Managerial Issues*, 26(2), 174–193.

Hiltrop, J.M. (1999). The quest for the best: human resource practices to attract and retain talent, *European Management Journal*, Vol. 17 No. 4, pp. 422-430.

International Air Transport Association. (2023). *Sustainable aviation fuel output increases but volumes still low*. Retrieved March 3, 2023, from <https://www.iata.org/en/iata-repository/publications/economic-reports/sustainable-aviation-fuel-output-increases-but-volumes-still-low/>

Jong, H. N. (2022). *In new climate deal, Norway will pay Indonesia \$56 million for drop in deforestation, emissions*. Mongabay Environmental News. Retrieved March 21, 2024, from <https://news.mongabay.com/2022/11/in-new-climate-deal-norway-will-pay-indonesia-56-million-for-drop-in-deforestation-emissions/>

Klingenberg, B., & Kochanowski, S. M. (2015). *Hiring for the green economy: Employer perspectives on sustainability in the business curriculum*. *Journal of Management Development*, 34(8), 987-1003

Kusmaryono, I., Wijayanti, D., & Maharani, H. R. (2022). *Number of Response Options, Reliability, Validity, and Potential Bias in the Use of the Likert Scale Education and Social Science Research: A Literature Review*. *International Journal of Educational Methodology*, 8(4), 625–637.

Lanctot, A. & Duxbury, L. (2022) *Measurement of Perceived Importance and Urgency of Email: An Employees' Perspective*, *Journal of Computer-Mediated Communication*, Volume 27, Issue 2

Le Gall-Ely, M. (2009). *Definition, Measurement and Determinants of the Consumer's Willingness to Pay: A Critical Synthesis and Avenues for Further Research*. *Recherche et Applications En Marketing (English Edition)*, 24(2), 91-112.

Lindwall, C. (2022). *What Are the Effects of Climate Change?* NRDC; NRDC.org. Retrieved April 3, 2024, from <https://www.nrdc.org/stories/what-are-effects-climate-change#weather>

Lyon, T. P., & Montgomery, A. W. (2013). *Tweetjacked: The impact of social media on corporate greenwash*. *Journal of Business Ethics*, 118, 747–757

Mandese, J. (1991). "New study finds green confusion", *Advertising Age*, Vol. 62 No. 45, pp. 1-56.

Marjon van der Pol, Shiell, A., Au, F., Johnston, D., & Tough, S. (2008). Convergent validity between a discrete choice experiment and a direct, open-ended method: Comparison of preferred attribute levels and willingness to pay estimates. *Social Science & Medicine*, 67(12), 2043–2050.

Marn M.V., Roegner E.V., Zawada, C.C. (2003). *Pricing new products*. The McKinsey Quarterly, 2003. – No 3. Retrieved March 27, 2024, from <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/pricing-new-products>

McClelland, B. (2022). *The World's Greenest Countries 2022*. GreenMatch UK. Retrieved March 29, 2024, from <https://www.greenmatch.co.uk/blog/greenest-countries>

McGougall, G. (1993). *The green movement in Canada: implications for marketing strategy*. Journal of International Consumer Marketing, Vol. 5 No. 3, pp. 69-87.

McKinsey & Company. (2023). *Consumers Care about Sustainability—and Back It up with Their Wallets*. McKinsey & Company. Retrieved May 2, 2024 from: <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets>

Merkert, R., & Swidan, H. (2019). *Flying with(out) a safety net: Financial hedging in the airline industry*. Transportation Research Part E: Logistics and Transportation Review, 127, 206–219. Retrieved March 5, 2024, from <https://doi.org/10.1016/j.tre.2019.05.012>

Norwegian Labour and Welfare Administration. (2024). *Helt ledige [Fully unemployed]*. Retrieved May 24, 2024, from <https://www.nav.no/no/nav-og-samfunn/statistikk/arbeidssokere-og-stillinger-statistikk/helt-ledige>

Nunnally, Jum C. (1967), *Psychometric Theory*, 1st ed., New York: McGraw-Hill.

O'Brien, R. (2023). *The Green Future Index 2023*. MIT Technology Review Insights. Retrieved March 21, 2024, from <https://mittrinsights.s3.amazonaws.com/GFI23report.pdf>

Peterson, R. A. (1994). *A Meta-Analysis of Cronbach's Coefficient Alpha*. Journal of Consumer Research, 21(2), 381–391.

