Marketing Sustainable Innovation
How Sustainable Innovation Creates Growth
Opportunities for SMEs in International Markets

Elisabeth Våland Suhr

Industrial Economics and Technology Management
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Supervisor: Arild Aspelund, IØT

Norwegian University of Science and Technology
Department of Industrial Economics and Technology Management
Problem Description

This master thesis seeks to investigate how SMEs can use sustainable innovation and sustainability marketing to create opportunities for growth in existing developed markets, and how they can create opportunities for entry into emerging markets. Though sustainability operations present uncertainty and risk, research has found that sustainable innovation and sustainability marketing can create competitive advantage, and increase profits and market shares (Porter & van der Linde, 1995). The study is centred on conventional marketing theory as well as emerging theories on sustainable innovation, sustainability marketing and emerging markets.
Preface

This thesis was written as the conclusion of my Master of Science degree in Industrial Economics and Technology Management, at the Norwegian University of Science and Technology (NTNU). The specialisation of my degree has been within Strategy and International Business Development. This thesis is based on my pre-diploma thesis on green innovation, written in collaboration with Frida Louise Rotvold during the fall of 2016.

The aim of this study is to investigate how SMEs can use sustainable innovation and sustainability marketing to create opportunities for growth in international and emerging markets. The thesis is part of work package 1 (WP1) – Internationalization of the project Sustainable Innovation and Shared Value Creation in Norwegian Industry (SISVI) at NTNU.

First and foremost, I would like to thank my academic supervisor Professor Arild Aspelund for his valuable guidance and constructive feedback throughout the process. In addition, a big thank you for his help in identifying a suitable case firm, and engaging them in the study. The contributions are highly appreciated.

I would also like to thank the case firm, Raufoss Water and Gas AS, for agreeing to participate in the study, and for sharing insightful information on their operations. A special thank you is given to CEO Lars K. Ølstad, Director of Marketing Kjetil Bang Hagen, and Director of Production and R&D Geir Haugen for spending time on interviews and proof reading, as well as providing important empirical evidence.

Elisabeth Våland Suhr

Trondheim, July 11th 2017
Abstract

An increasing global focus on socio-ecological problems, stricter policies and regulations and advanced technological innovations are putting pressure on companies to develop and market more sustainable products and processes. Though sustainable innovation is becoming a mainstream concept, research on sustainability marketing is still limited. This despite its positive impact on market shares, profit and competitive advantage. Companies are also to a higher degree turning to emerging markets, as they see these as enormous opportunities for growth. It is therefore interesting to study the relationship between sustainable innovations and marketing, and opportunities for growth in both developed and emerging markets. Current research is limited on the relationship between sustainability marketing and opportunities for growth and this study will attempt to shed more light on the topic.

The study aims to answer two research questions. The first questions studies how small and medium-sized enterprises (SMEs) can use sustainability marketing to create opportunities for growth in developed markets. The second question studies how these same innovations can be used as a means to entry into emerging markets. These questions are answered through an exploratory single-case study of a small Norwegian industrial company.

The first research question takes into consideration the already established market of the company, in developed countries, and investigates how sustainability marketing can create opportunities for growth in this market. The second question looks at opportunities for entry into emerging markets. By answering these questions, I hope to find common characteristics of successful sustainable innovations and marketing strategies.

The results of the study show that the characteristics of the market segment and industry are important to take into consideration when engaging in sustainability marketing. In the developed markets, characteristics such as industry size and age, as well as conservatism and risk aversion were prominent. In the emerging markets, infrastructure, educational levels, climate and resource scarcity were important characteristics. The characteristics of each segment largely influenced their demands and responsiveness to sustainability marketing. The study also found that creating a trustworthy sustainable image from the inside out, while
cooperating with partners, institutions, value chain actors and customers was important for the success of sustainability marketing. These findings are condensed in a proposed framework for managing sustainability marketing.
Sammendrag


Studiens formål er å besvare to forskningsspørsmål. Det første spørsmålet undersøker hvordan små og mellomstore bedrifter kan bruke bærekraftig innovasjon og bærekraftighetsmarkedsføring for å skape muligheter for vekst i utviklede markeder. Det andre spørsmålet undersøker hvordan de samme innovasjonene kan brukes som et verktøy i etablering av nye markeder i fremvoksende markeder. Disse spørsmålene er besvart gjennom en utforskende single-case studie av et lite norsk industriselskap.


Resultatene av studien viser at karakteristikkene til markedssegmentene og industrien er viktige å ta hensyn til når man driver med bærekraftighetsmarkedsføring. I de utviklede markedene, er karakteristikker som industriens alder og størrelse, i tillegg til konservatisme og risikoaversion fremtredende. I de fremvoksende markedene er infrastruktur, utdannelsesnivå, klima og ressursknapphet viktige karakteristikker. Karakteristikkene til hvert segment påvirker...
i stor grad deres etterspørsel og respons til bærekraftige produkter. Studien har også funnet at å skape et troverdig bærekraftige image fra innsiden ut, samtidig som man samarbeider med partnere, institusjoner, verdikjedeaktører og kunder, er viktig for suksessen til bærekraftighetsmarkedsføring. Disse funnene er kondensert i et rammeverk for ledelse av bærekraftighetsmarkedsføring.
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Aalberts – Aalberts Industries NV
CSR – Corporate Social Responsibility
MNC – Multinational Corporation
NAV – Norwegian Welfare and Labour Administration
NCE Raufoss – Norwegian Centre of Expertise Raufoss
NGO – Nongovernmental Organisation
RWG – Raufoss Water and Gas AS
SINTEF Raufoss – SINTEF Raufoss Manufacturing AS
SME – Small and Medium-Sized Enterprises
1 Introduction

With an increasing global focus on socio-ecological problems, stricter policies and regulations, and advancing technological innovations, sustainability has gained momentum and is becoming mainstream. Though there are risks and uncertainties related to sustainability marketing, and some have argued that it is non-profitable (Rennings, 2000), many scholars have found that the development and marketing of sustainable products, services and processes increase competitive advantage, and that there does not have to be a trade-off between being sustainable and being profitable (Klewitz & Hansen, 2014; Porter & van der Linde, 1995).

Kleindorfer et al. (2005) argue that the increasing interest from companies to operate sustainably is based on several factors. Firstly, the costs of energy and material are rising. Secondly, public pressure increases with the development of policies and regulations. Lastly, companies are becoming aware that acting in accordance with triple bottom line practices (Elkington, 2004) can increase consumer demand. Sustainable development is increasingly prominent in manufacturing, but deliberate use of sustainability marketing to create opportunities for growth is still a relatively unexplored concept. However, studies have shown that sustainability marketing can increase market shares and profit as sustainable products increase consumer and society value by creating both customer value, and socio-ecological value (Amores-Salvadó, et al., 2014; Dangelico & Pujari, 2010; Hillestad, et al., 210; Porter & van der Linde, 1995).

Another exiting opportunity in marketing is emerging market. As developed markets are becoming increasingly saturated, many companies are looking to emerging markets to find opportunities for growth (London & Hart, 2004). Until now, many such strategies have been targeted at the customers at the top of the economic pyramid, but a number of studies are now looking at the potential of the untapped market at the base of the pyramid. London and Hart (2004) state that this is the largest and fastest-growing segment of the world’s population, and potentially the most exciting market growth opportunity for the future. In addition, sustainability marketing is an opportunity for companies to help solve social and
environmental problems in these markets, as well as develop local economies (Hart & Christensen, 2002; Kirchgeorg & Winn, 2006).

Due to the predicted growth opportunities related to sustainability marketing and emerging markets, studying the relationship between the two could identify interesting findings and further opportunities for growth. By looking at a company’s sustainable innovations and sustainability marketing, and their market success in developed and emerging markets, this study aims to explore this relationship.

In the literature study we performed in our project thesis in the fall of 2016 (Rotvold & Suhr, 2016), it was evident that research on sustainable or green innovation was not a well-developed field of study. Most of the articles discovered were published within the last ten years, and the majority of them were quantitative studies. This shows there is still much uncovered ground, especially within in-depth case studies. In addition, sustainability marketing and the growth opportunities that occur from sustainable innovation are not researched in detail, and exploring this may provide interesting findings.

1.1 Research Questions
The growth opportunities related to sustainability marketing and emerging markets present companies with enormous opportunities for increased competitive advantage, and increased markets shares and profits. This thesis seeks to investigate the relationship between sustainable innovation and sustainability marketing, and how it can create opportunities for growth and entry in developed and emerging markets. In addition, the thesis seeks to identify what makes sustainability marketing successful.

The thesis aims to study the aforementioned by answering the following questions:

**RQ1:** How can SMEs use sustainable innovation and sustainability marketing to create opportunities for growth in developed markets?

**RQ2:** How can SMEs use sustainable innovation and sustainability marketing to create opportunities for entry into emerging markets?
1.2 Structure of the Study

This thesis is structured as follows. The following chapter provides an introduction of the conceptual background of the thesis. This includes sustainability, sustainable innovation, a description of emerging markets, conventional marketing strategy, and sustainability marketing. Chapter 3 will describe the methodology of the thesis, including research method, case selection, data selection, data analysis, as well as discuss the quality of the research design and methodological limitations.

Chapter 4 will present the empirical data collected on the case firm, before Chapter 5 discusses the findings of the study. This discussion will look at relevant findings in the case as well as previous research done on the field, and implications for managers will be discussed. A framework for sustainability marketing is proposed, and limitations of the study and opportunities for further research are presented. Lastly, Chapter 6 will provide a conclusion of the thesis.
2 Conceptual Background

This chapter will present the conceptual background for the thesis. Firstly, sustainability and sustainable development are discussed. Then, an introduction to sustainable innovation will be given. After this, conventional marketing strategy and sustainability marketing will be discussed, before characteristics of emerging markets are presented.

2.1 Sustainability

In 1987, the United Nations proposed a strategy for achieving sustainable development through *Our Common Future*, also known as the *Brundtland Report* (WCED, 1987). It defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 8). This became the start of an environmental shift followed by Earth Summit in 1992, which resulted in Agenda 21 and the Rio Declaration, and lead to the establishment of the Commission on Sustainable Development (UN, 1992). This was an establishment to call for partnerships between business and environmental groups. The period post-Rio was seen as a turning point in the relation between corporate business and the environment (Redclift, 2005).

In 1997, the Kyoto Protocol was adopted, and in 2005 it took effect. Its function is to commit industrialised countries to stabilise greenhouse gas emissions based on the principles of the convention. The Kyoto Protocol presents two main elements. The first is a binding emission reduction commitment for developed countries. The second is the establishment of flexible market mechanisms based on the trade of emission permits (UN, 2016b). On the 4th of November 2016 the Paris Agreement entered into force (UN, 2016a), which sets out a global action plan to limit global warming.

Following these directives, scholars have seen the need to study the concept of sustainability. For companies to address the sustainable development challenge, it has been stated that they must balance their financial, social and environmental performance. Elkington (2004) has coined this concept as the “triple bottom line” or “triple P bottom line”. The three P’s stand for profit, people and planet, and the theory suggests that firms
must produce a triple bottom line to take account of all costs included in their business. Profit is the traditional economic measure of success. The people-factor measures how socially responsible a firm is, and the planet-factor measures environmental responsibility.

Kramer and Porter (2011) argue that the purpose of the firm should be shared value creation. They define shared value as “the policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which they operate” (p. 6). In other words, shared value focuses on identifying and expanding the connections between societal and economic progress. They propose three ways that a firm can create shared value opportunities: by reconceiving products and markets; by redefining products in the value chain; and by enabling local cluster development. In addition, they argue that governments need to develop regulations that enable shared value rather than work against it. By having a shared value state of mind, firms will look at new approaches to generate growth through innovations that also benefit society.

2.2 Sustainable Innovation

As discussed, industries are experiencing increased environmental pressure, and the Brundtland Report (WCED, 1987) asserts the importance of firms to create, redesign, adapt and diffuse environmentally sound technologies. Innovation has become an increasingly important way for firms to successfully compete in changing markets and environments while contributing to sustainable development (Klewitz & Hansen, 2014).

Sustainable innovation is a relatively new concept. Thus, no generally accepted definition of sustainable innovation exists. In fact, scholars are using the terms green innovation, eco-innovation, environmental innovation and sustainable innovation interchangeably (Schiederig, et al., 2012). Although these terms have many similarities, minor differences between the four have been identified. The most important is the social aspect only denoted to the term sustainable innovation (Schiederig, et al., 2012). This thesis will use the term sustainable innovation. Current research on sustainable innovation includes everything from R&D, new products and services, production processes (Pujari, 2004), management, corporate brand and organisational identity (Hillestad, et al., 210). Examples

An important difference between sustainable innovation and traditional innovation is the double externality problem (Rennings, 2000). The term double externality states that “the innovator creates or adopts a new process, product or organizational measure which improves the quality of the environment. While society as a whole benefits from the innovation, the costs are borne by the innovator alone” (Beise & Rennings, 2005, p. 6). In other words, the double externality problem can reduce firms’ incentive to undertake sustainable innovation.

Porter and van der Linde (1995) on the other hand, argue that there does not have to be a trade-off between being sustainable and being competitive. They suggest that firms should implement sustainable innovation to use resources more productively. This can help firms achieve better product quality and enhanced global competitiveness. They draw attention to pollution as a form of economic waste, and as a sign that resources are being used inefficiently. Further, they suggest that firms should trace their own and their customers’ pollution back into the firms’ activities to gain insight about beneficial changes. This relates well to the theory of circular economy (Andersen, 2007), which states that there must be a material symbiosis between different firms and production processes. It encourages an increasing reuse of materials through collaboration and circular formations in supply chains, and is stated to be both economically and environmentally beneficial. This way of thinking is closely related to life cycle assessment, which to an increasing degree is being implemented in supply chain innovation.

Current research has identified regulations and policies and market demand as some of the main drivers of sustainable innovation (Lin, et al., 2014; Skjøndal Bar, 2015). Porter and van der Linde (1995) draw attention to the importance of shifting the focus of managers and regulators to encourage innovation and resource productivity. They suggest establishing relationships between firms and regulators to enhance the communication between the parties. This will improve regulators’ insight on what type of regulations are
needed to facilitate sustainable innovation. In addition managers must develop and enforce sustainable values and strategies to guide and motivate employees in sustainable innovation activities.

