# The Importance of Being Seen to Be Green

An Empirical Investigation of Green Marketing Strategies in Business-to-Business Organizations

### **Nicole Berth**

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Primary Supervisor: Ann-Marie Kennedy Secondary Supervisor: Andrew Parsons

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# **Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Nicole Berth

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Ethics for this research was approved from Auckland University of Technology Ethics Committee on 10<sup>th</sup> September 2010 with the Ethics Application Number 10/141 An Empirical Investigation of Green Marketing Strategies in the Business-to-Business Environment.

### **Abstract**

The purpose of this dissertation is to define Factors of Greenness for Business-to-Business<sup>1</sup> organizations in order to define and operationalize the Greenness Matrix of Simula, Lehtimäki and Salo (2009). Operationalization refers to the definition of a vague concept aiming to make that concept measurable and useable for companies and academics (Bryman & Bell, 2007). The research differs from other research in the marketing discipline as no research has addressed the definition of Greenness Factors in B2B organizations. This research defines those Greenness Factors with empirical support of manufacturers and business buyers operating in the chemical sector.

To start off, the research reviews the concepts of sustainability and green marketing. A successful green marketing strategy needs to include sustainability in order to satisfy the buyer's needs and expectations (Charter et al., 2002). Sustainability is outlined from a marketing perspective and relevant literature in Business-to-Customer <sup>2</sup> and B2B marketing is presented. The concept of green marketing is outlined and differentiated from sustainability. This research looks at B2B organizations. Therefore, it is outlined why green marketing particularly benefits B2B organizations which justifies the area studied. The research then moves on to uncover the link between both concepts and the studies that incorporate sustainability and green marketing focusing on B2B organizations.

As one of those studies, the Greenness Matrix of Simula et al. (2009) is introduced as a basis for this research. It suggests that B2B organizations must consider their actual greenness in comparison to the perceived greenness of their business buyers. But Simula et al. (2009) fail to define high or low greenness which makes it impossible for B2B organizations to implement greenness. This research will define Greenness Factors to identify what makes-up high or low greenness from a manufacturer' and business buyer's perspective. A thematic analysis of interviews with manufacturers and business buyers in the B2B environment is conducted. Five super themes are identified which are labelled as Greenness Factors. In developing the Greenness Factors, the Greenness Matrix (Simula et al., 2009) can be operationalized to assist B2B organizations to implement greenness to facilitate future research in the area.

Findings discover the philosophy of a company as the most significant Greenness Factor as it is crucial to the effectiveness of a green marketing strategy. It further strongly influences the other Greenness Factors in their orientation of being high or low.

<sup>&</sup>lt;sup>1</sup> Here referred to as B2B.

<sup>&</sup>lt;sup>2</sup> Here referred to as B2C.

# **Chapter One: Introduction**

# 1.1 Background and Problem Orientation

Green marketing the term and the concept in recent times has been widely used in the marketing discipline to describe the promotion of green activities in companies. Green marketing is: "the holistic management process responsible for identifying, anticipating and satisfying the needs of customers and society, in a profitable and sustainable way" (Peattie & Charter, 2003, p.727). Green marketing is strongly linked to sustainability as it helps to achieve sustainability through generating and delivering sustainable solutions whilst continuously satisfying customer's and stakeholder's needs (Charter et al., 2002). The examination of the green customer has been a challenge for marketing academics and practitioners ever since. Although green marketing is largely applied to B2C organizations, it is hardly considered in B2B organizations. That is surprising given that the pre-dominant marketing activities occur in the B2B environment (Pujari, Peattie, & Wright, 2004). In fact, the most significant impact of environmental concern is created in the B2B environment (Peattie & Charter, 2003; Drumwright, 1994; Morton, 1996). To add to this, B2B organizations face strong governmental regulations and public pressure due to heavy impacts on the environment and society. This is especially true for B2B organizations that operate with chemicals in their production process. Chemicals are used in essential manufacturing industries including steel, petroleum and pharmaceutics (Iles, 2006; Spitz). Negative images that involve pollution and environmental damage are related to B2B organizations using chemicals. This puts B2B manufacturers in those industries in the focus of governmental regulations which seek to control B2B manufacturers to decrease environmental impacts.

Also business buyers show strong interest in manufacturer's environmental performance. More importantly, environmental performance has become a buying

criterion for business buyers (Peattie, 1992). This implies that business buyers favour manufacturers and products that reinforce a positive environmental performance. In complex B2B supply chains business buyers often do not have information about the manufacturer's level of greenness and therefore must rely on their perceptions of greenness. Also, manufacturers do not know how business buyers define high or low greenness (For full descriptions and references for section 1.1 please see the literature review in Chapter Two). The aim of this dissertation is to define those Factors of Greenness that make-up high or low greenness in B2B organizations. The Greenness Factors are explored through a manufacturer and buyer viewpoint in order to operationalize the Greenness Matrix of Simula et al. (2009). This makes it utilizable for B2B organizations that wish to implement greenness in their company activities.

# 1.2 Research Objectives

To be able to operationalize the Greenness Matrix of Simula et al. (2009), Greenness Factors that make-up high or low greenness have to be identified. Thus, the research objective helps to define those Greenness Factors by asking:

 What are the characteristics manufacturers and business buyers would assign to a company with low greenness? In contrast, what are the characteristics manufacturers and business buyers would assign to a company with high greenness?

The research is conducted in B2B organizations in New Zealand through a thematic analysis of perceptions of high or low greenness involving manufacturers<sup>3</sup> and business buyers<sup>4</sup> that operate with chemicals.

<sup>&</sup>lt;sup>3</sup> The research of Simula et al. (2009) uses the term "seller" but in order to align it more specifically to the research focus, it is replaced by "manufacturer".

<sup>&</sup>lt;sup>4</sup> The research of Simula et al. (2009) uses the term "buyer" but in order to align it more specifically to the research focus, it is replaced by "business buyer".

# 1.3 Contribution of the Study

The research contributes to the discipline of marketing in particular B2B marketing. The study will add to the marketing body of knowledge by further exploring green marketing strategies from a B2B point of view. In detail, the Greenness Factors help to define what high or low greenness embraces from a manufacturer's and business buyer's point of view. This defines and operationalizes the Greenness Matrix of Simula et al. (2009) to facilitate the implementation of greenness in B2B organizations. The definitions of the Greenness Factors and the defined Greenness Matrix (Simula et al., 2009) become operationalizable to academics for further research on the topic of green marketing in B2B organizations.

The research further contributes to the B2B literature that combines sustainability and green marketing by applying the Greenness Matrix (Simula et al., 2009) to this particular business environment.

This study also has implications for marketers in B2B marketing concerning the development of more effective green marketing strategies that meet the expectations of the business buyers towards high or low greenness. The findings further assist marketers with the positioning and re-positioning process of B2B organizations within the green B2B market.

### 1.4 Thesis Overview

The structure of the dissertation is described as follows.

Chapter One presents an overview of the dissertation.

This is followed by Chapter Two which outlines the relevant literature reviewed in this dissertation. Chapter Two also gives information and justification about the decisions made throughout the dissertation. Chapter Two starts with a review of literature concerning the concepts of sustainability and green marketing. Sustainability is presented within a marketing context. Relevant literature in B2C marketing and B2B marketing is reviewed. Subsequently, the green marketing literature is outlined and

differentiated from the sustainability concept. Relevant literature is summarized in B2C. Special attention is given to the B2B environment as the dissertation takes B2B organizations as its focus. Then Chapter Two moves on to report on the link between sustainability and green marketing. Studies that combine both concepts are then presented. The Greenness Matrix of Simula et al. (2009) is outlined as a framework of greenness involving sustainability and green marketing. However, the Greenness Matrix (Simula et al., 2009) cannot be operationalized due to a lack of factors that define high or low greenness. Therefore, the research addresses this gap in the literature by discovering those Greenness Factors.

Chapter Three discusses the research methodology which is the basis for exploring the research objective. The chapter justifies the appropriateness of methodology and methods that are chosen for the dissertation. The epistemology and theoretical perspective are discussed in line with the appropriate use of semi-structured in-depth interviews and thematic analysis. Details about participants and data analysis are further given in Chapter Three. The chapter is concluded by the criteria for trustworthiness of the research.

Chapter Four gives details on the findings of this research. A thematic analysis of the interviews with manufacturers and business buyers identifies the Greenness Factors that make-up high or low greenness in order to meet the research objective. The Greenness Matrix (Simula et al., 2009) which is defined through the Greenness Factors is presented in Figure. 4.1.

Chapter Five discusses the findings from Chapter Four and reflects on these according to the extant literature. Academic contributions and managerial implications are outlined in order to demonstrate the significance of the findings. Lastly, limitations of the research are summarized and suggestions for future research are given before an overall conclusion is made.

# **Chapter Two: Green Marketing Literature Review**

# 2.1 Chapter Overview

This chapter aims to give an overview of the concepts of sustainability and green marketing. Both concepts are defined and reflected by relevant studies in the marketing discipline. Sustainability and green marketing refer to the B2C and most importantly the B2B environment. Then the chapter continues to examine the link between the concepts of sustainability and green Marketing. Studies that combine both concepts are then presented. The study of Simula et al. (2009) introduces the Greenness Matrix as this is the basis for the dissertation. The gap in the literature is then defined which assists in forming the research questions.

# 2.2 The Concept of Sustainability

This section gives insights into the concept of sustainability. The concept is defined and outlined in a marketing background. Relevant studies related to sustainability in marketing are presented underlining the significance of sustainability for the marketing discipline. These studies refer to the B2C and B2B environment.

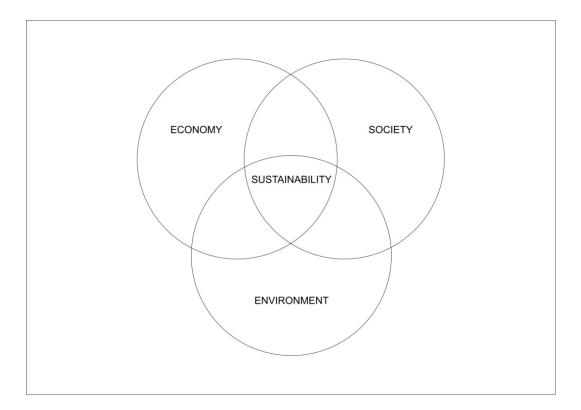
### 2.2.1 Definition

Sustainability is one of the most major concepts of modern business thinking (Peattie, 2001). It is widely promoted through the Brundtland Report published by the United Nations in 1987. This report defines sustainable development as a process that "meets the needs of the present without compromising the ability of future generations to meet their needs" (United Nations, 1987, p.43). Sustainability deals with aspects such as

increased consumption, population pressure, global warming, climate change, ozone depletion, and loss of habitats and species diversity (Charter et al., 2002).