Prøsch, S, P. & Ziesler, J. (2021). *Norwegian Consumer Sentiment 2021*. BCG. Retrieved April 1, 2024, from <https://www.bcg.com/publications/2021/norwegian-consumer-sentiment-survey>

Razali, N. M., & Wah, Y. B. (2011). *Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors, and Anderson-Darling tests*. Journal of Statistical Modeling and Analytics, 2(1), 21-33

Reddy, K. Pradeep., Chandu, V., Srilakshmi, S., Thagaram, E., Sahyaja, C., & Osei, B. (2023). *Consumers perception on green marketing towards eco-friendly fast moving consumer goods*. International Journal of Engineering Business Management, 15(15).

Reichheld, A., Peto, J., & Ritthaler, C. (2023). *Research: Consumers' Sustainability Demands Are Rising*. Harvard Business Review. Retrieved April 26, 2024, from <https://hbr.org/2023/09/research-consumers-sustainability-demands-are-rising>

Roberts, J. (1996). "Green consumers in the 1990s: profile and implications for advertising". *Journal of Business Research*, Vol. 36 No. 2, pp. 217-31.

Rozario, S. D., Venkatraman, V., Chu, M., & Abbas, A. (2020). *Enabling Corporate Sustainability from a Talent Acquisition Perspective*. *Journal of Sustainability Research*, 2(2).

Schmidt, J., & Bijmolt, T. H. A. (2019). Accurately measuring willingness to pay for consumer goods: a meta-analysis of the hypothetical bias. *Journal of the Academy of Marketing Science*, 48(48).

Hva er vanlig lønn i Norge? [What is a normal salary in Norway] (2024, February 7). SSB. Retrieved June 12, 2024, from <https://www.ssb.no/arbeid-og-lonn/lonn-og-arbeidskraftkostnader/artikler/hva-er-vanlig-lonn-i-norge>

Stutz, A., Schell, S., & Hack, A. (2022). *In family firms we trust – Experimental evidence on the credibility of sustainability reporting: A replication study with extension*. *Journal of Family Business Strategy*, 100498.

Svanemerket. ["The Nordic Swan"]. (n.d.). *Svanemerkets krav*. [The Nordic Swan's requirements]. Retrieved March 17, 2024, from <https://svanemerket.no/krav/>

United Nations (2015). *Transforming our world: The 2030 agenda for sustainable development*. Retrieved April 25, 2024, from <https://sdgs.un.org/2030agenda>

Tavakol, M., & Dennick, R. (2011). *Making sense of Cronbach's alpha*. *International Journal of Medical Education*, 2, 53–55.

Turban, D. B. & Greening D. W. (1997). *Corporate Social Performance and Organizational Attractiveness to Prospective Employees*, *Academy of Management Journal* 40, 658–672.

United Nations, (2022). *World population to reach 8 billion on 15 November 2022*. Retrieved April 21, 2024, from <https://www.un.org/en/desa/world-population-reach-8-billion-15-november-2022>

Walker, K., & Wan, F. (2012). *The harm of symbolic actions and green-washing: Corporate actions and communications on environmental performance and their financial implications*. *Journal of Business Ethics*, 109, 227–242.

Wasik, J. (1992). "Green marketing: marketing is confusing, but patience will pay". *Marketing News*, Vol. 26 No. 21, pp. 16-18.

Wright, K. B. (2017). *Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services*. *Journal of Computer-Mediated Communication*, 10(3). Oxford Academic.

Wilcoxon, F. (1945). *Individual Comparisons by Ranking Methods*. *Biometrics Bulletin*, 1(6), 80–83.

WWF [World Wide Fund for Nature], (2020). *THE ECO-WAKENING*. WWF. Retrieved April 11, 2024, from <https://explore.panda.org/eco-wakening>

Appendices

Appendix 1: Online Questionnaire

BLOCK 1: Introduction

Introduction

Q1.1

Dear Participant,

Thank you for considering participation in this survey.

I am a Master's student at Católica Lisbon School of Business & Economics, currently engaged in a research study focusing on sustainability practices in Norway as part of my thesis work.