Organisational identity and internal drivers such as values and strategy have been found to significantly improve sustainable innovation performance through organisational sustainable commitment (Chang & Chen, 2013; Noci & Verganti, 1999). This is found to be especially important in creating radical innovations (Leenders & Chandra, 2013). Chang and Chen (2013) found that green commitment was significantly smaller in SMEs than in larger enterprises. Skjøndal Bar (2015) attributes this to SMEs’ limited financial and human resources. Previous research therefore suggest that SMEs cooperate with larger firms and suppliers to overcome these barriers (Woo, et al., 2013). This is also found to be generally important for sustainable innovations. Sharing of external resources through openness and cooperation with research centres are positively related to effective innovations (Frey, et al., 2013; Galia, et al., 2015).

Though sustainable development is becoming mainstream, there has been a skewness towards the environmental aspect of sustainability (Kirchgeorg & Winn, 2006). The need to find new markets is a challenge in itself, and anti-globalisation demonstrations “have made it apparent that if corporate expansion is seen to come at the expense of the poor and the environment, it will encounter vigorous resistance” (Hart & Christensen , 2002, p. 51). Hart and Christensen (2002) do, however, believe the solution to this dilemma is to generate growth and satisfy social and environmental stakeholders through engaging customers at the base of the economic pyramid. These are predicted to be exciting opportunities for growth in the future, and have disruptive potential. Such markets also need technological innovations to address social and environmental challenges. Sustainable innovations can therefore aid in solving problems such as missing infrastructure, low educational levels and unemployment, while at the same time creating economic growth in the local society (Hart & Christensen , 2002; Kirchgeorg & Winn, 2006). This can help companies achieve triple bottom line operations (Elkington, 2004).
The next section will give an introduction to the characteristics of such markets, namely emerging markets.

2.3 Emerging Markets

The term emerging markets has been used rather inconsistently in strategy and marketing research and literature (Burgess & Steenkamp, 2006). Some financial institutions distinguish between developed countries and emerging markets, using three criteria. Firstly, income per capita must exceed 10 000 dollars. Secondly, the country must follow a stable and responsible macroeconomic policy. Lastly, the market capitalisation of publicly traded companies and shares traded on the stock market must be sufficient. Countries that do not meet all three criteria, are not considered developed countries (Burgess & Steenkamp, 2006).

Hoskisson et al. (2000, p. 249) define emerging economies as “low-income, rapid-growth countries using economic liberalisation as their primary engine of growth”. These are further categorised into two groups: developing countries in Asia, Latin America, Africa and the Middle East, and transition economies in China and the former Soviet Union. They further argue that in the early emergence of such markets, institutional theory is preeminent since societal and governmental influences are stronger in these economies than in developed economies. When markets mature, transaction cost economics and the resource-based view become more important (Hoskisson, et al., 2000).

As established markets are becoming saturated, multinational corporations (MNCs) are increasingly seeking opportunities in emerging markets (London & Hart, 2004). Many such strategies have been targeted at the top of the economic pyramid, but a number of new initiatives are exploring the untapped market potential at the base of the pyramid. London and Hart (2004) state that this is the largest and fastest-growing segment of the world’s population, and potentially the most exciting growth opportunity for the future. They further identify some characteristics of these markets. Firstly, there is a need to bridge formal and informal economies, as social institutions and contracts dominate.
Success in these markets therefore requires the capability to understand and appreciate the social infrastructure. Secondly, traditional partners may lack relevant experience, and non-profit organisations and other socially oriented institutions can be important in business development. This may require companies to collaborate with non-traditional partners. Lastly, societal issues such as poverty and the environment are important in emerging markets. Firms must therefore take into consideration the economic, social and environmental factors of their operations (London & Hart, 2004).

Sheth (2011) discusses the impact of emerging markets on marketing, and identifies five dimensions on which emerging markets differ from mature markets (Figure 1). Market heterogeneity is a product of markets being local, fragmented, low scale and mostly served by small, owner-managed enterprises. Emerging markets also have skewness towards base-of-the-pyramid consumers (Ottman, et al., 2006; Sheth, 2011), which have limited access to a well-developed infrastructure, and are poorly educated. This leads to less diversity in needs and wants, and consumer demand is largely driven by resource constraints. Sheth (2011) further argues that emerging markets have enormous influence of socio-political institutions like religion, business groups, government, nongovernmental organisations (NGOs), and local community. Many government-owned and -operated companies serve the market with monopoly power, or large, diversified trading groups dominate the market and influence government policies. It also includes faith-based political governance such as in Saudi Arabia and the Middle East. This leads to asymmetry in market power, which is important to keep in mind when entering the market.

Figure 1 – Five Characteristics of Emerging Markets (Sheth, 2011)
Thirdly, Sheth (2011) states that 60 percent of consumption in emerging markets is for unbranded products and services. This is because many branded services are not available due to infrastructure, access and high costs of doing business. In addition, outsourcing is minimal due to affordable labour, and the long life cycle of products. Emerging markets also tend to have chronic shortage of resources like electricity, water and physical space in consumption, exchange and production. Lastly, another characteristic of emerging markets is inadequate infrastructure, which includes physical infrastructure like roads and logistics, as well as market transaction enablers. Innovative access to consumers and non-traditional channels are therefore important.

2.4 Conventional Marketing

This section will give a brief introduction to conventional marketing strategy, which will be used to give a description of the case firm in Chapter 4.5 International Marketing. A description of segmentation, targeting, positioning and the marketing mix (Figure 1) will be given, as well as a short introduction to relationship marketing and the value proposition.

2.4.1 Segmentation, Targeting and Positioning

Market segmentation is the process of dividing the market into groups based on a set of criteria. These criteria may be geographic, demographic, psychographic, or based on consumer behaviour or needs. For successful segmentation, the process should lead to segments that are accessible, identifiable, meaningful and substantial. In other words, one must be able to identify which customers belong to which segment, the company must be able to reach the customers of the segments, each segment must have different needs, and the segments must be sufficiently large to be practically and economically viable (Stone & Desmond, 2007). Brookesbank (1994) describes the factors as homogeneity within segments, heterogeneity between segments, targetability via marketing mix and viability in commercial terms. When segmenting industrial markets, one should first identify sub-groups in the market that have common characteristics, also called macro segments. From these segments, target segments should be selected based on buying characteristics. These are called micro segments. Market segmentation allows for better customer relations,
marketing planning and resource allocation. In addition, it helps define the appropriate marketing mix for each segment.

After market segmentation, targeting is used to decide which markets to pursue. This is done by evaluating segments based on three criteria: the size and growth potential of each segment, segment attractiveness and company fit. Companies can select one or more segments based on available resources, capabilities and their desire for growth (Stone & Desmond, 2007).

“Positioning strategy refers to the choice of target market segment which describes the customers a business will seek to serve and the choice of differential advantage which defines how it will compete with rivals in the segment” (Brooksbank, 1994). Positioning strategy applies only to the level of a particular product, and must not be confused with corporate strategy. Brooksbank (1994) breaks positioning into three subcomponents: customer targets, competitor targets and competitive advantage. The idea is to target a segment of the market where the company’s strengths satisfy customers’ needs better than their competitors.

2.4.2 The Marketing Mix

After the positioning strategy is in place, an appropriate marketing mix must be developed (Brooksbank, 1994). A popular definition of the marketing mix is the four Ps developed by McCarthy (Peattie & Belz, 2010): product, price, promotion and place, where place is often referred to as distribution. It is important to have an appropriate positioning strategy in place before developing the marketing mix, to more easily define the four components. The marketing mix should be made so that customers regards it as being superior to those offered by competitors, by reflecting the company’s choice of competitive advantage (Brooksbank, 1994).
2.4.3 Value Proposition

“Value in business markets is the worth in monetary terms of the technical, economic, service, and social benefits a customer company receives in exchange for the price it pays for a market offering” (Anderson & Narus, 1998, p. 6). In other words, the value of a product is the sum of its monetary value, desired benefits and what a customer gets in exchange for the price it pays. Firms must therefore develop customer value models to gain advantages over their competitors. A value proposition is a marketing tool that company’s use to summarise why a customer should buy a specific service or product. The value proposition should explain how the product tends to a customer’s needs, in addition to communicating added benefits, and explaining why it is superior to other offerings on the market.
2.4.4 Relationship Marketing

“Relationship marketing attempts to involve and integrate customers, suppliers and other infrastructural partners into a firm’s developmental and marketing activities” (Sheth & Parvatiyar, 1995, p. 399). This way of marketing provides a shift from traditional transactional marketing strategies, moving from independence, competition and conflict to cooperation and mutual interdependence (Figure 2). It is believed that cooperation rather than competition, leads to higher value creation (Sheth & Parvatiyar, 1995). In addition, interdependencies are believed to reduce transaction costs, and generate higher quality and lower governance costs. Hence, relationship marketing enhances marketing productivity by achieving efficiency and effectiveness. Efficiencies include customer retentions, sharing resources between partners and efficient customer response. Increased effectiveness can be achieved by including customers early in the marketing process, and better being able to address each customer’s needs.

![Figure 3 – The Shift from Transactional to Relationship Marketing (Sheth & Parvatiyar, 1995)](image-url)
Grönroos (1997) identifies several differences between transactional marketing and relationship marketing (Table 1).

<table>
<thead>
<tr>
<th>The Strategy Continuum</th>
<th>Transaction Marketing</th>
<th>Relationship Marketing</th>
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<tbody>
<tr>
<td>Time perspective</td>
<td>Short-term focus</td>
<td>Long-term focus</td>
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<tr>
<td>Dominating market function</td>
<td>Marketing mix</td>
<td>Interactive marketing (supported by marketing mix activities)</td>
</tr>
<tr>
<td>Price elasticity</td>
<td>Customers tend to be more price sensitive to price</td>
<td>Customers tend to be less sensitive to price</td>
</tr>
<tr>
<td>Dominating quality dimension</td>
<td>Quality of output (technical quality dimension) is dominating</td>
<td>Quality of interactions (functional quality dimension) grows in importance and may become dominating</td>
</tr>
<tr>
<td>Measurement of customer satisfaction</td>
<td>Monitoring market share (indirect approach)</td>
<td>Managing the customer base (direct approach)</td>
</tr>
<tr>
<td>Customer information systems</td>
<td><em>Ad hoc</em> customer satisfaction surveys</td>
<td>Real-time customer feedback systems</td>
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<tr>
<td>Interdependence between marketing,</td>
<td>Interface of no or limited strategic importance</td>
<td>Interface of substantial strategic importance</td>
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<td>operations and personnel</td>
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<tr>
<td>The role of internal marketing</td>
<td>Internal marketing of no or limited importance to success</td>
<td>Internal marketing or substantial strategic importance to success</td>
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Table 1 – The Marketing Strategy Continuum

<table>
<thead>
<tr>
<th>The Product Continuum</th>
<th>Consumer packaged goods - Consumer durables - Industrial goods - Services</th>
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2.5 Sustainability Marketing

This thesis attempts to use both conventional and sustainability marketing theory as a framework for analysing the case firm. Firstly, a definition of sustainability marketing is given, followed by a presentation of two frameworks (Ottman, et al., 2006; Peattie & Belz,
2010) for sustainability marketing. Lastly some current findings of sustainability marketing are presented.

2.5.1 Defining Sustainability Marketing
Belz (2006, p. 377) defines sustainability marketing as “building and maintaining sustainable relationships with customers, the social environment and the natural environment”. A wide variety of terms define similar concepts, including green marketing, ecological marketing, environmental marketing, social marketing (Polonsky, 2011), and enviropreneurial marketing (Menon & Menon, 1997). What separates these definitions from sustainability marketing is their focus on environmental or social aspects only. Sustainability marketing on the other hand, takes into consideration both social, environmental and economic aspects (Belz, 2006). In addition, sustainability marketing aims to increase customer value by creating social and environmental value. Kirchgeorg and Winn (2006) define sustainability marketing as “the planning, coordination, implementation and controlling of all market transactions in such a way that a sustained satisfaction of the needs of current and potential customers toward the achievement of corporate objectives is granted, while at the same time contributing toward reducing ecological and social impacts and restoring social and ecological health” (p. 176).

Belz (2006) also presents characteristics that separate sustainability marketing from conventional marketing. Firstly, he notes that sustainability marketing departs from an identification of socio-ecological problems. In addition to common marketing goals like market shares, sales and profit, these socio-ecological aspects must be taken into consideration. Secondly, he states that the quality of sustainable products are often credence qualities, and trust, credibility and signalling are therefore crucial in sustainability marketing. Currently, there are few economic incentives to undertake sustainable business, and it will be important to change the institutional design to enable successful marketing of sustainable products beyond niche markets. Lastly, Belz (2006) states that sustainability marketing goes beyond traditional transaction or relationship marketing, as it is more long-term focused, aiming to build lasting relationships with customers, as well as the natural and social environments.
2.5.2 4Cs of Sustainability Marketing

According to Peattie and Belz (2010) the marketing mix represents the interface between a company and its customer. McCarthy’s traditional 4Ps model has been the most widely used model, consisting of product, price, place and promotion. The model has, however, received much criticism, and from a sustainability perspective, two factors are important. It is argued that it is producer-oriented and that it was developed with only the end user in mind, not all stakeholders. Peattie and Belz (2010) state that there are two new waves of marketing that go beyond adjustment and enhancement of the tradition marketing paradigm. These are eco-marketing or ethical marketing, and relationship marketing (Figure 4). They further propose a new construct, sustainability marketing, which includes...
the relational perspective of relationship marketing, and the broad focus of ethical and eco-marketing including society and the planet, in addition to just the market.

Peattie and Belz (2010) further define four ways in which marketing strategy must change. Consumer behaviour must be viewed holistically, socio- ecological problems must be the starting point of the marketing process, the marketing mix must be reconfigured and the transformational potential of marketing relationships must be utilised. They redefine the 4Ps marketing mix as 4Cs, as shown in Figure 4.