As shown in figure 2.1, sustainability takes a holistic approach by incorporating the three dimensions of environment, society and economy. These dimensions are coined by John Elkington as the Triple Bottom Line. According to Elkington, the Triple Bottom Line does not only focus on the economic value organizations create but also on the environmental and social value they create (Elkington, 1997). By incorporating the Triple Bottom Line, sustainability looks at economic aspects without compromising environmental and societal issues. Sustainability is seen as a process in which organizations strive for continuous improvement towards the three dimensions of the Triple Bottom Line. The concurrence of the three dimensions of the Triple Bottom Line creates sustainability.

Figure 2.1: The Three Dimensions of Sustainability – The Triple Bottom Line (Adapted from Carter & Rogers, 2008)



### 2.2.2 Sustainability in Terms of Marketing

This research looks at sustainability from a marketing perspective. Applying sustainability to the marketing discipline captures the essence of sustainable marketing. Sustainable Marketing "aligns internal organizational processes and organizes resources that create value for stakeholders (owners, shareholders, employees, value chain partners) and through which the external natural environment and social environment are enriched by the activities of the firm" (Arnould & Press, no year).

In other words, marketing's focus on economic aspects is expanded on by including the environmental and societal dimension. All three dimensions have to be included when planning a marketing strategy. To do so, assumptions and traditional marketing practices must be reconsidered.

- Marketing is a demand focussed concept. But in order to achieve sustainability, marketing must be willing to manage the customer's demand downward. This includes the demand for low costs, high availability and convenience of products and services. Marketing's expanding task is therefore to promote real product costs as well as impacts of consumption and production on the environment.
- Product prices must be based on the true costs of production, use and disposal.
   Thus, product price is replaced by product costs. Competition is then based on product costs such as costs of ownership and use. In achievement of sustainability, marketing must make sure that customers are aware of the true product costs.
- The "product concept" has to be redefined. Marketing to be sustainable cannot
  only focus on the product. The concept must be broadened by looking at how a
  product is made, distributed, and sold. This new focus reinforces the promotion
  of products that are made and consumed in a sustainable manner.
- Marketing has to reflect sustainable behaviour and responsibility towards all stakeholder groups (customers, investors, employees, government, suppliers, and society). Company activities must be increasingly more transparent to educate and inform all stakeholder groups. A marketing concept that incorporates sustainability considers the welfare of consumers and society. This includes responsibility to direct customers towards sustainable behaviour.

- Marketing communication must focus on information of products and services rather than mere endorsement.
- Marketing must promote the benefits for customers to use a product rather than
  to own a product. This leads to sustainable consumption as maintenance and
  service of a product is preferred over re-buy of a product from a sustainable
  viewpoint.
- Marketing must be willing to change the market and adapt to new forms of markets for example the circular flow of products. That derives from the notion that every product has a life cycle. The life cycle begins with resource distraction and ends with the disposal of the product. By using sustainable processes such as recycling and product take-backs, the life cycle of the product can be either extended or closed. A closed product life cycle allows using components of the disposed product as a resource for the new product. The circular flow of material creates new production processes and consumption patterns. Marketing must adapt to these processes while promoting sustainable activities to stakeholder groups (Points adapted from Peattie & Crane, 2005; see also Fuller, 1999).

# 2.2.3 Studies in Sustainability (Marketing Context)

Researchers have increasingly documented the contribution sustainable strategies can make for organizations that wish to generate a competitive edge and superior financial performance (Van Dam & Apeldoorn, 1996; Fuller & Gillett, 1999; Porter & Van der Linde, 1995; Sharma, Iyer, Mehrotra, & Krishnan, 2010). This is also true for the marketing discipline that increasingly recognizes the need to include sustainability concerns in organizations marketing strategies (Sharma et al., 2010; Bridges & Wilhelm, 2008; Peattie & Crane, 2005).

The marketing literature distinguishes between sustainable marketing activities in B2C and B2B environments.

### 2.2.3.1 B2C Environment

The main stream of literature in sustainability in B2C marketing focuses on how sustainability can be integrated into marketing discipline. Marketing's role is discussed as a driver of consumption which may decrease sustainability. In that sense, the opportunity marketing can offer to enhance sustainability and the consequences for the sarketing discipline is discussed. Sustainability is also studied referring to consumer behaviour and the decision making process behind that. Another area studied in sustainability includes sustainable consumption patterns of end-customers such as voluntary simplicity and de-consumption. This is linked to marketing's responsibility to communicate sustainable behaviour to customers.

The literature further discusses sustainable marketing strategies and the key performance drivers and key sustainable development objectives. This contributes to the discussion whether sustainability can generate competitive advantage for organizations in the B2C environment.

Aspects regarding sustainability in the B2C environment are not expanded on further as it is not of main relevance for the research. An overview of the key areas addressed in sustainability in the B2C marketing is presented in table 2.1.

Table 2.1: Key Areas Addressed in Sustainability in B2C Marketing

Area Studied	Description	Authors
Consumer Behaviour	<ul> <li>Consumer Decision         Making Process.</li> <li>Positioning on         Sustainability.</li> </ul>	Fuller (1999); Prothero et al. (2010); McDonald & Oates (2006); McDonald et al. (2006).
Integration of Sustainability into Marketing	<ul> <li>Marketing's critical Role.</li> <li>Consequences for Marketing.</li> <li>Importance of Marketing within the Sustainability Concept.</li> </ul>	Varey (2010); Burroughs (2010); Mitchell & Saren (2008); Frank (2009); Wilhelm (2008); Borin & Metcalf (2010); Bridges & Wilhelm (2008); Kirchgeorg & Winn (2006); Kirchgeorg (2002); Belz (2001); Van Dam & Apeldoorn (1996); Balderjahn (2004); Belz & Bilharz (2004); Charter, Peattie, Ottman, & Polonsky (2002).
Sustainable Consumption	<ul><li>Voluntary Simplicity.</li><li>De-Consumption.</li></ul>	Oates et al. (2008); Schaefer & Crane (2005); Dolan (2002); Thogersen (2010); Kilbourne et al. (1997); Hobson (2001).

	Sustainability in Marketing Communication.	
Sustainable Marketing Strategies	Key Sustainable     Development Objectives.	Mitchell et al. (2010); Epstein & Roy (2001); Fuller & Gillet (1999); Belz & Peattie (2009); Porter & Van der Linde (1995).
	Key Performance Drivers of Sustainability.	
	Sustainability as a Competitive Advantage.	

### 2.2.3.2 B2B Environment

The term B2B marketing increasingly replaces the traditional "industrial marketing" and "organizational marketing" descriptions. It is used in this dissertation to describe marketing activities of organizations, public or private, that exchange relationships with other organizations (Turnbull & Leek, 2003). In its special role, marketing strategies of B2B organizations need to be strongly distinguished from B2C organizations (Charter & Polonsky, 1999). Theories on marketing strategy that refer to end-customers cannot be applied to business buyers as they ignore the realities of B2B organizations (Turnbull & Leek, 2003; Peattie, 1992). Kärnä and Heiskanen (1998) for example outline that business buyers show stronger awareness of green product attributes than end-customers when purchasing a product. This implies that different marketing strategies have to be applied to the B2C and B2B environment.

Therefore, the organizational buying process must be well understood in order to develop effective B2B marketing strategies (Turnbull and Leek, 2003).

The concept of sustainability is sparsely studied within the B2B marketing literature. Basic frameworks on how to link sustainability and B2B marketing exist but it is hardly examined in the literature (Sharma et al., 2010). A small research stream in marketing focuses on sustainability related to supply chain activities. Here, the concept of sustainability is used to maintain and intensify collaborations between participants of the supply chain (Weber, 2001; Sheu & Hu, 2008; Sharma et al., 2010). Within the supply chain, remanufacturing activities and their implications for marketing are of more specific interest (Atasu et al., 2008). Remanufacturing captures the idea of

examining and repairing a used product in order to extend its life (Sharma et al., 2010). Thus, it includes sustainable components which can be marketed within the supply chain. Furthermore, remanufacturing can moderately influence the manufacturer's ability to meet sustainable environment regulations. For the manufacturer, remanufacturing opens up a new group of key business customers. Simultaneously, the business customer benefits from reduced prices of the remanufactured products (Seitz & Peattie, 2004; Ferrer & Whybark, 2000). Remanufacturing is practiced successfully throughout the automobile industry where parts such as motors are remanufactured and sold to business customers for a discounted price.

Another aspect outlined in the literature is the process of integrating sustainability into marketing processes of the New Product Development<sup>5</sup> as discussed by Pujari et al. (2004). The authors highlight that additional activities have to be included into NPD when aiming for sustainability. These activities look at the environmental impact of the company's products and strive to continuously improve NPD towards sustainability (Pujari et al., 2004). Furthermore, organisational aspects influence NPD, which are top management support, functional interfaces, and environmental policy. Following this, if organisational aspects and environmental impacts of products are incorporated in a company's NPD, sustainability can be generated.

# 2.3 The Concept of Green Marketing

This section aims to give a comprehensive overview of the concept and definitions of the concept of green marketing. This includes the differentiation of green marketing from sustainability and other related concepts. Studies are reviewed that reflect on the B2C and B2B environment.

### 2.3.1 Definition

Various definitions of green marketing exist in the literature. Certain aspects across those definitions are agreed upon.

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<sup>&</sup>lt;sup>5</sup> Here referred as NPD.

- Firstly, the concept of green marketing captures the basic assumptions of the marketing discipline whilst adding sustainability to the marketing objectives. Thus, definitions of green marketing refer to the holistic perspective of sustainability including economy, society and environment (Polonsky & Rosenberger, 2001; Charter, 1992; Charter & Peattie, 2003; Peattie, 1992; Polonsky, 1994, Mintu & Lozada, 1993). Thus, economic performance does not compromise with environmental and societal aspects (Kilbourne, 1998; Polonsky, 1994; Peattie, 2001; Van Dam & Apeldoorn, 1996; Charter, 1992; Mintu & Lozada, 1993).
- Secondly, definitions view green marketing as an open-ended continuous process (Kilbourne, 1998; Peattie, 1992; Peattie & Charter, 2003; Polonsky and Rosenberger, 2001). Thus, green marketing is viewed as an aspect that constantly needs to be included into companies' strategies.