Your input is invaluable to this study. The survey is designed to take less than 5 minutes of your time. Please be assured that your participation is entirely voluntary and all responses will remain confidential and anonymous. We seek your honest opinions and there are no right or wrong answers.

Should you have any questions, comments, or concerns, please do not hesitate to contact me at s-trosenberg@ucp.pt.

Thank you once again for your valuable time and contribution to this important research.

By clicking the 'Next Page' button, you consent to the collection and use of your data for the purposes of this project

BLOCK 2: Norwegian or not

Norwegian or not?

Q2.1

*

Are you a Norwegian National, and/or do you live in Norway?

Yes

No

BLOCK 3: Willingness to pay and credibility

Willingness to pay and credibility

Q3.1

Important information!

For all questions with a slider: To leave the slider at its initial position of 0, you must first move it and then return it back to the starting point



Page Break

Q3.2

*

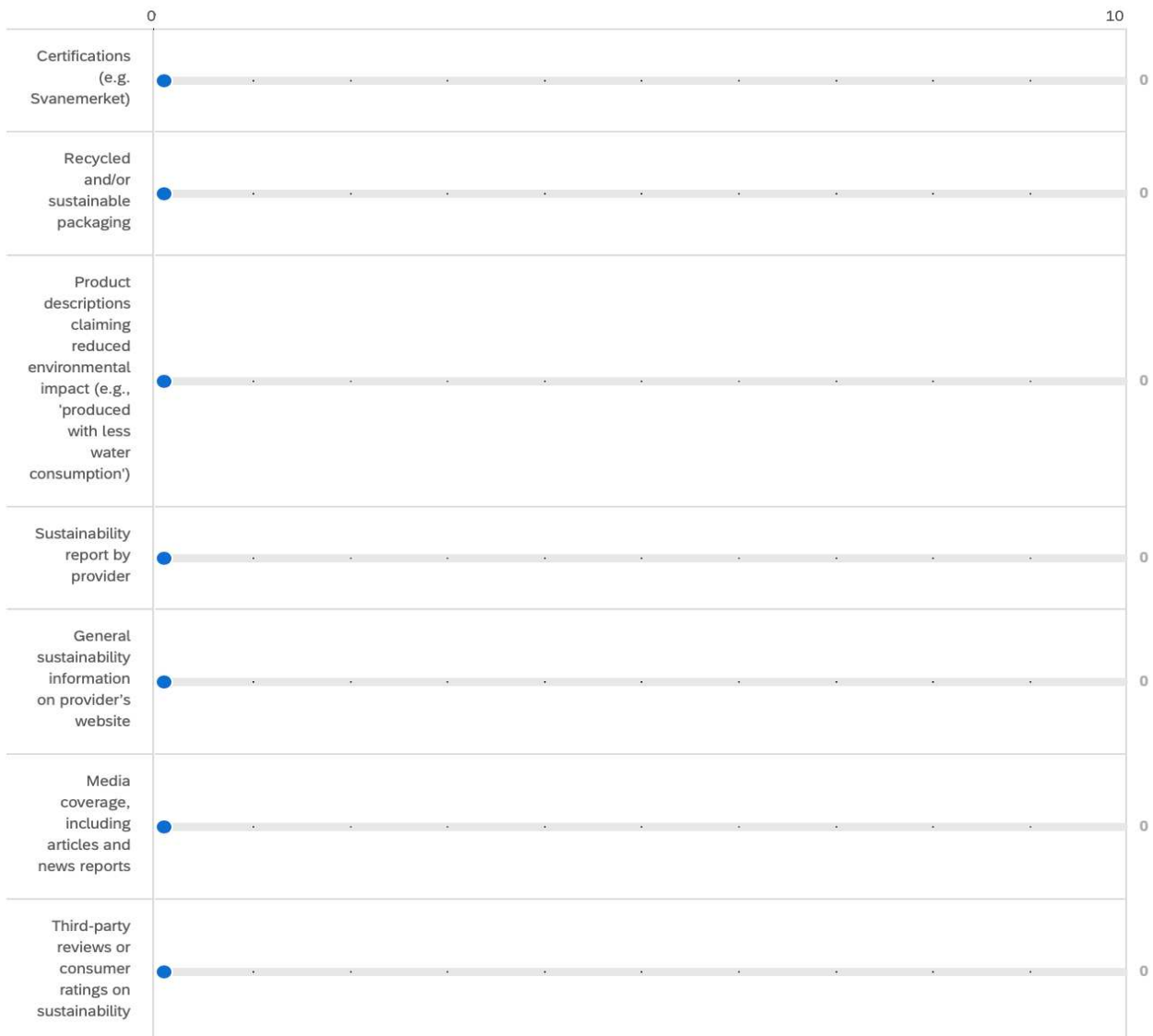
Imagine two completely identical products in terms of quality, functionality, and appearance. The only difference is that one product is considered sustainable, while the other is not. How much more, if at all, are you willing to pay for the sustainable product? Please select the percentage increase you are willing to pay.