Customer Solutions

Customers purchase products and services as they present a solution to certain wants or

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**Figure 4 – The Shift towards Sustainability Marketing (Peattie & Belz, 2010)**

![Diagram showing the shift towards sustainability marketing with four quadrants: Relationship Marketing, Sustainability Marketing, Modern Marketing, and Eco-marketing Ethical Marketing.](image)

**Figure 5 – 4Cs of Sustainability Marketing (Peattie & Belz, 2010)**

![Diagram showing the 4Cs of sustainability marketing with Product, Price, Place, Promotion, and their corresponding Customer Solutions, Customer Cost, Convenience, and Communication.](image)
needs. Viewing a product as a solution emphasises the limitations of purchasing products which solve one problem, while causing another. In a sustainability perspective, products need to address both customer problems and socio-ecological problems. Peattie and Belz (2010) argue that sustainable products have six characteristics. Firstly, to be successful in the long run, the product must satisfy customer needs. Unlike environmental products, sustainable products focus on both social and ecological products, in addition to taking into account the entire life cycle of the product. Sustainable products must also provide significant improvements to socio-ecological problems as well as being improved continuously to keep up with the needs of customers, people and the planet.

Customer Cost
Peattie and Belz (2010) define customer cost as the cost of the entire consumption process, including non-financial costs such as time and effort, as well as other costs that may occur during the products lifetime. They argue that the total cost of a product includes not only acquisition costs, but also use and post-use costs (Figure 5).

![Customer Cost Diagram](image)

Figure 6 – Total Customer Cost (Peattie & Belz, 2010)

Convenience
Convenience differs from the traditional concept of place, as it is not limited to the physical distribution of products. Place has also become less relevant as consumption processes are moving to the internet and as consumption processes go beyond the point of exchange, including the use and disposal of products. Convenience represents a challenge for sustainability marketers, as there has historically been a trade-off between convenience and environmental performance. Some say that sustainable products must match conventional products, while others argue that the notion of convenience must change (Peattie & Belz, 2010).
Communication

Moving away from the unidirectional notion of promotion, marketing is starting to appreciate two-way communication with customers. Communication is vital in informing customers about sustainable products, and in ensuring long-term relationships throughout the life cycle of the product. For sustainable products, communication can be challenging, as concerns about greenwashing escalate with the number of sustainable product claims (Peattie & Belz, 2010). Greenwashing is the concept of corporations managing their reputations with the “public, financial community, and regulators, so as to hide deviance, deflect attributions of fault, obscure the nature of the problem or allegation, reattribute blame, ensure an entity's reputation and, finally, seek to appear in a leadership position” (Laufer, 2003, p. 255). Openness and dialogue with all stakeholders is therefore important in sustainability marketing.

2.5.3 3Cs of Sustainability Marketing

Ottman et al. (2006) present three principles for avoiding green marketing myopia (Chapter 2.5.1). These are consumer value positioning, calibration of consumer knowledge, and credibility of product claims (Figure 6).

![Figure 7 – 3Cs of Sustainability Marketing (Ottman, et al., 2006)](image)
Consumer Value Positioning

“The marketing of successfully established green products showcases non-green consumer value, and there are at least five desirable benefits commonly associated with green products: efficiency and cost effectiveness; health and safety; performance; symbolism and status; and convenience” (Ottman, et al., 2006, p. 27). Hence, in addition to the sustainable value of a product, other benefits may add value to the customer. These customers’ benefits must be aligned with relevant consumer market segments.

Calibration of Consumer Knowledge

It is important that sustainability marketing programs calibrate consumer knowledge so that consumers recognise the sustainable product’s benefits. Slogans and campaigns should emphasise product attributes as a solution for both the customer’s personal needs and the socio-ecological environment.

Credibility of Product Claims

Many consumers fail to identify and verify a sustainable product’s consumer and socio-ecological value. To gain consumers’ trust, firms must procure third-party endorsements and word-of-mouth evangelism to increase the credibility of their sustainability claims.

2.5.4 Eco-labels

According to Rex and Baumann (2007), eco-labelling has emerged as one of the main tools of green marketing. Though considerate resources have been put into making these efficient and effective, current efforts have mainly been focused at green consumers. They suggest that green marketing should learn from conventional marketing and use tools such as “addressing a wider range of consumers, working with the positioning strategies of price, place and promotion and actively engaging in market creation” (Rex & Baumann, 2007, p. 567). As mentioned by Belz (2006), sustainability marketing has currently been the most successful in niches and with consumers already concerned with sustainability. To increase market share and the potential competitive advantage gained through sustainability marketing, it is important to reach beyond these niches.
Foster and Green (2000) argue that there appears to be limited communication between customers and suppliers about green issues. They suggest that actively identifying information about green issues from customers, suppliers and other relevant stakeholders can make the innovation process greener. Thus, involving sales and marketing would be essential to communicate between the firm and the environment. Dangelico and Pujari (2010) also suggest that the customers’ lack of awareness is a challenge for firms. They propose that the awareness can be stimulated by eco-labels, which make green products recognisable. Arnold and Hockerts (2010) present the concept of ‘green flagging’. They suggest that labelling a product with ‘Green Flagship’ is a specific signal for the customers to buy the best product of its class.

One of the key risks when marketing sustainable products is the increased public scrutiny by some stakeholders such as environmental groups (Dangelico & Pujari, 2010). Verifiable sustainable credentials are therefore important to avoid stakeholder backlash (Belz, 2006; Dangelico & Pujari, 2010; Ottman, et al., 2006) “Green products must meet or exceed consumer expectations by delivering their promised consumer value and providing substantive environmental benefits” (Ottman, et al., 2006, p. 31). Product and consumer benefit claims must be meaningful, specific, qualified and unpretentious. They further propose two ways of doing this: by procuring third-party endorsements or eco-certifications, and encouraging word-of-mouth evangelism through consumers’ social or Internet networks.

2.5.5 Values, Brand and Image

Lately, there has been an increased focus on corporate branding and organizational identity as potential sources of sustained competitive advantage (Hillestad, et al., 210). This perspective emphasizes that the organization itself, rather than the products and services offered by the company, represents the main locus of differentiation and competitive advantage.
Amores-Salvadó et al. (2014), Chen (2008) and Noci and Verganti (1999) use the term green image. Amores-Salvadó et al. (2014) try to emphasise the importance of the firm's external projection of its environmental commitment as part of the achievement of positive business returns derived from efforts in sustainable innovation. They found a positive and significant relationship between green corporate image and firm performance. Moreover, Dangelico and Pujari (2010) see the development of green products, by improving firm reputation and image, as a means to enhance competitiveness. Furthermore, Amores-Salvadó et al. (2014) suggest that proactive environmental strategies should emphasise communication efforts towards their stakeholders to show what they are currently doing and what can be expected in the future. As a result, external actions aimed to improve a firm's sustainability image, will be positively perceived by the stakeholders, leading to improved legitimacy and better results. Integrating CSR and environmental concerns as an important part of a firm’s strategy may contribute to differentiation through a higher degree of trustworthiness (Hillestad, et al., 210).

2.5.6 Communication and Marketing Channels

Leenders and Chandra (2013) found a relationship between the channel structure and the effectiveness of green innovation efforts. They suggest that selling products through close contact and direct channels enhance the effectiveness of sustainable innovation by creating more business success for the firm. Communicating with customers is important to educate them on sustainability as well as receive feedback from customers during marketing and new product development (Ottman, et al., 2006; Peattie & Belz, 2010). In addition, creating relationship with customers will increase loyalty, and help build a trustworthy brand (Ottman, et al., 2006).
3 Methodology

This chapter presents the research methodology used in the thesis. Firstly, the choice of research method is presented. Secondly, case selection is discussed. After this, methods for data selection and analysis are presented in detail. Lastly, the quality of the research design and methodological limitations are discussed.

3.1 Choice of Research Method

Yin (2014) suggests there are three conditions to consider when deciding on a research method. The first and most important condition is the type of research questions posed. Secondly, the extent of control a researcher has over actual behavioural events must be considered. Lastly, one must consider the degree of focus on contemporary as opposed to entirely historical events (Yin, 2014). The following section will discuss research methods based on these criteria, seeking to find the most suitable method for this thesis, and justify this choice.

3.1.1 Type of Research Questions

This thesis aims to answer the following questions: (RQ1) How can SMEs use sustainable innovation and sustainability marketing to create opportunities for growth in developed markets? (RQ2) How can SMEs use sustainable innovation and sustainability marketing to create opportunities for entry into emerging markets? These aspects of sustainable innovation and international marketing, as well as the link to emerging markets, have not been empirically investigated within the field of international business. The questions therefore require in-depth research to obtain an understanding of the phenomena. This depends on extensive insight into the company’s strategy and values, their motivation for sustainable innovation and marketing, operations and market conditions among others things.

In addition, the research questions are of the type “how” as opposed to types like “what”, “where” or “how many”. This type of question is of explanatory nature, and requires insight into the company over time rather than specific incidents. It also requires insight
into many aspects of a business, like its environment, strategy and daily operations both prior to, during and after the implementation of the concept being researched. According to Yin (2014), methods like a case study, history or experiments are preferred research methods for this type of study.

3.1.2 Extent of Control and Contemporary Versus Historical Events
As opposed to in an experiment, behavioural events cannot be controlled when trying to answer the proposed research questions. In addition, the study must look at prior events as well as contemporary, ongoing developments and changes in the company. This also gives the opportunity to observe events and conduct interviews with people involved in decision-making processes, as well as examine documents, reports, records and other sources of data. The strength of a case study is the possibility to use a large variety of different data sources, as opposed to with a history (Yin, 2014).

So far, the three criteria: the nature of the research questions; the extent of control of events; and contemporariness of the events, suggest a case study is the most suitable research method. This is due to the method’s strength to utilise both contemporary and historical evidence, as well as its ability to perform an in-depth examination of events. Despite the case study methods standing out as the best choice for this study, the method’s weaknesses should also be considered.

The case study method has received criticism for not being rigorous enough, and it allows researchers to be more sloppy than for example in a statistical study (Yin, 2014). Furthermore, one can question the generalisability of results derived from a case study. Opponents of the method argue that, in the lack of statistical evidence, findings may only be true in a specific case or incident. Lastly, a case study is a time and resource consuming method due to the data collection and analysis processes. Despite these criticisms, the case study method is considered the most suitable for this thesis. Firstly, though there is only one researcher, the given timeframe for the study should be sufficient to conduct a case study. Secondly, despite the fact that statistical generalisations will not be made, the study
will provide analytical generalisations which will be of a higher conceptual level than the specific case. Lastly, measures will be taken to avoid the study not being rigorous enough.

In conclusion, when looking at the evaluation criteria and measuring the strengths and weaknesses of the methods, a case study is the preferred research method to answer the posed questions. Its distinct advantages will give the best results, and its weaknesses are possible to overcome.

3.1.3 Case Study Design
For this thesis, a holistic single-case study design was chosen. The main reason for this was the resource constraints due to there only being one researcher. In addition, a single-case study allows for a more in-depth analysis of the unit being studied. A holistic approach was chosen, as the study wishes to examine the global nature of the company, and since the underlying theory is of a holistic nature (Yin, 2014).

Despite the choice, the researcher is aware that there are several weaknesses to a holistic single-case study. In a holistic case study, a challenge can be that the study may be conducted at a too abstract level, lacking clear measures or data. As mentioned, the holistic approach was necessary as the study examined the company as a whole, and not something that could be divided into sub-units. Yin (2014) suggests that if you have the resources available to do a multiple-case study, this is better. Single-case designs can be vulnerable, as you have put all your resources into one case. In addition, having several cases may give analytical benefits. With more than one case, findings from the different cases may show supporting or contrasting conclusions, giving the study analytical strength. Another criticism of the single-case design is the fear about the uniqueness surrounding the case, which may limit the generalizability of the findings.

However, Yin (2014) proposes five rationales for choosing a single-case design. These are having a critical, unusual, common, revelatory or longitudinal case. An additional
rationale may be if the study is meant as a pilot study for further research on the topic. This thesis studies a previously unexplored relationship between sustainability marketing and growth opportunities in existing and emerging markets, and can be seen as a pilot study. In addition, the resources constraints related to the time-frame and number of researchers, made a single-case study the best option.

3.2 Case Selection

When selecting a case for the study, it was important that the case was suitable for answering the proposed research questions. A list of selection criteria was therefore developed to allow for a structured search for possible cases. Since the thesis is written as part of the SISVI project, which looks at sustainable innovation and shared value creation in Norwegian industry, the case should preferably be a Norwegian company. As the study looks at international marketing, the case must be (1) a Norwegian company with national and international operations. In addition, the study investigates how sustainability innovation and marketing creates opportunities for growth in international markets. Therefore, the case must have (2) sustainable innovations that differentiate them from their competitors, and (3) sustainability and CSR are an important part of the company’s strategy and values. Lastly, the company must have (4) a goal of international growth in existing and emerging markets. As the thesis was planned as a single case study, only one case was needed, and no considerations on similarities or differences from other cases had to be taken.

The initial search included searching the internet and especially news articles related to sustainability and production, but it proved hard to find a case that fulfilled all criteria. After talks with my academic supervisor, Arild Aspelund, Raufoss Water and Gas AS (RWG), stood out as a good option. RWG is Norwegian company, which has had large market shares throughout Europe for more than 50 years. Recent initiatives to expand to the USA and emerging markets such as South Africa, the Caribbean and Saudi Arabia, made them perfect for criteria (1) and (4). In addition, RWG’s most renowned product is the ISIFLO Sprint, a composite coupling for water and gas distribution networks. The product is known for its many sustainability features. RWG also focuses on social and
environmental values in their strategy and production, which fit well with criteria (2) and (3).

It was important to be able to access information from key managers in the company, that are responsible for or involved in innovation activities, strategy and value creation, sustainability and marketing. Having access to decisions makers within these areas was crucial to gain the insight needed to answer the research questions. CEO in RWG Lars K. Ølstad was contacted by my academic supervisor Arild Aspelund, who had been in contact with the company earlier through the SISVI project. RWG are also part of the SISVI project, and is therefore well known to the researcher. CEO Lars K. Ølstad agreed to participate in the study, in addition to Director of Marketing and Sales Kjetil Bang Hagen, and Director of Production and R&D Geir Haugen.