Therefore, in support of many marketing academics as outlined above, the following definition based on Charter and Peattie (1992) is chosen for this dissertation: green marketing is described as "the holistic management process responsible for identifying, anticipating and satisfying the needs of customers and society, in a profitable and sustainable way" (Peattie & Charter, 2003, p.727).

# 2.3.2 Differentiation of Green Marketing from Other Concepts

In their definition of green marketing Peattie and Charter (2003) integrate the concept of sustainability. Both concepts are often mixed or used in a synonymous way. But both concepts vary strongly in content and scope. For the course of the dissertation a clear distinction between sustainability, green marketing and related concepts has to be made: Sustainability is the broader concept and covers the economic, environmental and societal dimension. Sustainability can be applied to various disciplines most importantly to management and marketing research. Green marketing can be seen as a part of the sustainability concept. Thus, green marketing acts as a marketing instrument which aims to truthfully promote and inform stakeholders about the company's sustainable activities (Peattie & Charter, 2003).

The literature outlines other green marketing related concepts and terms such as environmental marketing (Coddington, 1993; Polonsky & Mintu-Wimsatt, 1995),

ecological marketing (Henion & Kinnear, 1976), and greener marketing (Charter & Polonsky, 1999). Environmental and ecological marketing only focus on the environmental dimension of sustainability. Those concepts study positive and negative aspects of marketing activities related to reducing environmental impacts and damages. Green marketing differs from all concepts. It expands on these concepts by incorporating all dimensions of sustainability, which are environmental, societal and economic (Peattie, 1992). This gives green marketing a holistic viewpoint.

### 2.3.3 Studies in Green Marketing

The green marketing literature distinguishes between studies that occur either in the B2C and B2B environment. Relevant studies in green marketing in B2C organizations are summarized in section 2.3.3.1. Due to the focus of the dissertation on B2B organizations, the importance of green marketing for B2B organizations and key studies are highlighted in section 2.3.3.3.

### 2.3.3.1 B2C Environment

The prevailing green marketing literature is concerned with the end consumer as the major target audience (Iles, 2006; Sharma et al., 2010). Green buying behaviour is examined along with customer's motives to purchase green products and the divergence between environmental concern and actual buying behaviour. It is suggested how green customers can be segmented and how they may be targeted appropriately. The performance of green products is another aspect examined in the literature. It is argued whether products with green attributes perform in a better way and if end-customers appreciate those attributes. This relates to green pricing and the debate if end-customers are actually willing to pay a premium for green products. The promotion of green products is addressed in the literature by studying customer's responses to green claims and their scepticism. Further, studies relating to waste concerns and recycling initiatives are reviewed in the literature. Finally, the general concept of green marketing and how it can be developed and implemented complete the discussion in the B2C marketing

<sup>&</sup>lt;sup>6</sup> Greener marketing captures the same meaning than Green Marketing and is therefore covered under the concept of Green Marketing (Charter & Polonsky, 1999).

### literature.

Aspects about the B2C environment are not expanded on here as it is not of main relevance for the research. An overview of key areas addressing green marketing in B2C marketing is presented in table 2.3.

Table 2.2: Key Areas Addressed in Green Marketing in B2C Marketing

Area Studied	Description	Authors
Green Buyer Behaviour	<ul> <li>Demand and Motives for purchasing environmentally friendly Products.</li> <li>Link and Divergence between environmental Concern and Purchase Intentions.</li> </ul>	Kalafatis et al. (1999); Chen & Chai (2010); Stanley & Lasonde (1996); Walley, Custance, & Parsons (2000); Schlegelmilch, Bohlen, & Diamantopoulos (1996); Follows & Jobber (2000); Minton & Rose (1997); Roberts & Bacon (1997); McCarthy & Shrum (2001); Laroche et al. (1996); Balderjahn (1988); Dembkowski & Hanmer-Lloyd (1994); Dembkowski (1998); Shrum et al. (1995); Ottman (1998); Peattie & Crane (2005); Prakash (2002); Johri & Sahasakmontri (1998).
Segmentation of the Green Customer	<ul> <li>Characteristics of Green Consumers.</li> <li>Segmentation Strategies.</li> <li>Problems involved of targeting Green Customer.</li> <li>Targeting Green Segments with appropriate Marketing Strategies.</li> </ul>	Kinnear et al. (1974); Straughan & Roberts (1999); The Roper Organization (1990); Paço et al. (2009); Chan (1999); Ginsberg & Bloom (2004); Peattie (2001); Kilbourne & Beckmann (1998); Ottman (1993); Jain (2004).
Green Products	<ul> <li>Customer's Acceptance of Green Products.</li> <li>Performance of Green Products.</li> </ul>	Mendleson & Polonsky (1995); Crane (1990); Wong et al. (1996); Crane (1998); Crane (2000); Sriram & Forman (1993).
Green Pricing	<ul> <li>Customer's Willingness to pay Premium Price.</li> <li>Price Level.</li> </ul>	Vlosky, Ozanne, & Fontenot (1999); Laroche, Bergeron, & Barbaro-Forleo (2001); Coddington (1993); Prakash (2002); Peattie (1999); The Roper Organization (1990); Mintel (1991); Worcester (1993); Porter & Van der Linde (1995); Laroche et al. (2001).
Promotion of Green	Consumer's Scepticism towards Green Claims.	Polonsky & Rosenberger (2001); Mendleson & Polonsky (1995); National Consumer Council

Products	Green Advertisements and Customer's Response.	(1996); Peattie (1999); Barrett (2007); Iyer et al. (1994); Chan (2000); Davies (1993); Davies (1994); Kilbourne (1995); Schuhwerk & Lefkoff-Hagius (1995); Polonsky et al. (1998).
Waste	Consumer Waste	Thogersen & Grunert-Beckmann (1997); McCarty &
Concerns and	Recycling Behaviour.	Shrum (2003); Pelton et al. (1993); Biswas et al.
Recycling		(2000).
Initiatives	Attitudes and Beliefs	
	about Recycling.	
Green	General Concept.	McDaniel & Rylander (1993); Prakash (2002);
Marketing	·	Ottman (2008); Wong et al. (1996); Ginsberg &
Strategies	Development and	Bloom (2004); Peattie (1999); Mendleson &
	Implementation.	Polonsky (1995); Rivera-Camino (2007).

### 2.3.3.2 B2B Environment

Particular attention is given to the B2B environment due to its relevance towards the dissertation. Reasons for adopting green marketing for B2B organizations are presented and discussed. This gives justification for the research decision to focus on B2B organizations.

### 2.3.3.3 Why Green Marketing Benefits B2B Organizations

Given the special role of the B2B environment as outlined in section 2.2.3.2, green marketing strategies can provide strong benefits. This section outlines the relevance of green marketing strategies in the B2B environment and further explains why green marketing can particularly benefit B2B organizations. Therefore, this section gives justification for B2B as an appropriate subject of research.

• Business customers increasingly seek to buy environmentally-friendly products and services (Pujari et al., 2004; Drumwright, 1994; Polonsky, Broks, & Henry, 1998; Min & Galle, 1997). They also emphasize environmentally responsible practices in their transactions with manufacturers (Sharma et al., 2010). Thus, environmental concern must be acknowledged as an important buying criterion for business customers. This needs to be considered when developing successful marketing strategies for the B2B environment (Drumwright, 1994).

- Due to large purchase quantities, business customers are able to strongly influence manufacturers operations. This allows business customers to question and discuss the manufacturer's performance in sustainability (Peattie, 1992). Business customer's expertise plays an important role. It facilitates a profound examination and interpretation of the manufacturer's environmental claims (Prakash, 2002; Iles, 2006).
- The B2B environment represents the majority of all marketing activities, clearly outnumbering the purchases of end-customers (Pujari, Peattie, & Wright, 2004). Thus, the most significant impact of environmental concern is created in the B2B environment (Peattie & Charter, 2003; Drumwright, 1994; Morton, 1996).
- Governmental regulations, environmental taxes and legislations strongly influence companies in the B2B environment (Gurtoo & Antony, 2007; Hong et al., 2009; Prakash, 2002; Vaccaro, 2009; Sharma et al., 2010). To add to this, public, shareholders and investors expect companies to operate in a sustainable manner (Hong et al., 2009; Cetindamar, 2001). Companies that extensively impact the environment such as manufacturers of chemicals, heavy metal and oil are the ones affected by these pressures and regulations (Ottman, 1998; Peattie, 1992; Darnovsky, 1996).

Given these aspects, green marketing strategies can provide significant benefits for companies operating in the B2B environment. It seems that marketing literature has acknowledged the importance of green marketing strategies for the B2B environment but green marketing in B2B organizations has hardly been researched (Chamorro, Rubio, and Miranda, 2007). Two exceptions are the studies of Earl and Clift (1999) and Drumwright (1994).

Earl and Clift's (1999) case study outlines the importance of environmental features of electronic products. The study takes the manufacturer's perspective. Earl and Clift (1999) investigate the buying behaviour of business customers regarding their willingness to pay a premium price for environmental product features. Further, the authors examine if environmental product features act as a selling attribute. Although the results are mixed, the authors find that business customers tend to pay more for a product with environmentally friendly features. They found that mixed results stem from business buyer's misperceptions of how the green features of the product are

defined. This, in fact, weakens the effectiveness of the green marketing strategy. Business buyers do not understand the content and meaning of green product features which seems to be a reason why they did not react to the environmental features of the product. To add to this, negative past experiences related to performance of environmental friendly products influenced the buying behaviour of the business buyer (Earl & Clift, 1999). This lack of understanding of how high or low greenness is defined from the manufacturers and business buyers point of view is the major motivation why this research is conducted.

The study of Drumwright (1994) is one of the early studies concerned with the buying behaviour of business customers. The study takes the perspective of business customers that consider environmental concern as a buying criterion. This is of high significance for the manufacturer and must be understood well. It can allow the manufacturer to develop more effective marketing strategies in order to target the business customer.

In comparison to the prior studies, Crane (1998) integrates the entire supply chain. His study outlines impacts of green alliances on relationships between supply chain members. These green alliances aim to achieve environmental objectives. But the majority of the supply chain members show negative reactions towards close green alliances. This results from companies' scepticism to share confidential information with other supply chain members. But after collaboration between supply chain partners is created, environmental issues such as green product attributes can be addressed more efficiently. Given the marketing environment dominated by governmental and stakeholder pressure collaborations become attractive. They help to develop legitimacy and credibility for the entire industry. This creates mutual green marketing solutions Crane (1998).