Q3.3

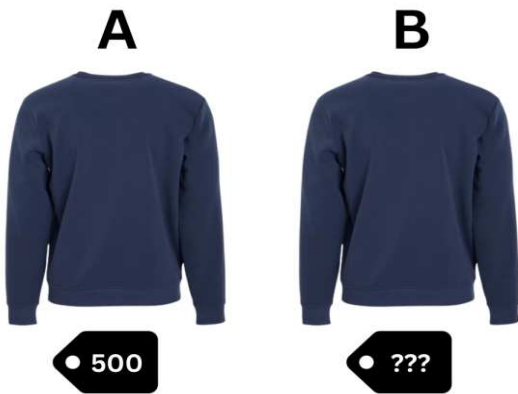
*

Below are various factors that people might consider when evaluating the sustainability of a product or service. Please rate how credible you find each of these elements on a scale from 0 to 10, where 0 means "Not at all credible" and 10 means "Extremely credible"



Q3.4

*



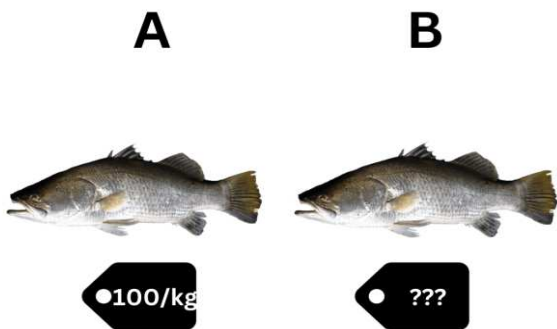
These two products are completely identical in terms of quality, functionality, and appearance. The only difference is that product B is more sustainable while product A is not. Imagine product A costs 500 NOK. Please select the price you are willing to pay for product B



Page Break

Q3.5

*

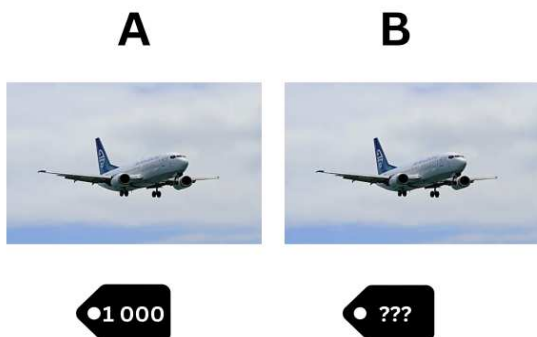


These products are completely identical in terms of quality, functionality, and appearance. The only difference is that product B is more sustainable while product A is not. Imagine product A costs 100 NOK/kg. Please select the price you are willing to pay for product B



Q3.6

*



These two services are completely identical in terms of quality, functionality, and service level. The only difference is that service B is more sustainable while service A is not. Imagine service A costs 1 000 NOK. Please select the price you are willing to pay for service B



Q3.7

★

A



100

B



???

These two services are completely identical in terms of quality, functionality, and appearance. The only difference is that service B is more sustainable while service A is not. Imagine service A costs 100 NOK. Please select the price you are willing to pay for service B



Page Break

Q3.8

★

A



10 000

B



???

These two products are completely identical in terms of quality, functionality, and appearance. The only difference is that product B is more sustainable while product A is not. Imagine product A costs 10 000 NOK. Please select the price you are willing to pay for product B



Q3.9

★

A



200

B



???

These two products are completely identical in terms of quality, functionality, and appearance. The only difference is that product B is more sustainable while product A is not. Imagine product A costs 200 NOK. Please select the price you are willing to pay for product B



Q3.10

★

A



● 10 000

B



● ???