3.3 Data Collection
One of the major strengths of case study research is the possibility to work with a wide variety of different data sources. Some examples are documentation, archival records, direct observations, interviews, participant-observation and physical artefacts (Yin, 2014). Yin further constitutes four principles for data collection. Firstly, the use of multiple data sources is important. By using triangulation and finding converging lines of inquiry through different data sources, findings and conclusions are more likely to be convincing and accurate. Secondly, a case study database should be created to keep evidence structured and easy to examine. Normally, the database consists of the researcher’s report and the actual data in two separate collections (Yin, 2014). Thirdly, to increase the reliability of a study, it is important to keep a chain of evidence so that external observers can navigate the material and locate sources of evidence easily. Lastly, Yin (2014) cautions researchers in the use of electronic sources due to the amount of data available and uncertainties connected to this data.

In this study, a combination of documentary evidence and interviews was collected to gain the insight needed to answer the research questions. The following section will present in
detail what sources of data were used and how they were collected. All data was collected and organised in an online database, with separate folders for reports, interviews and documentary evidence.

3.3.1 Documents
To be able to answer the proposed research questions, it was necessary to obtain a thorough understanding of the case firm and its environment. This includes strategy, values, operations, market conditions and plans for market expansion. A variety of documents was analysed to find information about these conditions, including company websites, annual reports, press releases, media articles, company presentations and policy statements.

Prior to Case Selection
The data collection process started early, as documentary information formed the basis for choosing the case firm. This initial work included searching company websites, press releases and news archives to find a firm that was suitable for a single case study on marketing of sustainable innovations. It was important to know that the firm had done one or more sustainable innovations, and that they were working on marketing these in international markets. In addition to information about the firm itself, it was important to gain knowledge about industry characteristics, market challenges and the competitive environment. The most important documentary data sources were the RWG website and media articles. In addition, the Aalberts website provided some quantitative information through annual reports on the Aalberts group, which includes RWG.

Prior to Interviews
After the case firm had been selected and confirmed with company representatives, the collected information was examined more thoroughly. In addition, new information was provided by RWG. This included company presentations and statistics on the number of employees in each subsidiary of the company. As RWG is also part of NCE Raufoss, information was also gathered from their website and press releases. Media coverage was
found through searching Google and using the “news” function to stay up to date on articles about RWG and ISIFLO.

The second analysis of the documentary data provided greater insight to the company and its values and strategy, in addition to providing a more comprehensive overview of RWG’s network and competitive environment. The documentary data also helped develop good interview guides as it provided insight into what information was already known, and what had to be elaborated by company representatives.

3.3.2 Interviews
Three interviews were conducted with representatives from the case firm, the CEO, the Director of Sales and Marketing and the Director of R&D and Production. The CEO, Lars K. Ølstad, is involved in many aspects of RWG’s business, and especially in strategy, values and decision-making. Kjetil Bang Hagen, Director of Sales and Marketing, is responsible for market strategy and sales in all markets, and provided important information on marketing channels, competition and plans of market expansion. Geir Haugen, previously Director of R&D, now Director of Production, provided great insight into the innovation processes and routines of RWG, as well as information on market competition. The interviews were a great data source as they allowed for the collection of more in-depth information about topics related to the thesis, as well as personal opinions and explanations. In addition, the opportunity to talk to three different managers helped form a more nuanced picture of RWG and its market conditions. All three interviewees have been at the company for several years and therefore had extensive knowledge about both prior and current events and the motivations for strategical choices.

Interview Preparation
As mentioned, documentary data was analysed in detail prior to the interviews. Firstly, this helped develop constructive interview guides. The better the interviewer knows the company, the better he or she is equipped to respond and act on the responses of the interviewees, as well as guide the direction of the conversation, ask follow-up questions
and manage the focus of the interviewee (Yin, 2014). Secondly, by having obtained most of the relevant background information in advance, less time had to be spent reviewing this in the short time the company representatives had available. It was important to rather focus the interviews on more in-depth information about topics related to the thesis, such as marketing strategy, values, sustainability and R&D.

Three separate interview guides were developed prior to the interviews with the CEO (Appendix A), the Director of Marketing and Sales (Appendix B) and the Director of Production and R&D (Appendix C). The interviews had some similarities and some differences. Questions about certain things such as history, development routines and market shares were only discussed in one of the interviews, whereas more uncertain things, subject to personal opinion, such as values, strategy and future plans were discussed with two or more of the interviewees to gain a more comprehensive view of the actual situation.

The interview guides were made with the intention of conducting semi-structured and open-ended interviews. This made it easier to be flexible in the interview, and allowed for adaption and changes in questions along the way. It made it possible to add new questions as they arose as a reaction to the interviewee’s response, and to remove questions that had already been answered. The interview guides were structured chronologically, with seven main topics for each interview, varying with each interviewee. Common for all three interviews were (1) introduction questions and (2) overall strategy for the interviewee’s business area, and (7) emerging markets. For the CEO, the remaining topics were: (3) strategy development; (4) values; (5) R&D and products; and (6) the future. The Director of Marketing and Sales was asked about (3) marketing channels, (4) network, (5) market position, and (6) internationalisation and market expansion. Lastly, the Director of Production and R&D answered questions on the following topics: (3) innovation activities; (4) drivers for innovation; (5) the development of Isiflo Sprint; and (6) the future.

The interview guide also provided a short description of the topic of the thesis and interviews. This information, however, was kept rather limited so the interviewees were
not affected by the opinions or knowledge of the interviewer during the interview. The information was provided to allow the company representatives to prepare for the interviews by recalling events or experiences that might be relevant, prior to the interviews. The interview guide was not sent to the representatives from RWG before the interview, as they did not request it.

**Interview Conduction**

All three interviews were conducted in one day at the RWG headquarters in Raufoss, Norway. This was done for the convenience of the company representatives, and also allowed for a tour of the offices and production plant. Before the interviews, CEO Lars K. Ølstad provided a presentation of the company used with customers, and described the history and overall strategy and goals of the company. After this, he gave a tour of the facilities, including the production plant and work centre. Interviews with the three key managers were then conducted separately. The interview with the CEO lasted about 1 hour, as much of the information was already given in the introductory presentation. Interviews with the Director of Sales and Marketing and the Director of Production and R&D lasted 1.5 hours and 1 hour respectively.

All three interviews were recorded using audio-recording equipment, with the consent of the interviewees. The interviewees gave their oral consent before the interviews were conducted. Firstly, this allowed me to go back later and review the information properly, not risking missing parts that might be important. Secondly, by not having to take notes during the interviews, I could be more attentive and ask better follow-up questions. In addition, the recordings allowed for the interviews to be transcribed. The written transcripts made it easier to review information in more detail, as well as remove any doubts formed by my bias or values in retrospect.

At the beginning of each interview, a short introduction to the thesis and purpose of the study was given. The main topics of the interview were also presented. This was to make sure the interviewee understood the scope of the interview. The interviewees were
encouraged to speak freely during the interviews, which, in addition to providing a lot of interesting information, showed what topics they considered the most important. Additional questions to the original interview guide were also added during the course of the interview where it seemed relevant. Interviewing the company representatives separately allowed them to answer without being affected by the others. This also gave three separate views on the most important topics.

3.4 Data Analysis

When conducting case study research, one of the most challenging parts is analysing the data. Unlike statistical analysis, where formulas and methods form the basis for data interpretation, there is no specific recipe for performing data analysis in a case study. In these situations, an analytic strategy can help guide the researcher through data to find insights, patterns and concepts (Yin, 2014). The purpose of the analytic strategy is to link information from the gathered data to concepts that are relevant to the research questions, and gain insight through this.

This study will use grounded theory (Bryman, 2012; Yin, 2014) as an analytic strategy. It is one of the most widely used methods for analysis of qualitative data, and is an inductive strategy. Instead of thinking about theoretical propositions, you go through the data and see if you find any patterns. This may be the start of an analytic path, possibly leading to additional relationships in the data (Yin, 2014). Bryman (2012) suggests a twelve-step process with four tools when using grounded theory. These four tools are theoretical sampling, coding, theoretical saturation and constant comparison. The strategy is iterative, meaning that steps like data collection and data analysis are repeated interchangeably.

The process of theoretical sampling was started early, with the work on our pre-diploma thesis in the fall of 2016 (Rotvold & Suhr, 2016). This thesis was a literature review on green innovation in general, and included aspects such as marketing and possibilities related to green innovation and competitive advantage. The review gave an understanding of concepts and theories used to describe sustainable or green innovation, as well as
highlight which areas of the topic had been studied before. The theoretical sampling was continued in the initial phase of this study, as additional conceptual information had to be gathered on conventional marketing, sustainability marketing and emerging markets.

Coding is the key process in grounded theory (Bryman, 2012) and includes reviewing data and breaking it into labelled components. These components should be of theoretical importance or be salient within the fields of sustainable innovation, sustainability marketing, emerging markets, sustainable values or other concepts relevant to the study. The coding is tentative, and indicators of concepts should be in a constant state of revision and fluidity. Indicators should be compared constantly to see which concepts are the best match (Bryman, 2012). The coding process allowed for an understanding of important elements of the study as well as the relationship between them.

Bryman (2012) further suggests three different types of coding, all of which have been used in this study. These are open coding, axial coding and selective coding, and all three processes were performed manually in this study. The process of open coding includes “breaking down, examining, comparing, conceptualizing and categorizing data” (Bryman, 2012, p. 569). The identified concepts were grouped into five categories: background information, R&D activities, strategy and values, sustainability and CSR, and international marketing. After this, axial coding was used to put data back together and make connections between categories. This allowed for an understanding of the relationship between the concepts and showed consequences and patterns of interaction. It was especially valuable in trying to understand how sustainable innovation and marketing to lead to opportunities for growth.

Lastly, selective coding was used to decide on a core category (Bryman, 2012). The other categories were then systematically connected to this, validating relationships between the categories and filling in categories that needed development. The core category in this study is identified to be sustainability and CSR. According to Bryman (2012), the core category is the central issue around which all other categories are integrated. Identifying
this made it easier to grasp the essence of the findings, and work towards answering the research questions.

In addition to coding, memos were an important tool in the data analysis process. Memos are short written observations to help keep track of concepts and ideas that emerge throughout the process. The tool was used in both the examination of the documentary evidence and the interviews, as well as in the data analysis process. Since the study touches upon many different topics, it was useful to collect ideas and associations made along the way in memos. The aim of the data analysis process was to develop good categories and concepts, and find interesting relationships among them.

3.5 Quality of the Research Design

When conducting a case study research, there is always a need to consider the quality of the research design. In the field of strategic management, four tests are commonly used to establish the quality of the study: reliability, construct validity, internal validity and external validity (Yin, 2014). The quality of the research design may give an indication of the robustness and strength of research findings. This section will evaluate the quality of research design based on the four mentioned criteria.

3.5.1 Validity

Validity is commonly separated into three components: construct validity, internal validity and external validity (Yin, 2014). The three criteria will be discussed separately in this sub-chapter.

Construct Validity

“Construct validity refers to the extent to which a study investigates what it claims to investigate” (Gibbert, et al., 2008, p. 1466). In other words, if the procedures lead to accurate observations of reality. The measures of the study have to reflect the concepts being studied. Yin (2014) suggests taking three measures to increase the construct validity:
using multiple sources of evidence, establishing a chain of evidence, and having key informants review a draft of the case study report.

As mentioned in Chapter 3.3, a wide variety of data sources were used, including interviews and different documentary sources. According to Yin (2014), studies using multiple sources of evidence were rated more highly on overall quality than studies with only a single source of information. In addition to three separate interviews, a variety of documentary sources was used to minimise subjectivity in the evidence. As a result, conclusions were not only based on verbal information, but also on annual reports, media coverage and different websites. This made it possible use triangulation to find convergence between sources of evidence, as well as discover conflicting information. Similarities in evidence gives the study strength, while conflicting findings may help the researcher avoid making misleading or wrong conclusions. In conclusion, using multiple sources of evidence increases the study’s construct validity.

A second measure to increase construct validity, is maintaining a chain of evidence (Yin, 2014). This allows the researcher, as well as external reviewers to trace evidence from initial research questions to conclusions, and the other way around. Throughout the process, all findings have been cited properly, with the origin of data as well as the time for collection. This includes interviews, which include information of the time and place of each interview. Maintaining a consistent chain of evidence, helped avoid evidence getting lost in the process, in addition to allowing observers to trace all evidence used in the study. This is especially important for an emerging topic of study, so the basis for results and conclusions is known to reviewers.

Thirdly, a draft of the empirical findings of the study as well as interview transcripts were sent to key informants to make sure information had not been interpreted incorrectly or taken out of context. The first challenge related to this, is the simultaneous use of both English and Norwegian. All interviews were conducted and transcribed in Norwegian, which may have led to wrongful translations and information being altered in the process.
In addition, the researcher and interviewees may have different understandings of central terms and concepts, something that could have caused misunderstandings during the interviews. Despite these challenges, construct validity was strengthened by allowing the interviewees to review the raw material and the researchers understanding of it in the case study report. It also allowed the interviewees provide more information on certain events that had been left out in the initial interviews.

**Internal Validity**

Internal validity looks at the data analysis phase and the relationship between variables and results (Gibbert, et al., 2008). Internal validity is mainly a concern in explanatory studies, where the researcher tries to establish causal relationships between events (Yin, 2014). In this study, the relationship between sustainable innovation and marketing, and international market expansion is being examined. It is therefore useful to be aware of the different tactics of internal validity, to avoid wrongful conclusions to the research questions. The study has not directly observed the case company’s operations and decisions-making processes nor its competitive environment, and all results are therefore based on the interviews and documentary evidence. This means that the inferences found in the study are built on this data, and one can argue that they might not be correct. To increase the internal validity of the study, a thorough data analysis was conducted.