# 2.4 Link Between Sustainability and Green Marketing

Section 2.2 and 2.3 outline the concepts of sustainability and green marketing with focus on in the B2B environment. It is stated that the concepts of green marketing and sustainability must be clearly distinguished from each other. As a result, B2B organizations that practice sustainability do not necessarily practice green marketing and vice versa. But a significant link exists between both concepts. As defined in section 2.2.1, sustainability obligates companies to incorporate the three dimensions of

sustainability (economic, environmental and societal) into their business activities (World Commission on Environment and Development, 1987). Green marketing is strongly linked to sustainability as it helps to achieve those dimensions of sustainability through generating and delivering sustainable solutions whilst continuously satisfying customer's and stakeholder's needs (Charter et al., 2002). Thus, B2B organizations can achieve sustainability whilst satisfying business buyer's and stakeholder's needs by combining both concepts effectively with each other. In order to enhance the explanations made, Figure 2.2 can be applied. Figure 2.2 is applied again in section 2.4.3 when the Greenness Matrix (Simula et al., 2009) is introduced and linked to the concepts of green marketing and sustainability.

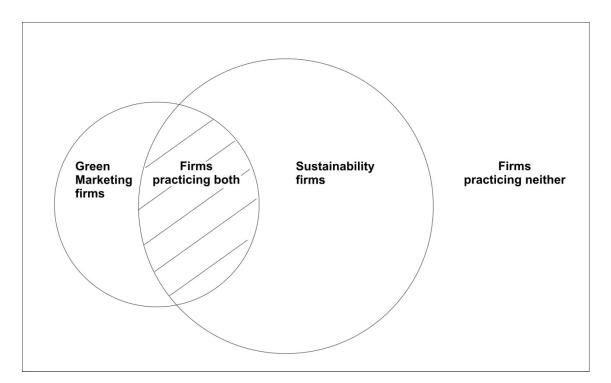


Figure 2.2: Link between Sustainability and Green Marketing

Figure 2.2 shows the two concepts of sustainability and green marketing and how they relate to each other. Green marketing is presented as a part of the sustainability concept. The left circle in Figure 2.2 represents B2B organizations that merely practice green marketing without considering sustainability at all. This would for example include a company that promotes itself as having a low environmental impact while not actually implementing systems that decrease the environmental impact of the company. The right circle in Figure 2.2 characterizes B2B organizations that incorporate sustainability

into their business without practicing green marketing. This applies for a B2B organization that has systems in place which actually decrease the environmental impact but the organization does not understand how to promote their actions towards their stakeholders. The overlap of circles in the centre symbolizes B2B organizations that combine green marketing and sustainability. These B2B organizations incorporate sustainability whilst using green marketing strategies to promote their sustainable activities while satisfying their customer's and stakeholder's needs (Charter et al., 2002). B2B organizations that are located outside of the circles do neither consider sustainability nor green marketing.

In summary, the research looks at four different types of B2B organizations as shown in figure 2.2: organizations that only practice either green marketing or sustainability, organizations that practice neither of the concepts and organizations that practice both concepts. Special attention is given to studies that incorporate both concepts of sustainability and green marketing regarding B2B organizations. These are outlined in the following section.

# 2.4.1 Green Marketing and Sustainability Studies

Research in B2B marketing that combines sustainability and green marketing is often related to manufacturers in specific industries as opposed to B2C marketing. These manufacturing industries are namely the technology sector (Simula et al., 2009) and the chemical industry (Iles, 2006; Peattie & Ratnayaka, 1992) as mentioned earlier. These sectors face enormous pressure from government and stakeholders due to their strong impacts on the environment, society and economy.

In chemical manufacturing competitive business advantages can be generated by practicing green marketing while achieving sustainability (Iles, 2006). Iles (2006) defines sustainability as green chemistry in his study of chemical manufacturers. Green chemistry looks at design of chemicals, process and impacts as well as energy conservation and resource efficiency (Iles, 2006). In order to link sustainability and green marketing, chemical manufacturers must define and understand the sustainable features of their products. That is, manufacturers often may not understand what business buyers evaluate as sustainable features of their offerings (Iles, 2006, Peattie &

Ratnayaka, 1992). Thus, the business buyer's opinions and perceptions about the product must be considered. This allows manufacturers to make sure that the product image matches the true content of the product (Simula et al., 2009; Peattie, 1992). This helps to enhance the important sustainable features and benefits of the product which matches the expectations of the business buyer (Simula et al., 2009). Thus, sustainability can be achieved whilst green marketing facilitates the satisfaction of business customers needs.

Chemical manufacturers can generate competitive advantage in two ways by practising green marketing whilst covering all dimensions of sustainability. Firstly, green marketing enables manufacturers to satisfy business buyer's needs which refers to the societal dimension of sustainability as it is a consideration of stakeholders. Green marketing also helps to comply with governmental regulations which relates to the environmental dimension of sustainability as these regulations aim to preserve the environment (Iles, 2006). Secondly, green marketing allows manufacturers to market their strategies as an economic benefit to their business customers. That is because the generation of sustainability can save resources and energy for their business customers. That refers to the economic dimension of sustainability (Iles, 2006).

Vaccaro (2009) takes a different approach in order to combine sustainability and green marketing. The study outlines the influence of innovations on green marketing strategies in order to achieve sustainability. It is stated that the more efficient the innovation, the more effective the green marketing strategy. An efficient innovation meets the needs of business buyers and other stakeholders. It must also meet the needs of the environment and economy. Thus, all three dimensions of sustainability are covered through the green marketing strategy. This can generate competitive advantage (Vaccaro, 2009).

So far, it is shown in this chapter that practising green marketing and sustainability are important for B2B organizations as it can generate competitive advantage. It is also outlined that this is especially true for manufacturers operating with chemicals due to business buyers and government demands. According to Simula et al. (2009) there are four approaches to a B2B organization combining green marketing and sustainability with their products. Therefore, the research takes the Greenness Matrix of Simula et al. (2009) as its basis. The Greenness Matrix (Simula et al., 2009) is explained in the

following section.

### 2.4.2 Simula et al. and the Greenness Matrix

The research work of Simula et al. (2009) looks at organizations in the B2B technology sector combining sustainability and green marketing when developing new products. Simula et al. (2009) focus on the development of green marketing strategies to benefit all dimensions of sustainability (Simula et al., 2009). When developing a green marketing strategy, business buyer's values towards greenness must be well understood. Thus, Simula et al. (2009) assume that before a new product can be developed all efforts must be focussed on the business buyer's needs and responses. This ensures that manufacturers and their products are perceived as green whilst performing at a high environmental level (Peattie & Crane, 2005). Simula et al. (2009) developed a four quadrant Greenness Matrix. Within that, the authors compare how business buyers and manufacturers perceive greenness of new products in one framework. The manufacturer's perceived greenness is termed as "actual greenness". It relates to the objective greenness of the manufacturer and its products. The business buyer's perceived greenness is termed as "perceived greenness". It describes how the business buyer evaluates the manufacturer's greenness and its products (Simula et al., 2009). Simula et al. (2009) compare the level of actual greenness of the manufacturer with the business buyer's perceived greenness.

In summary, Simula et al. (2009) suggest that a B2B organization must consider its own level of greenness in comparison to the level of greenness as perceived by the business buyer. For an illustration of the Greenness Matrix of Simula et al. (2009), see Figure 2.3.

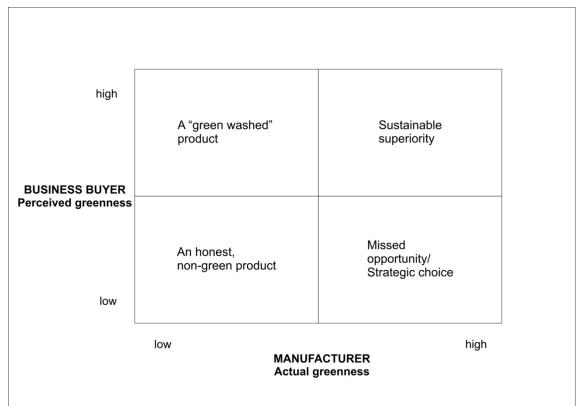


Figure 2.3: The Greenness Matrix (Adapted from Simula et al., 2009)

Following the perceptions of manufacturer and business buyer, the Greenness Matrix (Simula, et al. 2009) is divided into four quadrants described as "the green washed product, the honest non-green product, the sustainable superior product and the missed opportunity product" (Simula et al., 2009). A description of the quadrants as by Simula et al. (2009) is given in the following section 2.4.3.

# 2.4.3 The Quadrants of the Greenness Matrix (Simula et al., 2009)

Unfolding their Greenness Matrix, Simula et al. (2009) only give very brief descriptions about what each quadrant entails. According to Simula et al. (2009), the *green washed product* does not show a high level of actual greenness but claims to be highly green. The product is also perceived as highly green by business buyers. For example, a green washed chemical detergent would claim to have environmental benefits and is purchased for that reason by business buyers. The manufacturer of the product does not implement any processes towards Sustainability to do justice to their environmental claims. Simula et al. (2009) suggests that a green washed product results in disappointment for business buyers as it cannot meet the business buyer's expectations.

Manufacturers must adapt their green marketing strategies to the product's actual greenness in order to ensure credibility and loyalty. Negative press on false or exaggerated claims can result in decreased sales (Simula et al., 2009).

The *missed opportunity product* shows high actual greenness. But this is not valued and perceived by business buyers due to a lack of awareness about green product benefits. Manufacturers miss out an opportunity to effectively market their products to business buyers. Thus, companies should fully understand the greenness of their products and how these are perceived by business buyers. A missed opportunity chemical detergent would have a range of environmental benefits that are backed up by sustainable processes of the company. Those environmental benefits are not valued by business buyers resulting from a possible a lack of marketing communication.

With regard to the *honest non-green product*, the manufacturer and business buyer agree that the manufacturer's greenness is nonexistent. In other words, the manufacturer's actual greenness is low and is perceived as that by the business buyer. In this case the chemical detergent does not claim to have environmental benefits and business buyers do not purchase the products due to its environmentally friendly features. Simula et al. (2009) recommend to not create artificial green marketing features for the product. This could result in more harm than benefit to manufacturers as it does not meet the needs of business buyers.