These two products are completely identical in terms of quality, functionality, and appearance. The only difference is that product B is more sustainable while product A is not. Imagine product A costs 10 000 NOK. Please select the price you are willing to pay for product B



Page Break

Q3.11

★

A



● 1 000

B



● ???

These two products are completely identical in terms of quality, functionality, and appearance. The only difference is that product B is more sustainable while product A is not. Imagine product A costs 1 000 NOK. Please select the price you are willing to pay for product B



BLOCK 4: Sustainability profile as talent acquisition

Q4.1

★

On a scale from 0 to 10, where 0 means 'Not at all important' and 10 means 'Extremely important,' how significant is a company's sustainability profile in your decision to choose it as a workplace? If you are currently not working (such as being unemployed or retired), please imagine you are considering a new workplace.



Q4.2

★ ✕

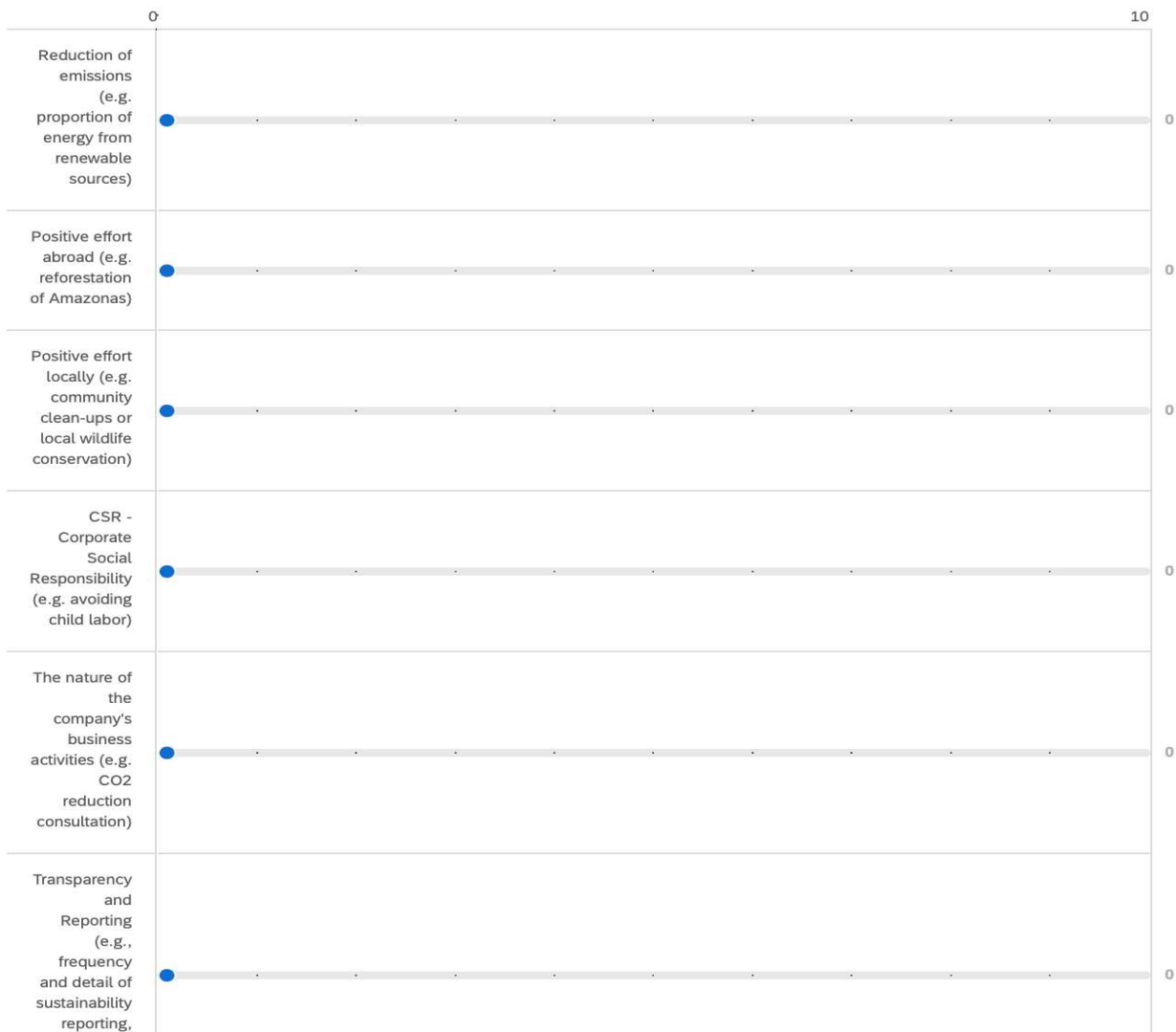
Please rank the following factors in order of importance when you choose your workplace, where 1 is the most important and 5 is the least important