In order to avoid wrongful inferences on which factors influence RWG’s market success and position, external market conditions and competitive environment were analysed in addition to RWG’s operations and strategy. This provided insight into whether the firm’s market position was a results of external conditions or its internal strategies. Internal validity becomes especially important as RWG operates in several different countries, leading to numerous customers and an extensive value chain. In addition, many external factors such as policies and regulations that RWG cannot control, affect the company’s operations. Such external conditions also affect customers and their buyer preferences. Hence, taking into account both internal and external factors, will increase the internal validity of the study.
In addition to considering internal and external factors, one should take into consideration rival explanations of similar situations, but as the specific relationships studied in this thesis have not been studied in detail before, few such explanations exist. Inferences with existing research on sustainability marketing and emerging markets is attempted used to increase the validity of the findings. Findings may also be affected by the personal opinions of interviewees, and factors leading to success may have been misinterpreted. Despite this, the findings of the study are based on both interviews and documentary evidence, which will have eliminated such misperceptions. Considering all measures taken, the internal validity of the study is considered satisfactory.

**External Validity**

External validity, also known as generalisability, refers to whether the findings of a study are generalizable “beyond the immediate study, regardless of the research method used” (Yin, 2014, p. 48). As suggested by Yin (2014), theory was used to increase the reliability of the single-case study. Generalising study findings by using theory is what he calls analytic generalisation. Analytic generalisation can be done either by (1) corroborating, modifying, rejecting or otherwise advancing previous theoretical findings or (2) finding new concepts that arise when completing the case study.

As a single-case study does not allow for comparison between cases within the study, previous research has to be used to enhance the external validity of the study. In this thesis, findings made in the case company have been compared to previous findings within the field of sustainability marketing and emerging markets, and the support or rejection of these theories have been discussed. This is a way of verifying the findings of the study.

In addition, when developing the research questions, the form “how” and “under which circumstances” where used, which makes it easier to generalise the findings of the study (Yin, 2014). This further increases the external validity of the study. Taking into consideration the measures taken to improve external validity, and the ability to perform analytic generalisations, the external validity of the study is considered satisfactory.
3.5.2 Reliability

Reliability refers to the “consistency and repeatability of the research procedures in a case study” (Yin, 2014, p. 240). In other words, to what degree another researcher could follow the same procedures and arrive at the same results and conclusions. The goal is to minimise bias and errors in a study. For another researcher to be able to conduct the same case study, good documentation is crucial. Poor documentation can make external reviewers doubt the reliability of the case study. Yin (2014) suggests two tactics for dealing with such shortcomings: a case study database, and a case study protocol.

As the topic of this thesis is a rather unexplored area of international marketing, it is important that research procedures are evident to external reviewers. In this type of qualitative study, a challenge is that it relies heavily on subjective interpretation, both by the researcher, and the interviewees. Interviewees will have interpreted the situations and events retold to the researcher, and the researcher will have further interpreted the statements of the interviewees in addition to statements made in previous research. This subjective perceptive is impossible to avoid 100 percent, but good documentation should ensure reliability in the study. Therefore, all procedures are documented in this thesis, and data collected in a case study database.

The data collection methods of this study have been described thoroughly in Chapter 3.3. All documentary data was collected prior to the interviews, and the processes of collecting the two are described separately. This should make it possible for other researchers to repeat the procedures conducted in this study. Thus, the thorough documentation of the case study methodology significantly improves the reliability of the study.

In addition to a description of the research procedures, a case study database was created to further increase the reliability of the study. This database is a structured collection of the evidence collected, including transcripts and audio-records of the interviews, interview guides, hyperlinks to media coverage and websites, company presentations, working
notes, and all other documentary data. The case study database can be found in Appendix D of the thesis, and significantly increases the reliability of the case study.

Despite the measures taken, the subjective influence of the researcher and interviewees presents a vulnerability of the study with regards to reliability. Subjectivity and bias may affect the interpretation of case data, and hence also the results found in the study. However, considering the measures taken to deal with these challenges, the reliability of the study is considered sufficient.

### 3.6 Methodological Limitations

Some methodological limitations must be considered when looking at this case study. These include limitations related to research method, and data collection and analysis.

#### 3.6.1 Research Method

As mentioned in Chapter 3.1, despite its many strengths, the case study method has some limitations that must be considered. Though these challenges are considered, and measures put in place to minimize them, some limitations may still be evident in the study. Firstly, the case study method is criticised for not being rigorous enough. As mentioned throughout this chapter on research methodology, several measures were put in place to increase the validity and reliability of the study, making it more rigorous. Despite this, the researcher’s bias might have influenced the interpretation of some of the data.

Secondly, a case study is a resource-consuming process, and one could consider the 21-week timeframe of this study to be a bit scarce, especially for one researcher. Despite this, limiting the study to a single-case study has allowed for a thorough case study to be performed. Of course, some limitations must be recognised. First of all, the project for which the study was being performed in on shared value creation and sustainability in the Norwegian industry. This limited the number of possible case firms to be examined. In addition, some more research and maybe interviews with the network or affiliated
institutions would be valuable to gain greater insight into the competitive environment of the firm. With only one researcher, it turned out to be enough conducting a series of time-consuming interviews within the firm, as the data must also be processed and analysed after collection.

Lastly, Yin (2014) points to a lack of generalisability as a possible weakness in case studies. Though one can put forward analytical generalisations, many critics argue that statistical generalisations give stronger findings due to their quantitative nature. Others argue that a combination of both qualitative and quantitative evidence will give the most robust findings. Despite this, due to the time constraints and newness of the topic being studied, it was not possible to conduct a quantitative study at this time.

3.6.2 Data Collection

The evidence used in this case study consists of both documentary data and three interviews. It must be recognised that both types of evidence has its limitations.

Documentary evidence was mainly collected from the internet. This included company websites and media coverage, among others. The internet can be hard to navigate, and with the large amount of data available it is impossible to know if all relevant data has been found. In addition, some documents may deliberately have been withheld, and the data is therefore not available to the researcher. The large amount of data can also make it hard to sort out what is actually relevant. Hence, one can argue that the collection of documentary evidence may not be complete.

In addition, credibility is a concern with documents retrieved from the internet. Most documents used in this study are from the company itself, or reliable mass media sources. Despite this, one should not forget that the documents are developed with a certain audience and purpose in mind, which are not this case study. Documents may also be influenced by personal bias or political opinions, things that are hard for the researcher to
identify. Lastly, some media coverage or website material may be out of date, not providing the newest information on the case. Consequently, material collected from the documentary sources is reviewed critically, and information is cross-checked with several sources, including the interviews.

In addition, the interviews present several limitations. Firstly, the questions asked in the interviews may be poorly articulated. In order to minimise this limitation, thorough interview guides were developed and revised several times before the interviews. My academic supervisor also reviewed the guides, which helped seed out less important questions and highlight what was the most important. It also helped make the questions as accurate and concise as possible, so time was not wasted on irrelevant questions. In addition, the answers given by the interviewees may have been inaccurate or poorly articulated. To limit this limitation, questions were as accurate as possible, and the opportunity to ask follow-up questions made it possible to clarify any information given during the interviews. I also had the interviewees review the interview transcript some while after the interviews, to make sure information given was accurate. The feedback gained from this process was taken into account, and the material was reviewed again. Limitations due to poorly articulated questions or answers should therefore be quite insignificant.

Interview evidence can also be affected by reflexivity (Yin, 2014). In other words, the interviewees giving the answers they thin the interviewer wants to hear. Due to this, the interview guides were developed to minimise this limitation. This was done by using open-ended questions like “how”, “to what degree” and “in what way”, to avoid leading the interviewee. In addition, questions that might put the interviewee in a defensive position were avoided to make sure important information was not withheld. I also made sure to keep my personal opinions and hypotheses to myself, so to not affect the answers given. Lastly, all interviews were done separately. This meant the interviewees were not affected by each other’s presence, opinions or answers. All three interviewees were asked questions regarding some similar topics, meaning the information given in each interview could be cross-checked with the other interviews, as well as the documentary data.
3.6.3 Data Analysis
Since all parts of the data analysis process were performed manually, all findings are affected by personal perceptions and opinions. In addition, there is only one researcher on this study, which may amplify these limitations. Due to this, there might exist categories and relationships that have not been discovered, in addition to there possibly being other perspectives on the matter. Since there has only been one researcher, the opportunities for discussion and disagreement on topics and conclusions along the way have also been limited. This leaves many interpretations and findings made by the researcher unchallenged. Despite this, the researcher has attempted to look at the evidence and conclusions several times over a large period of time to achieve as much perspective as possible on the research. Findings have also been discussed with my academic supervisor Arild Aspelund, to determine the importance of findings and get new input on the concepts. Lastly, the iterative nature of the grounded theory has allowed the me to reconsider and redevelop concepts and theories several times.
4 Empirical Data

In this chapter, relevant empirical data collected on the case firm is presented. The data is based on documentary evidence collected through a thorough review prior to the interviews, as well as information collected through interviews with key managers. A discussion on the empirical findings will be presented in Chapter 5.

4.1 Background Information on Raufoss Water & Gas AS

The following case description of Raufoss Water & Gas AS (RWG) is primarily based on the interviews with CEO Lars K. Ølstad, Director of Sales and Marketing Kjetil Bang Hagen and Director of Production and R&D Geir Haugen. In addition, information was gathered from documentary sources such as the company website, press releases, company presentations, annual reports and media coverage.

4.1.1 Introduction

RWG is a Norwegian industrial company established in 2000. It has manufactured and supplied ISIFLO couplings for the European water and gas distribution market since 1965, when Raufoss Ammunisjonsfabrikker acquired the rights to the ISIFLO brass coupling. Since 1971, it has sold more than 130 million ISIFLO couplings in Europe. RWG is headquartered in Raufoss, Norway, and has subsidiaries in Sweden, Denmark, France and Germany. RWG has a total of 143 employees, of which 58 are located in the headquarters in Raufoss, and a turnover of about 52 million Euro.

RWG’s stated concept is to create value through the development and delivery of environmentally friendly products of high quality within the sector of water and gas distribution networks (ISIFLO, 2017a). Its slogan is: “Where quality counts – choose your partner wisely”.
4.1.2 Aalberts Industries NV

Since 2004, RWG has been a fully owned subsidiary of the Dutch industrial group Aalberts Industries NV (Aalberts). Aalberts is listed on the Amsterdam stock market, AMEX, and has a total revenue of 2.5 billion Euro. It operates from 201 locations in 34 countries, and has a total of more than 15 000 employees. It is important to note that Aalberts is an industrial, not financial, company. Each year it acquires a small number of local niche market SMEs with strong brands, and is focused on creating growth, not investing in restructuring projects. As for organisational structure, each subsidiary is responsible for day-to-day business, creating a very decentralised structure (Aalberts, 2017b). Aalberts provides RWG with a large commercial network, which can otherwise be hard for an SME to obtain.

Aalberts focuses on using group strengths to achieve sustainable profitable growth (Aalberts, 2017b). Its objectives are to be worldwide leading in niche technologies, generating high-added value margins, creating sustainable profitable growth and converting strong operational execution into free cash flow. The Aalberts way is “winning with people”. This includes being an entrepreneur, taking ownership, going for excellence, sharing and learning, and acting with integrity.

4.1.3 NCE Raufoss

RWG is also part of NCE Raufoss, a Norwegian Centre of Expertise, which consists of 19 companies and a network of 41 companies. The cluster has its main business in the automobile, defence and electronics sectors, and is a national centre of competence on automated production and lightweight materials (NCE, 2017). The NCE initiative is a national effort to develop the most internationally oriented and expansive industrial clusters in Norway (NCE Raufoss, 2017). NCE Raufoss has a total revenue of about 13 billion NOK, and an export share of about 85 percent.

The main purpose of NCE Raufoss is to strengthen competitiveness and innovation through expansive cooperation between the companies and partners. Research-based innovation is the main pillar of NCE Raufoss, and the cluster has developed a shared centre
of competence in SINTEF Raufoss Manufacturing AS (SINTEF Raufoss). Such cooperation on R&D, cost reduction and infrastructure are important for Norwegian companies to be able to compete in globally competitive industries (NCE Raufoss, 2017).

4.1.4 ISIFLO Sprint

RWG’s main products are ISIFLO couplings for water and gas distribution networks. The ISIFLO brand is one of the most well-known names in the European market, and the product line consists of both brass and composite couplings. It started manufacturing the brass couplings after acquiring the patent in the mid-60s, and started developing composite couplings around 2002, though development was slow and the product was not on the market until 2009. The composite couplings are called ISIFLO Sprint and combine the strength of metallic fittings with the corrosion resistance of thermoplastics. ISIFLO Sprint is a push-fitting, which is easy to install and requires no special tools or education. RWG markets it as “strong, safe, fast, easy” (Figure 8). ISIFLO Sprint is also lead-free and durable, with an expected lifetime of up to 50 years. The product is developed and manufactured at RWG’s facilities in Raufoss. RWG was awarded the Norwegian Design Council’s Award for Design Excellence for the ISIFLO Sprint in 2009, and is considered revolutionary in the coupling industry (Norsk Design og Arkitektursenter, 2017).

![ISIFLO Sprint](image)

*Figure 8 – ISIFLO Sprint*
4.2 R&D Activities

In RWG, new R&D initiatives usually come from the marketing department. These are the ones that are in contact with customers, sensing the market’s pull for new products. All new development projects have to be approved by the marketing department. Once a month, representatives from all departments meet in what they call “Produktrådet”, the product council, where ongoing projects and new ideas are discussed. As the coupling industry is a rather limited segment, there is little focus on developing completely new products. In addition, the development of new products is a slow process, as new materials and products require elaborate testing to be certified for use in water distribution networks. RWG does, however, put four percent of its turnover into R&D activities every year with the motto “product development for the future”. RWG’s main focus in R&D is differentiation and having product uniqueness.

RWG uses a kind of stage-gate product innovation process (Cooper, 1990), where each development project passes through a given amount of stages. Between each stage is a gate where a project is either scrapped or continued. This process includes a lot of paperwork and reporting, which can be useful if a project is scrapped and taken up again several years later. As there is no specific focus on sustainability in the water and gas distribution industry, RWG does not aim specifically at developing sustainable products. There are, of course, standards for materials used in water distribution in addition to local government regulations in some areas, but quality and price are the most important features to customers. The connection with Aalberts, NCE Raufoss, SINTEF Raufoss and other projects provide financial and technical resources and opportunities, which are otherwise limited to SMEs.