The *sustainable superiority products* outline a high level of actual and perceived greenness. Coming back to the example of a chemical detergent, the product claims to be environmentally beneficial which is supported by sustainable systems and processes of the manufacturer. Business buyers purchase the detergent as a result of those perceived environmental benefits. Since business buyers are aware of products greenness, sustainable superiority is the most desirable situation to be in from a green marketing perspective. The manufacturer meets the business buyer's expectations which can offer competitive advantage (Simula et al., 2009).

### 2.4.4 The Link between Sustainability, Green Marketing and the **Greenness Matrix**

By defining the four quadrants of the Greenness Matrix, Simula et al. (2009) look at companies that practice both concepts of sustainability and green marketing, either one of them, or neither. Thus, the quadrants of the Greenness Matrix (Simula et al., 2009) can be assigned to the concepts of sustainability and green marketing. Therefore, Figure 2.3 is developed which pulls together the main concepts of sustainability, green marketing and the Greenness Matrix (Simula et al., 2009).

(Simula et al., 2009)

Figure 2.4: The Link between Sustainability, Green Marketing and the Greenness Matrix

Green Firms Sustainable **Firms** practicing both Marketing firms practicing neither firms Sustainable Superiority Greenwashers Missed opportunity/ Honest non-green Strategic choice

Developing Figure 2.2, the concepts of sustainability and green marketing are introduced. Further, companies are considered that either practice green marketing or sustainability, companies that practice both, or companies that practice none.

Figure 2.4 outlines the Greenness Matrix (Simula et al., 2009) and its quadrants which consider the perceptions of greenness of manufacturers and business buyers. Therefore, green washers relate to companies that only rely on green marketing strategies. They claim to be green but do not actually undertake any sustainability efforts. Companies with a *missed opportunity or strategic choice* implement sustainability but do not practice green marketing to promote these. Consequently, a competitive advantage cannot be achieved. However, these companies have the opportunity to make a strategic choice of developing green marketing strategies to market their sustainability efforts. *Honest non-green* companies do not consider any of the concepts. In contrast, *sustainable superiority* companies combine green marketing and sustainability successfully which can generate competitive advantage.

So far, the literature review outlines the concepts of sustainability and green marketing and the link between both is discussed with the relevant studies. As a relevant study of both concepts, the Greenness Matrix of Simula et al. (2009) is introduced and defined according to the authors. In the following section the limitations of the Greenness Matrix (Simula et al., 2009) are identified in order uncover the gap in the literature that is addressed by this research.

### 2.5 Gap in the Literature

The Greenness Matrix (Simula et al., 2009) is defined according to the authors in section 2.4.3. Given these definitions of the quadrants of the Greenness Matrix (Simula et al., 2009), the explanations of the authors are inadequate and only reflect what the actual figure of the Greenness Matrix already displays.

It is outlined in section 2.3.3.3 that sustainability and green marketing are outlined to be significant factors in profit for B2B organizations. Sustainability and green marketing are starting to be forced upon manufacturers particularly in the chemical sector due to business buyer's and government's demands as they strongly influence B2B organizations (Ottman, 1998; Peattie, 1992). Business buyers prefer dealing with manufacturers that offer environmentally-conscious products and services (Pujari et al., 2004; Drumwright, 1994; Polonsky, Broks, & Henry, 1998; Min & Galle, 1997). In fact, business buyers expect manufacturers to give emphasis to environmentally responsible practices (Sharma et al., 2010). Also, shareholders and investors expect manufacturers to act in a sustainable manner (Hong et al., 2009; Cetindamar, 2001). However, as Earl and Clift (1999) have found, defining greenness is a problem for business buyers. Given these aspects, B2B organizations must understand what makesup high or low greenness if they wish to implement greenness to match business buyer's

and government's expectations. This is of great importance as it can affect B2B organization's profit.

According to Simula et al. (2009) there are four different approaches to a B2B organization combining sustainability and green marketing with their products. However, the authors have failed to define factors that form high or low greenness, making their Greenness Matrix (Simula et al., 2009) very difficult for B2B organizations to implement.

Therefore, this study seeks to explore Greenness Factors through the manufacturer's and business buyer's perspective in order to operationalize the Greenness Matrix (Siumla et al., 2009). The gap must be addressed as it aids B2B organizations in their implementation process of greenness.

Further, the Greenness Matrix (Simula et al., 2009) is of a conceptual nature and does not provide any empirical support. This is addressed by this research which conducts interviews with manufacturers and business buyers to empirically support the Greenness Factors that will be developed.

### 2.6 Conclusion

This chapter aims to overview the literature about the concepts of sustainability and green marketing. The literature distinguishes between the B2C and B2B environment. Relevant studies of B2C and B2B environment are outlined in the literature review. The chapter further outlines the link between sustainability and green marketing specifically in the B2B environment. The study of Simula et al. (2009) and their Greenness Matrix are presented. The chapter finishes by outlining the limitations of the Greenness Matrix (Simula et al., 2009) that are addressed by this research. It gives justification for the research as the development of Greenness Factors that make-up high or low greenness in B2B organizations has not been researched yet. This chapter shows that the research topic helps to expand on the literature of Green Marketing in B2B organizations. This gap in the literature is addressed by this dissertation.

# **Chapter Three: Methodology**

### 3.1 Introduction

This chapter examines the reasoning behind the research decisions made in this dissertation. It starts with the motivations for conducting this particular study. Then, the chapter describes the approach that is taken for the research. Following this, the chapter explains and justifies the epistemology, theoretical background, and methodology chosen as appropriate for the research. Details of method, participants and data analysis are outlined. To finish, quality criteria for the research are presented and examined.

# 3.2 Research Purpose

The B2B market offers various challenges for organizations wanting to implement sustainability and green marketing. Public and governmental pressure acts as motivations to comply with regulations (Peattie, 1992). This is especially true for the manufacturing sector that operates with chemicals in the production process. A manufacturer can directly influence products, processes, and the engineering (Iles, 2006; Hong, 2009). In fact, this puts manufacturers into the forefront of regulative activities.

Manufacturers also experience pressure from other supply chain participants. Environmental concern becomes a crucial part of the organizational buying process (Drumwright, 1994; Polonsky et al., 1998). Thus, manufacturers must make sure that the product image matches the true content of the promoted product. This decouples manufacturers from "green washing" activities and negative reputational

consequences. Therefore, it is essential to understand the business buyer's perceptions about what the important green features of a product and company are (Hong et al., 2009). This understanding may help manufacturers to enhance the green features of its product and company to match the business buyer's perceptions and expectations (Simula et al., 2009; Hong et al., 2009).

Manufacturers do not only suffer from governmental and supply chain pressure. There is little academic research concerning green marketing strategies in B2B marketing. Manufacturers have no guidance if they wish to strategically position themselves in the green B2B market. Given those pressures and lack of academic research, this study looks at manufacturers using chemicals within their production process in the B2B environment.

Simula et al. (2009) suggest that there are four approaches to B2B organizations combining sustainability and green marketing with their products. These approaches are outlined in the Greenness Matrix (see section 2.4.2 for extended discussion) of Simula et al. (2009). It compares perceptions of high and low greenness of manufacturers and business buyers in one framework. Though, Simula et al. (2009) have failed to define factors that make-up high or low greenness. That makes the implementation of the Greenness Matrix (Simula et al., 2009) very difficult for B2B organizations. This study takes the Greenness Matrix (Simula et al., 2009) and investigates the Factors of Greenness through both a manufacturer and business buyer viewpoint in order to operationalize the concept to assist B2B organizations in their implementation of greenness to facilitate future research in the area.

The major contribution of the research is to operationalize the Greenness Matrix (Simula et al., 2009) by exploring the Factors of Greenness with empirical support collected from manufacturers and business buyers. Therefore, the research provides guidance to B2B organizations who seek to implement greenness. It also assists B2B organizations that wish to place themselves in one of the quadrants or wish to reposition themselves in the green B2B market.

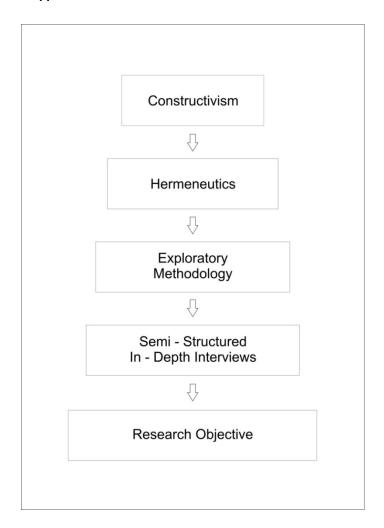
Thus the research objective which helps to frame this study is:

• What are the characteristics manufacturers and business buyers would assign to a company with low greenness? In contrast, what are the characteristics manufacturers and business buyers would assign to a company with high greenness?

# 3.3 Research Approach

This section outlines the epistemology and theoretical perspective that underlies this research. It also covers the theoretical beliefs by describing the assumptions that are made throughout the dissertation about reality, knowledge and knowledge creation (Crotty, 1998). This section explains the research decisions that are made regarding methodology and research techniques which are outlined as appropriate for this research. An overview of the research approach is presented in Figure 3.1.

Figure 3.1: Research Approach



### 3.3.1 Epistemology

This study took the view of constructivism as its epistemological philosophy. Epistemology looks at the beliefs of the researcher. It explains how knowledge is created along with beliefs about the researcher-participant relationship (Hudson & Ozanne, 1988; Guba & Lincoln, 1985). Constructivism assumes that knowledge is created through people's interactions with each other and through people's continuous interpretation of their own and others behaviours and social situations (Berger & Luckmann, 1967). Thus, this research sought manufacturers and business buyers view of the characteristics of a company with high or low greenness. Consequently, this view was created through participant's interactions with the interviewer (Hudson and Ozanne, 1988; Guba & Lincoln, 1994).

The continuous process of interpreting people's own and others behaviours, was identified as constructs. Constructs gave meaning to behaviours and communications. Consequently, a communication could only be grasped if the meaning that is assigned to the communication is understood. It was also crucial to understand why the person interpreted the behaviour in that particular way. This interpretation resulted from the person's experience and background (Schwandt, 2000). Therefore, there could be multiple realities which are formed in each individual's context (Hudson & Ozanne, 1988; Guba & Lincoln, 1994). One of these realities was the researcher's reality. Within this reality, the researcher himself/herself made interpretations of the constructs of the participants (Schwandt, 2000). If these constructs formed a consensus, a general worldview could be formed for that group of individuals regarding the subject studied (Smith, 1989; Hudson & Ozanne, 1988).