The company's sustainability profile	1
Salary	2
Work-life balance	3
The company's reputation	4
Opportunities for internal advancement	5

Q4.3

★

Please consider the following aspects of sustainability when evaluating potential workplaces. Rate the importance of each aspect using a scale from 0 to 10, where 0 means 'Not important at all' and 10 means 'Extremely important'. If you are currently not working (such as being unemployed or retired), please imagine you are considering a new workplace.



BLOCK 5: Information about participant

Information about participant

Q5.1

*

How old are you?

- Under 18
- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 - 74
- 75 or older

Q5.2

*

What is your gender?

- Male
- Female
- Other
- Prefer not to say

Q5.3

*

What is your highest **completed** education?

- Primary school
- High school
- Bachelor's degree
- Master's degree
- PhD / Doctorate

Q5.4

*

What is your current employment status?

- Working part-time
- Working full-time
- Student / pupil
- Unemployed
- Retired
- Other

Q5.5

*

What is your total annual income? (Please include all types of income, such as social security, dividends, school grants, and any other sources.)

- Under 100 000 NOK
- 100 000 - 249 999 NOK
- 250 000 - 399 999 NOK
- 400 000 - 549 999 NOK
- 550 000 - 699 999 NOK
- 700 000 - 849 999 NOK
- 850 000 - 999 999 NOK
- 1 000 000 NOK or above
- Do not want to disclose

BLOCK 6: End of survey

End of Survey

We thank you for your time spent taking this survey.

Your response has been recorded.

Appendix 2: Sample Description Output

```
. tabulate Age, missing
```

Age	Freq.	Percent	Cum.
18 - 24	36	18.00	18.00
25 - 34	52	26.00	44.00
35 - 44	14	7.00	51.00
45 - 54	44	22.00	73.00
55 - 64	37	18.50	91.50
65 - 74	5	2.50	94.00
75 or older	5	2.50	96.50
Under 18	7	3.50	100.00
Total	200	100.00	

```
.  
* Frequency and percentage for Gender  
. tabulate Gender, missing
```

Gender	Freq.	Percent	Cum.
Female	92	46.00	46.00
Male	107	53.50	99.50
Prefer not to say	1	0.50	100.00
Total	200	100.00	

. * Frequency and percentage for Education

. tabulate Education, missing

Education	Freq.	Percent	Cum.
Bachelor's degree	78	39.00	39.00
High school	39	19.50	58.50
Master's degree	71	35.50	94.00
PhD / Doctorate	6	3.00	97.00
Primary school	6	3.00	100.00
Total	200	100.00	

. * Frequency and percentage for Occupation

. tabulate Occupation, missing

Occupation	Freq.	Percent	Cum.
Other	1	0.50	0.50
Retired	8	4.00	4.50
Student / pupil	37	18.50	23.00
Unemployed	1	0.50	23.50
Working full-time	122	61.00	84.50
Working part-time	31	15.50	100.00
Total	200	100.00	

. tabulate Income, missing

Income	Freq.	Percent	Cum.
1 000 000 NOK or above	27	13.50	13.50
100 000 – 249 999 NOK	33	16.50	30.00
250 000 – 399 999 NOK	15	7.50	37.50
400 000 – 549 999 NOK	17	8.50	46.00
550 000 – 699 999 NOK	44	22.00	68.00
700 000 – 849 999 NOK	33	16.50	84.50
850 000 – 999 999 NOK	13	6.50	91.00
Do not want to disclose	7	3.50	94.50
Under 100 000 NOK	11	5.50	100.00
Total	200	100.00	