4.3 Strategy and Values

As RWG is a small company with a relatively flat organisational structure, they have no written down strategy or values. Their vision is to be world leading in the “mains to meter” segment, that is, the pipes that go from the main network to the meters installed in buildings and homes. A common goal in everything they do is thinking long-term. They want to be able to face critics and stand for what they do, today and in the future. Their strategy involves working on innovative and environmentally friendly materials, unique
products, and technological solutions that last and do not make an impact on the environment. Uniqueness and technological differentiation are major strategic focuses of RWG. Their products are more advanced and of better quality than the competitors’, but the price of their products is also about 20 percent higher. RWG aims for a growth of about ten percent per year, though it was as high as 20 percent in 2016. The high growth will probably continue this year, with entrance into new markets such as the US.

RWG’s values are, according to the CEO, honesty, trust, participation and long-term sustainability. Like the strategy, values are not written down or communicated deliberately to employees. They are embedded in the way they do business, and if asking different people around the company, one might see some variation in the answers on what they company values are. The CEO does, however, believe that all answers would be something in line with the mentioned values. In addition, compliance and anti-corruption are important values from the Aalberts group. All higher-level employees in Aalberts companies have to go through a series of webinars on these topics to get a certificate.

### 4.4 Sustainability and CSR

Around year 2000 it was discovered that more than 100 years of industry at Raufoss Industrial Park had led to large amounts of pollutants and waste in the nearby environment. This was an eye-opener for RWG, eventually leading to their strict Corporate Environmental Policy and focus on sustainable production.

#### 4.4.1 Corporate Environmental Policy

The RWG Corporate Environmental Policy considers local, regional and global environmental aspects, and includes every part of the production and distribution chain, from the production of raw material to the end user (ISIFLO, 2017b). The policy includes working within the strictest environmental standards for management and production, and annual third party audits, as well as using suppliers that also follow these standards. RWG also focuses on using local suppliers in order to decrease transportation emissions. In addition, R&D resources are put into improving the environmental performance. This
includes production processes, products and packaging. The documentation of sustainable production is important, both internally and towards customers.

Closed-Loop Production and Waste Handling
The Corporate Environmental Policy is especially focused on waste handling and closed-loop production. This includes initiatives like (ISIFLO, 2017b):

- Scrap, oil and liquids from production are recycled in closed circuits.
- All material is sorted and recycled if possible.
- All waste is collected and registered. Annual goals are set to reduce waste.
- RWG is a member of RENAS, an organisation that collects and recycles industrial electrical waste.
- Energy consumption is monitored, and programs put in action to reduce CO₂-emissions.

4.4.2 ISIFLO Sprint
In addition to production and process sustainability, the ISIFLO Sprint represents a sustainable product innovation. Its unique function, design and materials give it many environmental and societal benefits (ISIFLO, 2017c). Firstly, the push-in functionality allows the product to be installed without special tools or education, making installation in developing countries easier. The push-in feature also reduces the chance of incorrect installation, and drastically reduces installation times. Installation can also be carried out in any temperature and weather conditions, making it suitable for many different geographical markets. Secondly, the coupling is lead-free and corrosion resistant, creating health and durability benefits. Unlike traditional plastic couplings, the material does not sag over time, and it is as strong as metallic couplings.

4.4.3 Integration and Work Centre Project
In addition to environmental efforts, RWG is part of a project to help immigrants and unemployed people learn Norwegian and gain working experience. The project, which is
implemented in cooperation with NAV, is mainly an effort to help integrate immigrants by giving them a job and teaching them Norwegian through this job. Project participants assemble the ISIFLO Sprint at the RWG work centre in Raufoss, and all communication in the work centre must be in Norwegian. The assembly of the couplings would have had to be outsourced if not for the inexpensive man-hours provided by the project. The project also allows participants to show potential employers what they can do, and many have gotten a full-time job through the initiative.

4.4.4 Aalberts Code of Conduct
As RWG is increasingly working towards emerging markets, focus on anti-corruption is important. These countries have a higher occurrence of corruption and other work-related crimes, and when entering these markets, it is important to be aware of this. Measures are put in place at Aalberts centrally to cope with such challenges, and all key employees in finance, HR, operations, purchase, sale and general management must go through the Aalberts Integrity Academy e-learning portal (Aalberts, 2017a). The Aalberts Code of Conduct includes business integrity, dealing with suppliers, fair and timely disclosure of information, responsible work conduct, responsible work environment, corporate responsibility, proper authorisation and approvals, and the “Speak up!”-program. RWG has a high focus on staying within these guidelines.

4.5 International Marketing
4.5.1 Market Conditions

*Developed Markets*

The water and gas distribution market is a conservative market, where quality is the most important trait of a product. Products are expected to last at least for many years, and they have to be consistent to match the existing piping in an area. The market is also extremely risk averse. Even small mistakes or faults on the product can be very expensive and affect many people. The motivation is to not do something wrong, rather than do something well, and customers tend to buy the products that they know to be safe. This makes barriers to entry and switching costs high in the industry. Since water distribution is something that
goes on underground, there is generally little political focus on it. As long as water prices stay low, it does not matter that as much as 50 percent of water is lost during transportation. The main political focus in the industry is the certification of materials used to transport drinking water, which may be the main driver for sustainable innovation in the segment. RWG sees the importance of being on different boards and committees that set these regulations, to always be up to date on what regulations are coming.

As couplings is a niche market, international expansion has been important since the beginning of ISIFLO. Today, RWG distribute the ISIFLO couplings to more than 30 countries, with the biggest markets being Norway, Denmark, Germany, France, the Benelux countries, Sweden, Austria and Spain. The coupling industry consists of mechanical and welded solutions, with RWG operating within mechanical solutions. This segment is further constituted of 25 percent metallic couplings and 75 percent thermoplastics. The demand for brass couplings is stable or even declining, while the demand for composite is increasing. Composite couplings have the features to be able to compete in both segments, as they are as durable as metallic couplings, while being more affordable and corrosion-free like plastic couplings. This way, the ISIFLO Sprint is creating new opportunities for growth, though the ability to exploit this is limited by RWG’s production capacity. RWG has a goal of ten percent growth per year, but last year the growth came to 20 percent. RWG is now working on expansion to the US, especially in the agriculture segment. This is an opportunity made possible through the Aalberts network and the ISIFLO Sprint, since brass couplings are too expensive and not well fit for agriculture. They see this possibility as a huge opportunity for growth.

**Emerging Markets**

Over the last couple of years, RWG has also explored the possibility of expansion to emerging markets such as the Middle East, South Africa and the Caribbean. These are markets were water is a scarce resource, and a well-functioning water distribution network is therefore more important. In addition, education levels are lower and the access to advanced tools more limited. It is also a problem, especially in South Africa, that people steal tools and metallic couplings to sell them at scrap price. This makes the ISIFLO Sprint
a great option, as it is not metallic, and does not require special tools or education. The difference in climate also makes the composite coupling more suitable for Caribbean conditions, where the salt water would cause corrosion on brass couplings. RWG has also seen an increasing interest in sustainable solutions in the Middle East. In general, the barriers to entry and switching costs are not as high as in the European market. In addition, where the quality factor is the most important in European markets, there is a higher need for the more sustainable features of the ISIFLO Sprint in emerging markets.

Despite these obvious opportunities in South Africa, the Middle East and the Caribbean, RWG is struggling to gain foothold in these markets. Due to challenges like corruption and compliance, market development in these segments is slow. In addition, RWG has no established network in these areas. So far, only pilot projects have been conducted in these markets, and the ISIFLO Sprint is not for sale outside these. To ease the entry into these markets, RWG have collaborated with Innovation Norway and the Norwegian ambassadors in the countries to establish a network of distributors and partners. These collaborations include sending representatives from the countries to the headquarters in Raufoss, as well as enabling the creation of pilot projects.

4.5.2 Marketing Strategy

Segmentation, Targeting and Positioning

RWG has limited is possible customer segments by aiming to be industry leaders in the “mains to meter” segment. This limits the number of customers per geographic area. The market that RWG is currently targeting can be divided into three segments. These are the developed and existing markets in Europe, the developed agriculture segment in the US, and the emerging markets in the Middle East, South Africa and the Caribbean. As for now, these markets create sufficient opportunities for growth, as RWG’s current facilities limit production capacity.

RWG has operated in the European market for more than 50 years, and are market leading within the “mains to meter” segment. This segment is conservative and risk averse, and
appreciate high product quality. Due to existing piping and long-term relationships with manufacturers, barriers to entry and switching costs are high. Government regulations and industry standards are the main incentives for operating sustainably, and the price versus quality trade-off drives most customers’ decision-making. As regulations become stricter, the need and interest of customers to act sustainably will increase, and more customers will demand sustainable products. This segment presents an opportunity for growth through ISIFLO Sprint’s ability to transcend the metallic couplings segment (25% of mechanical couplings segment), and enter the plastic couplings segment (75%). RWG already have subsidiaries and business partners throughout this segment.

In the American market, RWG are aiming to enter the agriculture market, which is not within their corporate goal, but is seen as an opportunity as RWG’s existing couplings are a good fit for the needs of this segment. In addition, it is a large market, providing enormous opportunities for growth. The possibility to enter this market has been provided by connections through the Aalberts group, an opportunity that would not present itself otherwise. This segment is more price-sensitive than the European market, as couplings used in agriculture are usually plastic, and therefore less expensive than composite couplings.

When it comes to emerging markets, there is a lot of untapped potential, as water distribution networks are less developed and there is a need for infrastructure improvements. Socio-political governance makes market entry more difficult. These markets are more perceptive to the sustainability features of the ISIFLO Sprint, both due to geographical conditions such as heat, resource scarcity and soil conditions, but also because of education levels and the access to tools.

*Customer Solutions*

The ISIFLO Sprint does, as mentioned, provide many benefits for customers. Not only is it a durable and sustainable product of high quality, but it is easy to install, requires no education or special tools, and it works in all weather conditions. This makes the ISIFLO
Sprint suitable for many different customer segments, independent of geography, demography, and customer needs. In addition to the product itself, RWG emphasises the entire customer experience in marketing, not only the product. This includes focus on superior customer service, availability and response times to customers.

**Customer Cost**

The ISIFLO Sprint is per now, priced higher than competing solutions. Despite this, customers are willing to pay the premium, as ISIFLO is an established brand, known for being high-tech and high quality. In addition, one must take into consideration the total customer costs, including time, effort and other costs that may occur during the product lifetime. The ISIFLO Sprint requires little time and effort to install and maintain, and it also has a long expected lifetime. This lowers its total cost compared to competing solutions, as these require more education, tools, and time to install, as well as having lower quality.

**Convenience**

The ISIFLO Sprint couplings are distributed through subsidiaries and wholesalers throughout Europe. In the US, RWG has used its network through Aalberts and will be distributing the couplings through Home Depot. In the emerging markets, distribution has so far been limited to pilot projects, and products have been sold directly to the end customer. Direct sales is the most important distribution channel in the developed markets, and RWG marketing personnel communicate directly with both wholesalers and end customers. This is mostly done by use of their demo trucks, which drive around visiting customers, letting customers try the product first hand, and allowing for direct feedback on the products to RWG representatives.

**Communication**

RWG use both relationship marketing and direct sales to communicate with customers. Communication goes both ways as product innovation processes are initiated from the marketing department, which communicate directly with end customers. In the developed
markets RWG has long-term established relationships with customers, and are known for the high-tech products. Communication with the emerging markets has to a large degree been facilitated by local embassies and Innovation Norway, who have helped RWG initiate pilot project and provided important business contacts.

*Value Proposition*

RWG’s value proposition offers customers high quality, innovative technology, sustainability in processes and products, and good customer service. Which elements of the value proposition are emphasised depends on the market, as some markets, like Germany, consider technical specifications important, while other markets, like France, value the relationship and loyalty between customer and manufacturer. In addition, some markets are more regulated by policies than others, for example in the German cities of Berlin and Leipzig, where there are strict regulations on which materials can be put in the ground. Using the framework of Ottman et al. (2006) for the 3Cs of sustainability marketing, the 3Cs have been incorporated by RWG as shown in Figure 9.

<table>
<thead>
<tr>
<th>Consumer Value Positioning</th>
<th>Calibration of Consumer Knowledge</th>
<th>Credibility of Product Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISIFLO Sprint performs as well, if not better, than other couplings on the market</td>
<td>Direct sales</td>
<td>ISO-standards</td>
</tr>
<tr>
<td>Is valuable to customers not only through being sustainable but also</td>
<td>Relationship marketing</td>
<td>Strong brand in Europe, known for high quality</td>
</tr>
<tr>
<td>Saves installation time and cost</td>
<td>Two-way communication with customers in sales and development</td>
<td>Trustworthiness and quality through the association with Aalberts</td>
</tr>
<tr>
<td>Does not require special tools or education</td>
<td>Use website and direct sales to communicate value proposition to customers</td>
<td>Awarded by Norwegian Design Council</td>
</tr>
<tr>
<td>Is durable and corrosion-free</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is as strong as metallic couplings, but less expensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Works in all weather conditions</td>
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</tbody>
</table>

*Figure 9 – 3Cs of Sustainability Marketing (Chapter 2.5.3)*
5 Discussion

The following discussion will analyse the empirical findings of this study in the light of current theories on sustainable innovation, sustainability marketing and emerging markets. It will seek to identify the relationship between sustainable innovations and opportunities for market growth in developed and emerging markets. The findings will be discussed based on six criteria or conditions considered important in successful sustainability marketing: (1) the market’s responsiveness to sustainability, (2) network and external knowledge sharing, (3) internal values and strategy, (4) image and trustworthiness, (5) consumer value positioning, and (6) relationship marketing and direct sales. The two former criteria are based on conditions external to the case firm, while the latter involve the company’s internal values and marketing strategies. Implications for theory will be discussed throughout the discussion of the empirical findings. Implications for managers will be discussed in the following section, and a proposed framework for sustainability marketing will be provided. As this study has not looked specifically at the role of regulations and policies, implications for policy-makers will not be discussed.