Constructivism assumes that these social constructs are flexible and diverse. The flexibility and diversity refers to the background of the individuals (Guba & Lincoln, 1985; Schwandt, 1994). Thus, the research interview aimed to find a version of the construction that is more informed than prior constructions about the area studied. This was achieved using participants with adequate prior knowledge on the area studied in order to give a competent interpretation (Guba & Lincoln, 1985; Schwandt, 1994). Accordingly, research participants were chosen with high prior knowledge regarding green marketing strategies in order to fully contribute to the research.

Constructivism assumes that the research relationship is subjective. It aims to facilitate

the participant's constructs on the topic being studied (Guba & Lincoln, 1985). Within the researcher-participant relationship, the researcher became immersed in the research through shared knowledge and social interaction (Manning, 1997). Meaning was generated through social interaction. That indicates that the researcher's intentions were not hidden from participants (Schwandt, 1994). This meant that constructions are created as the interviews are carried out. Further, constructivism was suitable for this research because it accepted that each individual may have a different view about what a company with a high or low greenness would have. Additionally, it presented criteria for coming to a conclusion about an agreed worldview of green marketing strategies i.e. consensus.

In order to create an agreed worldview of participants, the constructs between the participants must be consentual. To do so, the constructs of different individuals must be compared to gain a consensus of the participant's multiple realities. This was addressed by the research through including the manufacturer's and business buyer's view of greenness in order to define the Greenness Factors. Participant's realities were created by social interaction. Thus, it was assumed that the process by which individuals are studied may affect their interpretations. The researcher was a part of the social reality of the research context and thus researcher and participant interacted to create interpretations. So too, interpretations were affected by the researcher's own knowledge and assumptions. Thus, the researcher had an active part in interpreting the constructs of participants (Guba & Lincoln, 1985, 1994; Hudson & Ozanne, 1988).

### 3.3.2 Theoretical Perspective

The above made assumptions of constructivism led to a theoretical perspective that is based on hermeneutical beliefs. The theoretical perspective presented the basis for the choices of methodology (Crotty, 1998). Hermeneutical techniques considered interactions between interviewer and participant. The aim was to form a consensus among the findings. Hermeneutics considered that each person's construction was different due to the person's background and experience. It also saw constructs as a result of social interaction. Thus, the aim of the research was to find a consensus between constructs that was more informed and sophisticated than previous constructs. Consequently, the persons' constructs were interpreted by the researcher using

hermeneutical techniques (Arnold & Fischer, 1994). The above beliefs were shared by constructivism (as outlined in Section 3.3.2).

Hermeneutic philosophy is concerned with the interpretation of understanding and meaning (Crotty, 1998; Bernstein, 1983). Thus, before the meaning of a construction could be understood, an individual must have a basis which helps to interpret the construction (Crotty, 1998). This basis was termed pre-understanding. The researcher belonged to the world in which participants and the subject studied exist. Hence, the researcher could already have predetermined notions about the subject or the participants. This could result from the researcher's own experiences and perspectives as a part of society and as a researcher. This pre-understanding enabled the researcher to interpret the constructs of participants (Arnold & Fischer, 1994).

Hermeneutics considered language as the universal medium in which understanding occurs. Language helped to communicate the constructs of the participants studied. Thus, language helped to link the construction with its meaning (Arnold & Fischer, 1994) and the researcher could gain a better understanding of the individual's constructs. This understanding could even be deeper than the understanding those individuals have themselves.

The understanding of individual's constructions required pre-understanding. To add to this, the subject studied should be understood as a part of a larger whole (Crotty, 1998; Arnold & Fischer, 1994). Though, it must be noted that it was impossible to achieve objectivity. This was due to the pre-understanding process the researcher had to be aware of. Participants were continuously in the process of understanding and building constructions (Arnold & Fischer, 1994). But the consensus of constructs which forms final understanding could assist the researcher to move closer to objectivity (Arnold & Fischer, 1994).

Thus, hermeneutics was a suitable approach in this research as it enabled the understanding of constructions. Further, hermeneutics acknowledged that meaning could be communicated through interviews. It was also considered appropriate by Guba and Lincoln (1994) as a suitable methodology with constructivism. The approach of hermeneutics enabled the researcher to interpret interviews and constructions of manufacturer's and business buyer's views of characteristics a company with high or low greenness would have. These interpretations of what makes-up high or low greenness allowed the researcher to answer the research questions. This was based on

the hermeneutical assumption that meaning was communicated through language. Consistent with the philosophy of constructivism, meaning was created through social interactions. Therefore it could be interpreted by an interviewer.

Qualitative methods were appropriate for this research for the following reasons. Firstly, information could be gained from a context along with the findings. This reinforced the researcher's ability to better understand and interpret the participant's constructs (Guba & Lincoln, 1985). Secondly, qualitative methods allowed for deep insights into the participants constructions. This resulted from the possibility to further question and clarify the participant's constructs and interpretations (Guba & Lincoln, 1985). Thirdly, qualitative methods supported the finding and understanding of processes and patterns of meaning. These may have only existed in the participant's sub- consciousness but could be explored with the help of qualitative methods (Flick, Kardoff & Steinke, 2004).

Following these aspects and the discussion held above, qualitative methods were most appropriate for this research. Qualitative methods considered full description and understanding which were needed for these multiple constructions (Robson & Foster, 1989). This was in agreement with the use of interpretive methods. They reinforced the interaction between interviewer and participant. Interpretative methods also facilitated the identification of themes on which to create consensus (Bryman & Bell, 2007). In essence, qualitative methods allowed rich description and interpretation of participant's constructions. This created a more broad examination of the manufacturer's and business buyer's view on characteristics a company with a high and low greenness would have.

# 3.4 Methodology

Methodology is the philosophical basis for gathering knowledge. It looks at the way researchers believe reality and knowledge can be discovered (Guba & Lincoln, 1985). The methodology presents the approach which creates and makes decisions about the methods that are used in the research (Crotty, 1998). The methodology that is used in this study adds to the above made assumptions about reality and knowledge. Consistent with these assumptions, the study uses qualitative methods, which are in-depth interviews. These are applied to the Greenness Matrix (Simula et al., 2009) in order to

create indicative questions.

## 3.4.1 Semi-Structured In-Depth Interviews

Semi-structured in-depth interviews were used to interview marketing managers of manufacturers and business buyers. Taylor & Bogdan (1998) stated that in-depth interviews are suitable when research objectives and questions are clear. The research objective clearly asked for manufacturers and business buyers view on what characteristics they would assign to a company with a high and low greenness. Thus, indepth interviews were appropriate.

Further, the information asked from participants was based on their perceptions of high and low greenness. This indicated a complex decision making process (Robson & Foster, 1989) that manufacturers and business buyers were not aware of themselves. Hence, in-depth interviews were chosen because they helped to examine aspects that assisted participants to understand their decision making in the process of green marketing strategies. With the help of in-depth interviews participants communicated their understanding of those green marketing strategies (Sampson, 1996).

In-depth interviews were also chosen due to marketing manager's time constraints. As outlined in the literature, time constraints are a valid reason for selecting in-depth interviews as a methodological technique (Taylor & Bogdan, 1998; Robson & Foster, 1989).

The use of in-depth interviews did not assure truly honest responses from participants. Thus, it was important to create a relaxed and comfortable interview atmosphere for participants (Taylor & Bogdan, 1998; Robson & Foster, 1989). This happened by starting an informal conversation with participants prior to the interviews. Participants were also given enough time to reflect upon and answer questions (Taylor & Bogdan, 1998; Robson & Foster, 1989).

Further, the interviewer must have an understanding of the context of the participants' own language and experiences (Taylor & Bogdan, 1998). This was crucial in order to interpret participant's responses. The prior research process on sustainability and green marketing prepared the interviewer well in order to understand and interpret participant's responses appropriately.

#### 3.4.2 Method

This section gives details on how methodologies were utilised to collect data from participants (Crotty, 1998). It describes the development of criteria in order to select participants. Further, the pre-testing of interview guides and the data collection process are outlined.

### 3.4.3 Development of Selection Criteria

The selection criteria for participants for in-depth interviews were created following the explanations made in the literature review. Participants were marketing managers of manufacturer and business buyers. Participants were selected on the basis of purposive sampling. This meant that participants were chosen due to their richness of information with which they contributed to the research objectives (Neumann, 2003; Patton, 2002; Ritchie & Lewis, 2003).

The manufacturers were selected on the criteria of:

- Being a manufacturer
- Operating with chemicals in the production process
- Being based in New Zealand
- Operating in the B2B environment

An online search through the homepage of www.madefromnewzealand.co.nz was conducted which allowed for a specific search for companies according to the selection criteria. Four manufacturers were assessed. Subsequently, manufacturers were contacted via phone or email in order to get contact details of the person that could contribute to the research with the most knowledge which in this case was the marketing manager. Then, those marketing managers were contacted via email to inform them about the research, ethics and participants expectations.

The business customers were selected on the criteria of:

- Being a business buyer of a manufacturer that is based in New Zealand and operates with chemicals in the production process
- Operating in the B2B environment

The selection of business buyers followed the same procedure as the manufacturers. A search was conducted with help of the homepage www.madefromnewzealand.co.nz which helped to indentify four business buyers. Again, business customers were contacted in order to get contact details of the most knowledgeable person. They were also contacted with details about the research, ethics and participants expectations.

### 3.4.4 Development of Interview Guide

Semi-structured interviews were completed in order to fully understand the participant's perceptions about what characteristics a company with a high and low greenness would have. This provided an interview guideline which helped to structure the interview.

The interview guide consisted of three questions. It was suggested in the literature that general and specific questions needed to be included in order to gather data. General questions should be asked first. They aim to encourage the participants and facilitate the start of the interview (Berg, 2009; Esterberg, 2002). Thus, the first question asked for the participant's general definition of greenness within a company context. The general question was then followed by two specific questions asking the participants for their specific view about what characteristics a high green or low green company would have. The interview guide can be seen in Appendix (A).

## 3.4.5 Pre-Testing of Interview Guide

The in-depth interview questions were tested first with a read through by a senior marketing academic (supervisor). Accordingly, the supervisor assisted with an expert opinion to further clarify questions, format and order. This was followed by fellow post-graduate students responding to the questions. The pre-testing process enabled the researcher to alter questions if necessary. It also gave the researcher the opportunity to further train and improve interviewing skills.