Appendix 3: Cronbach's Alpha Test Results

```

. alpha WTPClothes WTPFood WTPTransportation WTPDelivery WTPElectronics WTPSelfCare WTPPersonalTransportation WTPFurniture
Test scale = mean(unstandardized items)
Average interitem covariance:    161703.5
Number of items in the scale:    8
Scale reliability coefficient:    0.6534

. alpha CertificationsCred RecycledCred ReducedEnvironmentalImpactcre SustainabilityRepCred WebsiteCred MediaCoverageCred ReviewsRatingsCred
Test scale = mean(unstandardized items)
Average interitem covariance:    2.151828
Number of items in the scale:    7
Scale reliability coefficient:    0.8135

. alpha ImportanceSustainabilityWorkpl ReductionofEmissionsImp EffortAbroadImp EffortLocallyImp CSRImp NatureofBusinessImp TransparencyandReporti
> ng
Test scale = mean(unstandardized items)
Average interitem covariance:    4.438678
Number of items in the scale:    7
Scale reliability coefficient:    0.9241

```

Appendix 4: Research Question 1

```

Wilcoxon signed-rank test

```

Sign	Obs	Sum ranks	Expected
Positive	149	17832	10050
Negative	51	2268	10050
Zero	0	0	0
All	200	20100	20100

```

Unadjusted variance    671675.00
Adjustment for ties    -3621.12
Adjustment for zeros    0.00
-----
Adjusted variance      668053.88

H0: PercentageIncreaseWTP = 12
      z = 9.521
Prob > |z| = 0.0000
Exact prob = 0.0000

. swilk PercentageIncreaseWTP

Shapiro-Wilk W test for normal data

```

Variable	Obs	W	V	z	Prob>z
Percentage~P	200	0.82269	26.451	7.536	0.00000

Appendix 5: Research Question 2

```
. swilk Clothes500Prem Food100Prem Trans1000Prem Delivery100Prem Electronics10000Prem SelfCare200Prem PersTrans10000Prem Furniture1000Prem

Shapiro-Wilk W test for normal data
```

Variable	Obs	W	V	z	Prob>z
Clothes500~m	200	0.91847	12.162	5.748	0.00000
Food100Prem	200	0.91285	13.001	5.902	0.00000
Trans1000P~m	200	0.89467	15.714	6.338	0.00000
Delivery10~m	200	0.88458	17.219	6.548	0.00000
Electronic~m	200	0.80639	28.884	7.738	0.00000
SelfCare20~m	200	0.87959	17.964	6.646	0.00000
PersTrans1~m	200	0.81063	28.251	7.687	0.00000
Furniture1~m	200	0.82252	26.478	7.538	0.00000

```
. swilk Mean1000 Mean1000andAbove

Shapiro-Wilk W test for normal data
```

Variable	Obs	W	V	z	Prob>z
Mean1000	200	0.92070	11.831	5.685	0.00000
Mean1000an~e	200	0.83977	23.904	7.303	0.00000

```
. histogram Clothes500Prem, normal
(bin=14, start=0, width=7.1428571)
```

```
. summarize Mean1000 Mean1000andAbove
```

Variable	Obs	Mean	Std. dev.	Min	Max
Mean1000	200	28.93125	18.30498	0	100
Mean1000an~e	200	20.16875	17.2677	0	100

```
. signrank Mean1000 = Mean1000andAbove, exact

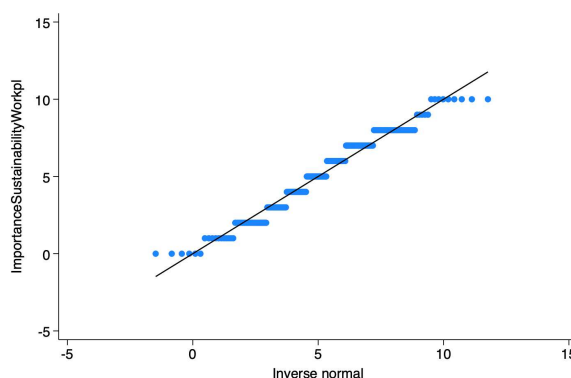
Wilcoxon signed-rank test
```