5.1 External Conditions

This section will discuss the external market conditions of the case firm, providing an analysis of the circumstances under which it operates, and how they influence sustainability marketing success.

5.1.1 Market Responsiveness to Sustainability

The findings of this study have shown that there is a large variation in a market’s responsiveness to sustainability. Sustainability marketing has proven to be more successful where the market is more responsive to it. In this case, there are no specifically “green” customers (Belz, 2006; Dangelico & Pujari, 2010; Rex & Baumann, 2007). The markets’ lack of knowledge or interest in sustainability, in addition to lacking incentives and policies to act more sustainably, makes it hard to succeed with sustainability marketing in the studied industry. This is in accordance with the findings of Belz (2006) and Rex and Baumann (2007), who argue that current methods for sustainability...
marketing, including eco-labels, are targeted towards and most efficient with customers which already have an interest in sustainability. Dangelico and Pujari (2010) also found that customers’ lack of awareness can be a challenge for firms.

In the developed market in Europe, which is very conservative and risk averse, the only drivers to act sustainably seem to be regulations and standards, making sustainability a low priority for customers. This is in line with the findings of Lin et al. (2014) and Skjøndal Bar (2015) who identify regulations as one of the main drivers of sustainable innovation. As all manufacturers must act in accordance with the same regulations, factors such as price and quality are more important in their decision making process. This is in line with the findings of Ottman et al. (2006) who found that the most successful sustainable products are not primarily successful because of their sustainability features, but because of the other benefits such products have for customers. It is therefore important to educate customers and highlight all the different attributes of sustainable products, to make customers see their value. In a conservative industry like this, companies seem to be reactive rather than proactive in their sustainability strategies (Amores-Salvadó, et al., 2014).

The most interesting find concerning market responsiveness, is the difference between developed and emerging markets. One would think that sustainability features were more important in the developed markets due to the higher number of regulations and the knowledge level of customers (Sheth, 2011), but the findings of this study show the opposite. The emerging markets are actually more receptive to the sustainability benefits of the product. This can be linked to the findings of Hart and Christensen (2002), London and Hart (2004), and Sheth (2011) which argue that societal issues are more important in emerging markets. In addition, the sustainability attributes of the specific product studied, match well with the characteristics of emerging markets (Sheth, 2011). First of all, the product reduces leakage of water, which is important when water is a scarce resource. Secondly, it requires no special tools or education, which are also resource constraints in the emerging markets. Lastly, these markets are not as developed and conservative, which makes barriers to entry lower.
In conclusion, customers’ education about sustainability and their purchasing power do not automatically lead to successful sustainability marketing. In a conservative industry like this, the study finds customer needs to be the most important driver in their decision making. The product has a higher value where its sustainability attributes are solutions to customers’ physiological and safety needs (Sheth, 2011). Where these needs are already fulfilled, compliance with regulations is the only driver for sustainability.

5.1.2 Network and External Knowledge Sharing
RWG’s network and access to external technological and financial resources has proven to be important in the success of their sustainable product. First of all, their cooperation with technical, commercial and financial partners has been an important factor in developing the ISIFLO Sprint, their most sustainable product. In addition, this cooperation provides resources that are necessary for an SME to be able to operate in and enter so many international markets. This is in line with the findings of Frey et al. (2013), Galia et al (2015) and Woo et el. (2013), who found cooperation with larger companies and knowledge and resource sharing to be important to the success of sustainable innovations. Having an extensive global network has eased the entry into new markets as it provides connections and a trustworthy seal of approval for potential customers (Ottman, et al., 2006).

In the emerging markets, non-traditional partners such as embassies and Innovation Norway have been important to help RWG form connections with local customers. This goes well with the findings of London and Hart (2004) who emphasise the need to be innovative when trying to access new customers in emerging markets. When entering emerging markets, one must understand the social environment and take it into consideration when doing business (London & Hart, 2004). This may explain why RWG are struggling to gain foothold in the emerging markets.

Openness also allows the company to collaborate with suppliers and other actors along the supply chain. In the case of RWG, this has helped reduce the total social and
environmental impact of their operations through using local suppliers, engaging in the work centre project, and making sure all suppliers follow the strictest environmental standards. This is in line with the findings of Jensen et al. (2013) who found that the different supply chain actors must be included to maximise the tangible and intangible benefits of sustainable innovations.

5.2 Internal Conditions

5.2.1 Internal Values and Strategy
The demand for sustainable products in the researched industry, especially in Europe, was very little, and mainly based on regulations and standards. This can in many cases lead to a reactive sustainable strategy (Amores-Salvadó, et al., 2014), which in turn will not be as successful. The case company does, however, have a great internal drive for sustainability, both in their values and strategy, which gives them a proactive sustainable strategy. This allows them to always be ahead of regulations and policies, making their sustainable innovations more successful. This is in line with the findings of Chang and Chen (2013), Noci and Verganti (1999) and Leenders and Chandra (2013), who found that internal drivers significantly improve sustainable innovation performance through organisational commitment. In addition, an internal drive for sustainability increases trustworthiness (Hillestad, et al., 210).

5.2.2 Image and Trustworthiness
RWG have created a strong brand in the European markets, and is one of the most well-known brand in the water and gas distribution industry. They are mainly known for high-tech, high quality products, but moving forward, this brand can probably transition into including sustainability. Per now, eco-labels are the main sustainability marketing tool of RWG, which has not created much response with customers. Eco-labels have in many cases been found to be inefficient because they only target “green” customers (Belz, 2006; Rex & Baumann, 2007). This may be the case for RWG as the sustainability features haven’t so far created many opportunities for growth in the developed countries.
RWG should use their already strong brand and loyal customers to create a sustainable image. This has been shown by many to have an important impact on the returns of sustainable operations (Amores-Salvadó, et al., 2014; Dangelico & Pujari, 2010; Noci & Verganti, 1999; Chen, 2008). They have already created trust with customers, and must now utilise it to make a switch to a sustainable image. Their image and trustworthiness is strengthened by the association to Aalberts, NCE Raufoss, and through the existing customer base, which provides word-of-mouth information spread about their products (Ottman, et al., 2006; Peattie & Belz, 2010).

5.2.3 Consumer Value Positioning
RWG has seen the important of adjusting the consumer value positioning to each market segment. They adjust the way and what they communicate to the different markets in Europe, form the more technically oriented, to the more relationship-oriented markets. The difference is especially important when considering the emerging markets, as these have physiological and safety needs for the sustainable products of RWG. What product benefits are communicated to customers therefore change with the market and customer. This is in line with the findings of Ottman et al. (2006) on the success of sustainability innovations who stress the importance of targeting each customer based on their demands and needs.

Creating attractive consumer value propositions is also important to be able to attract customers that are not in the “green” niche (Belz, 2006; Ottman, et al., 2006; Rex & Baumann, 2007). This will create additional market demand, and opportunities for growth in new markets and segments. In the marketing of the ISIFLO Sprint, RWG highlights features such as time and effort savings, no need for education or special tools, how the material makes it more durable, corrosion free, and how it leaks less than traditional couplings. These are all features related to the sustainability of the product, but the benefits are presented in a way that makes customers see their value, and relate it to their own needs. This is in line with the findings of Ottman et al. (2006), who argue that the most successful sustainable products have been successful due to how they have marketed the
non-green consumer values of the products, such as health, safety, efficiency, performance and convenience.

These benefits of the ISIFLO Sprint also decrease the total cost for customers, as use and post-use costs are much lower than with other products (Peattie & Belz, 2010). Customers are not very price sensitive because they value the features of the product, and are therefore willing to pay a higher price for a higher quality, more sustainable product. This is in line with the findings of Peattie and Belz (2010) who argued that the total customer cost of a product is more than just the price of acquiring the product.

5.2.4 Relationship Marketing and Direct Sales

RWG emphasise relationship marketing and direct sales in their marketing strategy. This has allowed them to gain direct feedback from customers as well as communicate product benefits directly to customers. This way, they have increased the trust in the product. In addition, their sales trucks allow customers to meet up with sales personnel and other customers, this way increasing the flow of information between the customers themselves and with RWG. This is in line with the findings of Foster and Green (2000), and Leenders and Chandra (2013) who found through their studies that close relationships with customers and direct sales increase the success of sustainable products. Ottman et al. (2009) also emphasise the importance of having close and direct communication with customers for sustainability marketing success.

Direct sales and long-term relationships also makes the products more available for customers, increasing the perceived convenience. Peattie and Belz (2010) highlight convenience as one of the 4Cs of the sustainability marketing mix. This differs from the traditional marketing mix where place is the distribution factor, which demands more from customers with regards to discovering and acquiring products. These findings therefore support the research of Peattie and Belz (2010) and the 4Cs of the sustainability marketing mix. The factor of communication is also enhanced through relationships and direct sales.
Grönroos (1997) argued that one of the characteristics of relationship marketing is that customers become less price sensitive. This finding is supported by my findings, as the customer service and loyalty of RWG allows them to sell their product at a higher price than the rest of the market, and still be market leaders. Hoskisson et al. (2000) also argue that the more mature a market becomes, the more marketing shifts from transactional marketing to relationship marketing (Peattie & Belz, 2010). RWGs European market is considered to be mature, and the success of the relationship marketing is therefore not a surprise. In the emerging markets, on the other hand, communication so far has gone through third-parties and been based on single project transactions. This also supports the findings of Hoskisson et al (2000). Sheth (2011) and London and Hart (2004) on the other hand, emphasise relationships and social interactions as important ways to create trust and image in emerging markets, and this is therefore something that RWG should focus on in the future.

5.3 Implications for Managers
Managers should prioritise developing a proactive sustainable strategy and build firm values and operations around this. These values should be communicated to employees, customers and other stakeholders to increase the sustainability image of the company and increase the internal drive for operating sustainably. This will lead to more radical sustainable innovations, and greater competitive advantage. In addition, it will keep the company ahead of regulations and policies that may come in the future.

To ease the entry into new markets, managers should build strong networks with technical, financial and commercial partners, and be open to opportunities presented through these business contacts. Openness and external knowledge sharing also allows for shared resources and development of new products, enhancing innovation efforts. Cooperation across the supply chain should also be encouraged to minimise the environmental and social impact of the company’s complete operations.
In addition, managers must emphasise the importance of direct, two-way and long-term communication with customers. This allows companies to educate customers about their products and sustainability in addition to allowing customers to provide feedback which can be valuable in sales and new product development. Long-term commitment also increases the trustworthiness of the company and loyalty of customers, and increases customer’s incentives to spread the word about a certain product. Managers should work with all internal and external stakeholders to enhance the sustainable image of the company and allow for further sustainable development.

5.3.1 Sustainability Marketing Framework

The following framework for sustainability marketing incorporates conventional marketing theories, Ottman et al. (2006) and Peattie and Belz’ (2010) frameworks for sustainability marketing, in addition to the most significant findings of this study of a Norwegian SME. The framework presents a seven-step process for achieving success and opportunities for growth with sustainable innovations (Figure 10). The steps do not necessarily have to be performed in the given order, but show the importance of building a sustainable image from the inside out, cooperating with partners, institutions, value chain actors and customers to achieve the greatest competitive advantage. The steps of the process are intertwined, and each step affects the others, enhancing the outcome of the process.

**Step 1: Create proactive sustainability strategy and values**

Several studies, including this, has found a significant impact of values and internal strategy on the success of sustainable innovations and sustainability marketing. The company’s values should be centred around sustainability and corporate strategy should be developed with a goal of increased sustainability in management, processes and products.
Step 2: Cooperate with external partners and network

Cooperation with external entities provides SMEs with resources that are not otherwise available to them. In addition, openness and cooperation has been found to increase the speed and quality of sustainable new product development processes, as well as the success of sustainable innovations. External partners can be research institutions, technical experts, financial partners, customers and commercial networks. Utilising the company’s network will also ease the entry into new markets, and provides a seal of approval for new customers.

Step 3: Cooperate throughout the entire value chain

Cooperating with value chain actors may enhance the sustainability of a product or process, as adjustments can be made not only by the company itself, but by other actors in the supply chain. In addition, cooperation across the supply chain may lead to more radical sustainable innovations and greater sustainable product success.

Step 4: Build long-lasting relationships with customers

Relationship marketing is becoming increasingly important in both conventional and sustainable marketing theory. First of all, creating a long-term relationship with customers will increase
customer loyalty and customer’s trust in sustainability claims. In addition, in conservative and emerging markets, creating bonds with customers will be important to uphold market position and develop new products. Long-term commitment to customers also adds value to products through quality of customer service.

**Step 5: Use direct sales to educate customers and receive feedback**

Communicating directly with customers allows a better flow of information, and hence eases the education of customers on the sustainability of products. In addition, it allows for customers to express their needs and demands, and can therefore enhance the new product development process and give the company insight into what customers actually value.

**Step 6: Adjust consumer value positioning to each market segment**

Customise the product’s value proposition to each market segments based on the value added characteristics of each segment. In addition to the sustainable benefits of products, customers may value different attributes related to sustainable products, such as efficiency and effectiveness, health and safety, performance, symbolism and status, and convenience. The appropriate value proposition for each segment should be communicated to customers. In addition, the 4Cs of Peattie and Belz (2010) can be used to define more structured marketing mixes for each segment.

**Step 7: Build a trustworthy sustainable image**

Credibility and trust have been found to be important for the success of sustainable innovations, especially to avoid claims of greenwashing. Trustworthiness can be achieved by endorsements and certifications from external partners, and through the word-of-mouth evangelism of customers through their networks. In addition, the company should aim to brand itself as sustainable with claims that are specific, meaningful, unpretentious and qualified.

**5.4 Limitations**

Lastly, it must be acknowledged that this study is not without limitations. The resource constraints of the study led to limited possibilities with regards to method and scope. As
mentioned in Chapter 3.6 on Methodological Limitations, single-case studies have been 
criticised for being resource consuming and lacking rigour and generalisability. Though 
several measures were put in place to overcome these limitations, the researcher’s bias 
may nevertheless have influenced some findings.