### 3.4.6 Interview Sample Size

Eight interviews were conducted in total. The literature suggests that interviews should continue until additional interviews can't give new insights into the subject studied (Taylor & Bogdan, 1998). This is commonly known as the point of theoretical saturation (Glaser & Strauss, 1967). It was agreed with the supervisor to stop the interviewing process when repetitive themes occurred. This happened after the eighth interview which showed strong repetitions of themes. More in-depth interviews would have been conducted in case there was no repetition of themes after the eighth interview.

#### 3.4.7 Data Collection

Eight in-depth interviews were conducted using four marketing managers representing manufacturers and four marketing managers representing business buyers.

Prior to the interviews, the participants were informed of ethics, the interview process and the audio-taping of the interview. They were also given time to review Participant Information Sheets before signing the Consent Forms. Each interview lasted half an hour or less due to participant's time constraints.

It was considered as important to create a relaxed, informal atmosphere in order to put participants at ease. This was created first through the choice of venue, which was familiar to all participants as these were the participant's work place. Two interviews had to be conducted over the phone due to marketing manager's geographical dispersion from the interviewer (see Berg, 2009 for benefits and costs of telephone interviews in qualitative research). Thus, telephone interviews are a viable alternative when the researcher has no direct access to participants (Berg, 2009).

The researcher used open-ended questions within the interview. The wording of the questions changed slightly according to the development of the interview and participant's responses. After each question participants were allowed to consider their response. If noted that participants did not understand the question, the researcher stepped in to give further explanations. Otherwise, the researcher let the participants explain without interruption. The interview questions were modified if necessary. All the mentioned aspects created a flexible interviewing procedure aiming to uncover each

participant's view of greenness.

In-depth interviews were audio-taped and transcribed by the researcher. This was a significant process in order to get familiar with the responses. Consistent with the hermeneutic approach, transcriptions were reviewed after each interview. This process enabled the researcher to consider areas that require further investigation in following interviews. To add to this, emerging and reiterating themes could be identified.

### 3.5 Participants

Due to the research questions and theoretical perspective of this study, in-depth interviews with marketing managers of manufacturers and business buyers were conducted. This was in order to create a consensual worldview of the interpretation of views of the characteristics a company with high greenness, or low greenness would have. The views of the participants were then gathered with help of in-depth interviews through the researcher. The in-depth interviews reinforced the collection of rich data on the participants view. Rich data was required to fully understand the participant's constructions to create a reconstruction of consensus (Spiggle, 1994). Consensus helped to explore the research objectives of this dissertation and allowed for triangulation of views (between participants, supervisor and the researcher).

#### 3.5.1 Manufacturers

Participants representing manufacturers were recruited. Consistent with qualitative methods, participants for interviews were selected with help of purposive sampling. This means, participants were chosen with a purpose due to specific characteristics that enabled the researcher to examine and understand the subject studied (Ritchie & Lewis, 2003). In essence, participants that contribute most to the research of green marketing strategies within a B2B organization were chosen. Marketing managers were identified as appropriate participants due to their position in the company and knowledge about marketing strategies. The participants were interviewed regarding their view about characteristics a company with high greenness, and low greenness would have.

This research does not claim to be generalised to the broad population. Along with the constructivist philosophy, the research sought to operationalize the Greenness Matrix

(Simula et al., 2009) by focussing on the participant's views of high or low greenness only (Hudson & Ozanne, 1988). Following hermeneutics, the researcher understood and used the language of the participants. This allowed the researcher to ask more specifically and interpret the responses appropriately (Klein & Myers, 1999).

The research process for the dissertation prepared the researcher well for the given responses in the interviews. Further, the participants had all marketing related job positions. This made them suitable participants as they had enough prior knowledge to be able to be competent in their interpretation. This was noted as being a significant requirement of the constructivist philosophy (Guba & Lincoln, 1985; Schwandt, 1994). Prior to the interviews, participants were contacted by email and asked for a suitable time. Interviews lasted half an hour and were audio-taped with participants' permission. Comprehensive company profiles are not given here due to ethical reasons that do not allow the identification of the interviewed companies. But for further research into the field of B2B organizations, short descriptions of the manufacturers' industry, type of output and size are outlined.

**Table 3.1: Company Profiles of Manufacturers** 

Manufacturer	1	2	3	4
Industry	Dairy Hygiene	Pharmaceuticals	Environmental Protection Systems	Plastics
Types of Output	Detergents, Animal Health Products	Skin Care, First Aid, Supplements, Injury Treatment	Stormwater and Wastewater Systems, Flood Protection	Packaging, Palettes, Bins
Number of Employees	40-49	400	50	50-99

#### 3.5.2 Business Buyers

Participants representing business buyers were selected. This happened in line with qualitative methods. The selection of participants within business buyers followed the same procedures of purposive sampling that was applied for the manufacturers. Therefore, business buyer's marketing managers were chosen as appropriate

participants for the same reasons as the manufacturers marketing managers. Those reasons are outlined in section 3.5.1.

Short descriptions of the business buyers are given according to industry, types of output and size.

Table 3.2: Company Profiles of Business Buyers

Business Buyer	1	2	3	4
Industry	Hygiene service	Plastics Processing	Office Supply	Hardware
Types of Output	Washroom and Hygiene Products	Containers, Handgrips, Wheels	Office Products, Stationary, Office Furniture	Houseware, Security, Cookware
Number of Employees	50-99	80	900	43

## 3.6 Data Analysis

## 3.6.1 Thematic Analysis

In-depth interviews were transcribed by the researcher and transferred into word documents. These documents were analysed by hand using a thematic analysis. After transcribing the in-depth interviews, the researcher re-examined and reviewed the transcripts. This allowed the researcher to check for an accurate transcribing process. Further, the process enabled the researcher to get a better understanding and feeling for the data. Familiarity with the participant's responses avoided miss-readings (Ezzy, 2002; Spiggle, 1994).

In-depth interviews were broken down into four categories. These categories were:

- Characteristics manufacturers assigned to a company with high greenness
- Characteristics manufacturers assigned to a company with low greenness
- Characteristics business buyers assigned to a company with high greenness
- Characteristics business buyers assigned to a company with low greenness

The researcher worked through the transcripts of the manufacturer and business buyers while coding participant's responses. These codes were assigned to specific characteristics in the text. These codes were then pulled together according to themes (Ezzy, 2002; Strauss & Corbin, 1990). Then, themes were used to create super themes which were labelled as Greenness Factors. These allowed for full descriptions of what makes-up high or low greenness. The Greenness Factors were then merged together to explore each quadrant within the Greenness Matrix (Simula et al., 2009).

For example, the "green washer" quadrant was defined through the characteristics manufacturers assign to a company with low greenness and the characteristics business buyers assign to a company with high greenness.

To finish, a second reviewing process of the in-depth interview transcripts was conducted. That was to identify additional themes that may have been missed out due to human error and loss of context when dividing responses. This iterative approach (Miles & Huberman, 1994) allowed the identification of higher order themes (Strauss & Corbin, 1990; Spiggle, 1994).

In order to reflect and facilitate the data analysis process, a journal was completed. This monitored the researcher's thought, reasoning on themes, dissimilarities, and the hierarchy of themes. Also, difficulties and thoughts on coding and on-coding were reported. This process supported the researcher's iterative process of reviewing and organizing the data (Strauss & Corbin, 1990; Spiggle, 1994; Taylor & Bogdan, 1998; Ezzy, 2002).

In summary of the data collection and analysis process, see Table 3.3. It describes the steps of data analysis of the research.

Table 3.3: Steps of Data Analysis

Steps of Data Analysis	Step Description
Data Collection	Four interviews were conducted with manufacturers and four interviews were conducted with business buyers asking them about their perception of characteristics a company with high or low greenness would have. That resulted in four categories.
Coding of Text Units	The text units of the four categories were coded and reviewed.

Forming Themes	The codes were collated to themes.
Forming Greenness Factors	The themes were further collated to super themes which are labelled as Greenness Factors. Therefore, factors were defined that make up high or low greenness from a manufacturers and business buyers point of view.
Defining the Quadrants of the Greenness Matrix (Simula et al., 2009) through the Greenness Factors	Following the structure of the Greenness Matrix, the manufacturer's and business buyer's perceptions of high/ low greenness were matched within each quadrant. Thus, every quadrant was defined by Greenness Factors.
Operationalization of Matrix	In defining the Greenness Factors through both a manufacturer and business buyer viewpoint, the Greenness Matrix was operationalized to aid B2B organizations in their implementation of greenness.

## 3.7 Establishing Trustworthiness

This research used trustworthiness as its measure for reliability and validity (Guba & Lincoln, 2000). The concepts of validity and reliability assumed that there is only one "truth" for researchers to discover. This research assumed that multiple realities can be constructed and explored. Following this assumption, it would have been inappropriate for this research to include the concepts of validity and reliability. Thus, aspects of trustworthiness were applied. The section describes how trustworthiness differs from the concepts of reliability and validity and how they were addressed in the research. Trustworthiness was a significant criterion for the quality and credibility of the research (Guba & Lincoln, 2000).

# 3.7.1 Credibility

Credibility replaced internal validity. Internal validity referred to the confidence in the findings of the research, that the findings are the one sole answer for the research question. Internal validity also suggested that the research has eliminated any other potential explanations for the findings (Guba & Lincoln, 1985). This differed from

credibility because credibility believes that multiple realities exist rather than one finding which is absolutely true. Thus, internal validity was impossible to attain. This was important due to the constructivist assumptions of this research.

In order to achieve credible findings, the researcher made sure that these multiple realities were represented or interpreted correctly. Credibility was achieved through the continuous reviewing process of the data (Guba and Lincoln, 1985). This was followed by a reviewing process of the transcripts and summaries by the supervisor to confirm the logical interpretations (Guba and Lincoln, 1985). This reviewing process made sure that information and description were rich enough to reconstruct credibility by peers as well (Denzin, 1989; Geertz, 1973; Miles & Huberman, 1994).

In achievement of credibility, the themes and super themes that were identified by the researcher were judged by the supervisor. It was decided by the supervisor whether the text units were accurate representatives of themes. The themes and super themes were then examined in relation to the text units of the transcripts in their context of the interview. All the mentioned methods reinforced the triangulation between researcher, researcher's journal, and supervisor. This triangulation assured precise representation of participant's responses and helped to confirm credibility (Denzin, 1989; Guba & Lincoln, 1985).