Sign	Obs	Sum ranks	Expected
Positive	173	18568.5	10022.5
Negative	17	1476.5	10022.5
Zero	10	55	55
All	200	20100	20100

```
Unadjusted variance 671675.00
Adjustment for ties -40.12
Adjustment for zeros -96.25
Adjusted variance 671538.62

H0: Mean1000 = Mean1000andAbove
z = 10.429
Prob > |z| = 0.0000
Exact prob = 0.0000
```

Appendix 6: Research Question 4



```
. swilk ImportanceSustainabilityWorkpl
```

Shapiro-Wilk W test for normal data					
Variable	Obs	W	V	z	Prob>z
Importance~l	200	0.98973	1.532	0.981	0.16334

```
. ttest centered_var = 0
```

One-sample t test

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]
center~r	200	.145	.1817555	2.57041	-.2134139 .5034139

```

mean = mean(centered_var)                                t = 0.7978
H0: mean = 0                                             Degrees of freedom = 199

Ha: mean < 0                                             Ha: mean != 0                                           Ha: mean > 0
Pr(T < t) = 0.7870                                       Pr(|T| > |t|) = 0.4260                                   Pr(T > t) = 0.2130

```

```
. summarize ImportanceSustainabilityWorkpl
```

Variable	Obs	Mean	Std. dev.	Min	Max
Importance~l	200	5.145	2.57041	0	10

Appendix 7: Research Question 5

```

. gen Sustainability_top_two = (Sustainability == 1) | (Sustainability == 2)
. tabulate Sustainability_top_two

Sustainabil
ity_top_two |         Freq.   Percent   Cum.
-----|-----
          0 |         156     78.00     78.00
          1 |          44     22.00    100.00
-----|-----
        Total |         200    100.00

.
. bitest Sustainability_top_two == 0.5

Binomial probability test

Variable |         N   Observed k   Expected k   Assumed p   Observed p
-----|-----
Sustainabi~o |         200         44         100     0.50000     0.22000

Pr(k >= 44)         = 1.000000 (one-sided test)
Pr(k <= 44)         = 0.000000 (one-sided test)
Pr(k <= 44 or k >= 156) = 0.000000 (two-sided test)

```

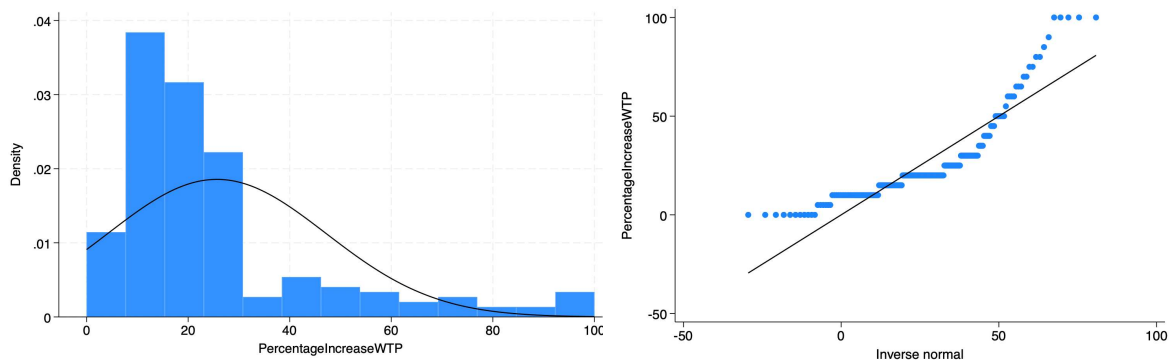
Appendix 8: Research Question 7 (Hypothesis 7a)

```

Shapiro-Wilk W test for normal data

Variable |         Obs         W         V         z         Prob>z
-----|-----
Percentage~P |         193     0.82085     25.911     7.475     0.00000
Income |         0         .         .         .         .

```



```

. regress PercentageIncreaseWTP high_income, robust

Linear regression                               Number of obs   =          193
                                                F(1, 191)       =           5.79
                                                Prob > F        =          0.0171
                                                R-squared       =          0.0260
                                                Root MSE       =          21.269

-----+-----
Percentage~P |         Coefficient   Robust   t   P>|t|   [95% conf. interval]
              |         std. err.
-----+-----
high_income |         7.07996     2.942164   2.41  0.017   1.276653   12.88327
_cons       |        21.38158     1.98531  10.77  0.000   17.46563   25.29753

```