There may also be some limitations with regards to generalisability as the study looks at 
only one company, a Norwegian SME operating in one industry. Firstly, this may produce 
constraints with regards to the geographical generalizability, and findings may not be valid 
in other countries with different market conditions. This goes for the industry as well. The 
industry studied in this thesis turned out to be both conservative and risk averse in the 
already established markets, while other characteristics where prominent in the emerging 
markets. Findings on the existing markets may therefore be restricted to similar industries, 
while the findings for emerging markets should not be affected by this characteristic.

As RWG is an SME, findings may also differ if studying larger companies. Some of these 
differences are lessened by RWGs access to both commercial, technical and financial 
networks through Aalberts, NCE Raufoss and SINTEF Raufoss, resources that are usually 
limited in SMEs. As almost all production and development takes place in RWGs 
headquarters in Raufoss, Norway, findings might be different for companies operating and 
manufacturing in several countries, in some cases closer to the customer.

### 5.5 Further Research

The following approach is recommended for further research. As this study can be seen as 
a pilot study on the relationship between sustainability marketing and opportunities for 
growth, especially in emerging markets, more research on the concept is needed to 
increment the strength and generalisability of findings. This can be done through multiple-
case studies and eventually through quantitative studies measuring the statistical relation 
between the components researched in this study. In addition, longitudinal studies on the 
concept would be interesting to show the drivers, strategy and eventually antecedents of 
sustainability marketing. This will give an answer to whether the inferences and 
assumptions made in this study are correct.
A quantitative study should be conducted on the relationship between sustainability marketing and opportunities for growth. Quantitative studies have different strengths than qualitative ones, and findings from these studies can oppose or support findings of this study, as well as reveal aspects that have not been detected through this study. With quantitative studies one can make statistical generalisations, which are not possible with a qualitative study. This might provide additional support for the findings of this study. In addition, a combination of qualitative and quantitative methods will result in more robust findings, and might help overcome some of the methodological limitations of this study.

To gain a deeper understanding of the concept studied in this thesis, one could study the effects of sustainability marketing in developed or emerging markets separately, without comparing the two as has been done in this study. It is especially interesting how emerging markets value sustainability features of products and services differently than developed markets, due to their characteristics. This presents enormous untapped opportunities for growth, which should be studied in more detail. In addition, one could study the circumstances under which sustainability marketing is the most successful. This study has only looked at one company and industry, but by studying several companies, one could draw conclusions on circumstance characteristics.

Another interesting opportunity for research, is to study companies in other countries, different from Norway. Sustainability is an important aspect of values, strategy and operations in Norwegian companies, and these characteristics might be different in other countries, resulting in different, and maybe opposing findings. Interesting areas to do this research in could be the US or Asia, where culture and business operations are very different from in Norway.

In addition, it would be interesting to study the validity and generalisability of the presented framework through an empirical study, and optionally adjust the proposed steps.
The frameworks is based on findings in a specific type of company with many unusual characteristics, and an industry that is not very up to date on sustainable innovation. It would be interesting to research if the framework would be valuable in for example larger companies, more sustainable industries or in different geographical areas. By testing a large variety of companies, one will be able to identify if the framework is applicable for all firms, or just within certain boundaries.

Future research should also look into quantifying the benefits of sustainability marketing. As of today, there exists few or no such methods exists. Being able to measure the effects of sustainability marketing will significantly lower the barriers to acting sustainably. High perceived risk and cost are some of the main barriers to sustainable innovation and sustainability marketing. Quantitative measures will make it easier for managers to justify strategic decisions based on sustainability, and it would make it easier to compare different strategies.
6 Conclusion

This studied aimed to examine how SMEs could use sustainable innovation and sustainability management to create opportunities for growth and entry into international markets. It has further looked more specifically at how to do this in developed and emerging markets. The findings of this study show that sustainable product and process innovations, as well as sustainability marketing, can create opportunities for growth in both existing international markets, and that they create opportunities for entry into emerging markets.

The conditions under which a company operates have been found to be extremely important for the implementation and success of sustainability marketing. The characteristics of the industry and market segment provide important guidelines for how products should be marketed to achieve the highest rate of success. In the developed markets, characteristics such as industry size and age, as well as conservatism and risk averseness were prominent. In the emerging markets, infrastructure, educational levels, climate and resource scarcity were important characteristics. The characteristics must be taken into account when communicating with customers and developing the value proposition, as different segments value very different benefits.

In addition, the study has shown that an internal drive for sustainability through values and strategy is important for the success of sustainable innovations. Especially in an industry where regulations and policies are the main driver of sustainability, an internal drive to act sustainably is important to make it a proactive and competitive business strategy. Organisational identity is generally found to increase the success of sustainable products as well as lead to more radical sustainable innovations.

This case has also shown the importance of direct sales and relationship marketing in sustainability marketing. Communicating with customer about the socio-ecological value of sustainable products both in developed and emerging markets, is important to increase the customer’s knowledge about the sustainable product, and to adjust the value
proposition of the product to the customer’s demand and needs. Long-term relations with customer also increases loyalty and trust which have been found to be important when marketing sustainable products. Greenwashing and false claims are a big threat to customer trust, and a barrier to sustainable consumption, and these can be diminished by creating a trustworthy sustainable image for the company.

Lastly, cooperation with different stakeholders like value chain actors, customers, institutions and business partners have proven important to overcome the resource constraints usually experienced by SMEs. This may not be as important in larger companies, but it is shown that open innovation and knowledge sharing create more radical sustainable innovations, and increase the success of the sustainable products. Association with other institutions also provide a seal of approval, enhancing trustworthiness.
7 References


Appendix A – Intervjugeide CEO

Lars K. Ølstad

Introduksjon av oppgaven, og hvorfor er jeg hos RWG. Hva som vil være fokus gjennom intervjuet. Ønsker personen å være anonym eller ikke? Kan jeg ta opp intervjuet?

Introduksjonsspørsmål
Hvilken stilling har du i RWG?
Hva er dine ansvarsområder?

Bakgrunnsinformasjon/strategi
Hva legger dere i å ha en ansvarlig/bærekraftig strategi?
Hvilke aktiviteter er de viktigste i en slik strategi?
Har bærekraftighet vært et hovedmål for RWG fra starten, eller har det vært en gradvis utvikling?

På hvilken måte blir strategien formidlet til de ansatte?
På hvilken måte påvirker/berører strategien de ansatte?

Hvilke markeder opererer dere i? Både internasjonale markeder og ulike segmenter.
På hvilken måte er den bærekraftige strategien tilpasset hvert enkelt marked?

Hva er målsetningen med strategien? Hvor skal den ta RWG?
Hva er fremtidige målsetninger for internasjonale markeder?

Strategiutvikling
Hvordan ble RWGs strategi utviklet?
Hvem var delaktige i prosessen?
Ansatte, eksterne, top management, styret?
Hvordan har strategien endret seg med årene?
Hvordan har strategien blitt påvirket av ISIFLO Sprint?

I hvilken grad er strategien påvirket av reguleringer/policies?
I hvilken grad er strategien påvirket av eksterne stakeholders?

Har det bærekraftige aspektet ved strategien gitt flere/nye kunder?
På hvilken måte?
Dukker det opp mange nye muligheter som resultat av bærekraftighetsstrategien?
Hvordan fanges disse opp/utnyttes disse?

Verdier
Hva er de viktigste verdiene for RWG?
Hvordan er RWGs verdier blitt til?  
Hvem bidro i utviklingen av verdiene?  
Ansatte, eksterne, top management, styret?  
Hvordan var de ansatte delaktige i utviklingen av verdiene?

I hvilken grad er verdiene påvirket av reguleringer/policies?  
I hvilken grad er verdiene påvirket av eksterne stakeholders?

Hvordan formidles verdiene til ansatte?  
Hvordan formidles verdiene til eksterne (kunder, leverandører, samfunnet)?  
Er verdiene en viktig del av RWG? Hvorfor?

**Innovasjon/produkter**  
Hvilke innovasjonsaktiviteter er viktige for RWG?  
Hvordan ser prosessen ut for å utvikle nye produkter?  
Bruker dere noen spesielle rammeverk/metoder i innovasjonsprosesser?

**Veien videre**  
Hva er RWGs strategi for fremtiden?  
Markedsekspansjon? Segment og geografi.  
Utvikling av nye produkter?  
Utvikling av strategi/verdier?  
Vekst?  
Resultater?

**Emerging markets**  
Det er mye snakk om muligheter i emerging markets. Er dette noe dere fokuserer på?  
Hva er de største forskjellene i disse markedene vs. velutviklede markeder?  
På hvilken måte må markedsføring стрATEGI endres for å tilpasses disse forskjellene?

Hva er de største fordelen/ulempene i slike markeder?
Appendix B – Intervjuguide Director of Marketing and Sales

Kjetil Bang Hagen

Introduksjon av oppgaven, og hvorfor er jeg hos RWG. Hva som vil være fokus gjennom intervjuet. Ønsker personen å være anonym eller ikke? Kan jeg ta opp intervjuet?

Introduksjonsspørsmål
Hvilken stilling har du i RWG?
Hva er dine ansvarsområder?

Markedsføringsstrategi
Kan du beskrive markedsføringsstrategien til RWG?
Varierer markedsføringsstrategien mellom segmenter/geografi?
I hvilken grad brukes bærekraftighet i markedsføring og salg av ISIFLO Sprint?
På hvilken måte brukes det i markedsføring?
Bruker dere noen spesielle rammeverk/metoder/modeller for markedsføring og salg?
Hvilke? Hvordan?
  * Resource-base view
  * Stakeholder theory
  * Internal values/strategy
  * Image/identitet/brand

Er image/brand viktig for ISIFLO?
Hvordan vil du si at kunder/forbrukere oppfatter ISIFLO? Mtp bærekraftighet?
I hvilken grad er markedsføringen påvirket av reguleringer/policies?
Dukker det opp mange nye muligheter/kunder som resultat av bærekraftighetsstrategien?
Hvordan fanges disse opp/utnyttes disse?

Markedsføringskanaler
Hvilke markedsføringskanaler bruker RWG?
  * Channel structure
  * Direkte salg
  * Distributører
  * Agenter
Hvor nært står RWG kundene?
Brukes ulike markedsføringskanaler i ulike segmenter? Hvordan?
Hvordan gjøres salg/markedsføring i internasjonale markeder?
Brukes agenter/distributører?
  * Hvor nært står disse RWG?
Nettverk
Hvordan bruker RWGs nettverk i markedsføring/salg?
Hvordan bruker RWGs nettverk til å nå nye kunder?
Hvordan bruker nettverket for ekspansjon til nye markeder/internasjonalisering?

Markedsposisjon
Hvordan er ISIFLOs markedsposisjon?
Hvilke er de største markedene?
Endrer dette seg mye? Er veksten lik i alle markeder?
Finnes det mange konkurrenter? Er dette ein industri i rask utvikling?

Internasjonalisering/markedsekspansjon
Hvilke er de nyeste markedene RWG er gått inn i?
Hvordan har dette blitt gjort?
Hva slags strategi brukes for internasjonalisering og ekspansjon i utlandet?
Har dere noen planer for fremtidig ekspansjon? Hvordan ser disse ut?
Hvilke markeder vil være de mest attraktive for ISIFLO Sprint de neste årene?

Emerging/developing markets
Det er mye snakk om muligheter i emerging markets. Er dette noe dere fokuserer på?
Hva er de største forskjellene i disse markedene vs. velutviklede markeder?
På hvilken måte endrer dere markedsføring/strategi for å tilpasses disse forskjellene?
Hva er de største fordelene/ulempene i slike markeder?
Er dette markeder som vil være viktige for ISIFLO i fremtiden?
Appendix C – Intervjuguide Director of Production and R&D

Geir Haugen

Introduksjon av oppgaven, og hvorfor er jeg hos RWG. Hva som vil være fokus gjennom intervjuet. Ønsker personen å være anonym eller ikke? Kan jeg ta opp intervjuet?

Introduksjonsspørsmål
Hvilken stilling har du i RWG?
Hva er dine ansvarsområder?

Strategi
Hva er RWGs overordnede strategi for R&D?
Hvem utvikler denne/bestemmer hva det skal satses på?
Dukker det opp mange nye muligheter som resultat av bærekraftighetsstrategien?
Hvordan fanges disse opp/utnyttes disse?

Innovasjonsaktiviteter
Hvem er involvert i innovasjonsprosesser?
Benytter dere spesielle rammeverk/prosesser/modeller for innovasjon?
Design thinking, stage-gate etc.

I hvilken grad har ansatte frihet til å jobbe med nye produkter/idéer?
Hvordan fanger dere opp nye idéer til produkter?

Hva er de største utfordringene dere opplever i innovasjonsprosesser?
Hvordan løser dere disse?

Drivere for innovasjon
Hva er driven for å utvikle nye/eksisterende produkter?
Intern, ekstern, reguleringer/policies,
RBV
Stakeholder theory
Institutional theory
Internal values/strategy

Hva slags reguleringer/policies må dere ta hensyn til i utviklingen av produkter?
Har dere stort fokus på bærekraftighet i R&D? Hvordan da?

På hvilken måte kan kunder/samarbeidspartnere påvirke R&D og produktutvikling i RWG?
Hva er deres viktigste samarbeidspartnere?
Hvordan gjøres slikt samarbeid?

Får dere ekstern støtte til utvikling? Hvordan påvirker dette utviklingsprosessen?

Tilpasser dere produkter til ulike markedssegmenter/geografiske områder?
Hvordan gjøres dette?
Utvikling av ISIFLO Sprint
Hvor kom idéen fra?
Hvordan var utviklingsprosessen?
Ble det utviklet med hensikt å være et bærekraftig produkt?
Vil produktet videreutvikles? Kommer det nye produkter?

Fremtiden
Hva er deres strategi for innovasjon de neste årene?
Hvilke markeder satser dere mot?
Hvordan er konkurransen? En industri i utvikling?

Emerging markets
Det er mye snakk om muligheter i emerging markets. Er dette noe dere fokuserer på i R&D?
Hvordan rettes utvikling av nye produkter mot slike muligheter?
Har dere en R&D-strategi for emerging markets?