## 3.7.2 Transferability

Transferability replaced external validity for this type of research. External validity indicated how well the findings could be generalised when using different measures and participants (Cook & Campbell, 1979). Transferability differed to external validity as it indicated that the findings were applicable to different contexts (Guba & Lincoln, 1985). Following the epistemological belief that multiple realities were created resulting from different backgrounds, the research did not aim to generalise the findings across the population. A generalisation of the findings would have removed the context of the research. Therefore within the context of the study, transferability was more concerned with adequate and contextual information as well as description. In essence, different researchers could utilise the findings regarding their own population of interest.

In order to achieve transferability within the research, rich descriptions had to be undertaken (Guba & Lincoln, 1985). This research gave descriptions of the participants

(Section 3.5), rich description of the findings (Chapter Four) and appendices of the transcripts of responses (Appendices C). These sections gave contextual and descriptive information about the research. This information gives other researchers the opportunity to consider whether the research is applicable to their own research context. As it is not possible to foresee what another researcher's research context will be, this was not assessed by the supervisor (Guba & Lincoln, 1985; Miles & Huberman, 1994).

Transferability was addressed through rich description of the context and participants. Purposive sampling gave a wide range of information surrounding the phenomenon studied, so that future researchers are able to assess transferability of the findings to their research contexts (Guba & Lincoln, 2000).

### 3.7.3 Dependability

Reliability was the criteria linked with dependability. Reliability involved how accurately the findings could be replicated while using similar methods and participants (Ford, 1975). Reliability also supposed that there was only one "truth" to discover by researchers. In contrast, dependability assumed that multiple realities of participants exist. Thus, the exact same findings could never be replicated (Guba & Lincoln, 1985). In order to ensure dependability of the research, the methodology, understandings and interpretations followed a logical structure (Guba & Lincoln, 1985). This was achieved by using the researcher's journal which incorporates information about the research and decision making process. These reflections in the journal supported the logic of the researcher's interpretation of the data. Additionally, the supervisor was in agreement that the researcher's approach and interpretations were logical.

# 3.7.4 Confirmability

The criterion of confirmability was related to objectivity. Objectivity can be achieved when various researchers agree on the interpretation of the findings. In order to assign confirmability to the research, the researcher proved that the findings were not influenced by motivations or background of the researcher. This was achieved by using the researcher's journal. The data from the journal was triangulated with the supervisor.

The journal contained the researcher's beliefs and assumptions of the research processes and participants. Following that, the supervisor examined the findings, the transcripts and the journal. This process helped to assure that the findings were derived from the data rather than the researcher's personal constructions (Guba & Lincoln, 1985). Therefore, confirmability of the research was fulfilled.

## 3.8 Summary

This chapter reveals the reasoning behind this research. Further, it justifies all the decisions made and approaches used. This research explores the Greenness Matrix of Simula, et al. (2009). In-depth interviews explore the study's objectives regarding the participant's view of characteristics a company with high greenness, or low greenness would have (Simula, et al., 2009). This is done by adapting the Greenness Matrix of Simula et al. (2009) linked with the views of the participants. This research uses qualitative research methods along with the beliefs of constructivism which leads to the use of hermeneutical techniques. Therefore, the quality criterions of trustworthiness are established for the research to be seen as credible.

# **Chapter Four: Findings**

#### 4.1 Introduction

Chapter Four outlines the findings of the research. The objective of the dissertation is to operationalize the Greenness Matrix of Simula et al. (2009) by developing Greenness Factors for each quadrant. Manufacturers and business buyers are asked what characteristics they assign to a company with a low and high greenness. Thematic analysis is used to identify themes. Super themes are created termed as Greenness Factors. These are fused together to develop the definitions of the quadrants of the Greenness Matrix (Simula et al., 2009). The Greenness Factors are explained in detail in the following section. The explanations are supported by participant quotations. This is followed by Figure 4.1 which shows the fully defined Greenness Matrix (Simula et al., 2009).

#### 4.2 Greenness Factors

This section reports on the Greenness Factors derived from interviews with manufacturers and business buyers. Five Greenness Factors are identified by the research. Greenness Factors outline the characteristics manufacturers and business buyers would assign to a company with low greenness or high greenness. Descriptions of the Greenness Factors are outlined and the quadrants are then defined by using those Greenness Factors.

## 4.2.1 Sustainable Credibility

Consistent with participants view, sustainable credibility is strongly related to environmental certifications. Examples include accreditations by the ISO<sup>7</sup>, certifications by Enviro-Mark®NZ<sup>8</sup>, participation in the Sustainability Business Network New Zealand as well as health, safety and building warranty of fitness. Sustainable credibility is also characterized by continuous independent audits to assess the company's sustainable activities in order to make them account for caused impacts and pollution.

As pointed out by a business buyer (Business Buyer 1, Appendix C, p.95): "I think a key thing for a company that really wants to display a high greenness is to be transparent."

Commitment to sustainability is a significant step towards sustainable credibility according to participants. When aiming for sustainable credibility, participants agree that green washing activities are not accepted.

Green washing in that sense means that companies

"try and disguise their lack of credibility or their lack of independent certification [...]. On the outside they appear to be quite green but if you actually really look into it is just full words and no action. It is no actual established processes or business initiatives that actually do display that they have initiatives that say that they are a green company." (Business Buyer 1, Appendix C, p.94)

A high sustainable credibility also considers the compliance with governmental regulations and a sustainable procurement policy as well as environmental management systems as crucial elements.

"I think countries like New Zealand have very strict governmental policies already and if a certain company complies with all these government policies and regulations then the company can call itself a green company." (Manufacturer 2, Appendix C, p.88)

<sup>&</sup>lt;sup>7</sup> International Organization for Standardization.

<sup>&</sup>lt;sup>8</sup> New Zealand's leading environmental certification programme.

A business buyer pointed out about the importance of a sustainable procurement policy:

"One thing that comes to my mind immediately is a green procurement policy. From my own experience I can say that it plays an important role in a lot of processes. In general, we look at the procurement policies of the supplier and we choose carefully". (Business Buyer 3, Appendix C, p.99)

It was stated by a business buyer that a green organization:

"[...] has established processes and established business initiatives that are independently audited by a third party. So, for example they have ISO 9001 certification that measures their quality systems maybe the ISO 14001 or the New Zealand equivalent which is the EnviroMark accreditation that manages ISO and audits their environmental management systems." (Business Buyer 1, Appendix C, p. 95)

## 4.2.2 Environmental Impact of Company and Product

A company should consider all environmental impacts of the company and products in their processes and activities according to the participants. Regarding the product and its environmental impacts, the consideration of emissions, air quality, noise pollution and the carbon footprint are most discussed aspects.

"Speaking of emissions, a green company takes also care of the air quality and the fumes that are created through the production facilities. [...] Also noises and smells must be considered because it directly impacts the community the production facilities are located in." (Manufacturer 3, Appendix C, p. 90)

Concerns about recyclability, bio-degrability and re-use options of the product are mentioned, too.

"[... ]you can design the products from different materials if it is recyclable or bio-degradable and also sourced from a sustainable company." (Business Buyer 2, Appendix C, p. 98)

A reuse option of packaging was described by a business buyer:

"Another thing that a green company would maybe initiate is the introduction of reusing old packaging. It would be also cheaper for the company. Our company is practicing that very successfully." (Business Buyer 4, Appendix C, p. 101)

Further, the consideration of the entire product life cycle including waste treatment and disposal should be included by a company that wants to be considered as highly green.

"[...]a company would be obviously considering all the negative effects or impacts that a company may have on the environment and making sure that they are measured so that they know how much waste that they are producing, how much energy that they are consuming, how much water that they are using and measuring that, and creating initiatives to either reuse that waste or that water or offset it in a way with the carbon credits." (Business Buyer 1, Appendix C, p.96)

A high recycling rate and the consideration of the Emission Trading Scheme are also features that make a highly green company.

"In terms of the marketing initiatives, greenness, recyclability and sustainability is huge in Business-to-Business operations. It is something that a company should involve in their business proposition." (Manufacturer 4, Appendix C, p.92)

A manufacturer mentioned the economic aspect of recycling:

"Recycling is just more efficient and cost effective. And companies are now under so much financial pressure that they want to save every penny." (Manufacturer 2, Appendix C, p. 88)

Regarding the Emission Trading Scheme, a manufacturer stated:

"Within the processes, a company with a high greenness would probably try to limit the emissions that are caused by the company to the lowest level possible. The New Zealand Emission Trading Scheme will be introduced soon and will affect business quite a bit in future. So a green company would definitely consider that." (Manufacturer 3, Appendix C, p.89)

#### 4.2.3 Consideration of Stakeholders

This Greenness Factor looks at the variety of stakeholders that need to be considered within a company's activities. Stakeholders must involve the local and wider community that is affected by the company's actions. In line with the participants, local communities must be provided with support and health and safety issues in production facilities must be guaranteed.

"You can be the best company at recycling and the best company at reducing your waste but you also definitely need to consider the wider community around you and supporting that by providing sports support for schools, and charity such as breast cancer awareness." (Business Buyer 1, Appendix C, p.95)

Particular attention is given to close relationships with supply chain partners.

"[...] also for companies that buy manufactured products, it is really essential to ensure that you form alliances with other business partners or suppliers that operate on the same ethos, that also have those true sustainable issues and operate at the same level." (Business Buyer 1, Appendix C, p.95)

Further, manufacturing, warehousing, delivery and transport are evaluated as important supply chain partners and stakeholders that need to be considered when business partners are selected.

### 4.2.4 Resource and Energy Efficiency

Resource and energy efficiency is considered as a significant Greenness Factor by the participants as it aims to preserve the environment while achieving cost benefits. Energy efficiency is related to energy consumption within the machinery and production process. It also refers to the use of innovative technologies in order to save energy.

"[...] a company that has a low greenness regarding production processes, the only thing that I could think of is that they have ineffective processes and they would use more energy than they would normally have to and they would have inefficient systems; that they do not consider the environment while setting up those processes." (Business Buyer 2, Appendix C, p. 97)

Resource efficiency considers the sustainability of material consumption and material source. A local material source is favoured by participants.

"[... ]if you can source your raw material locally that would be better rather than importing these ingredients." (Manufacturer 2, Appendix C, p. 88)

Material concerns also involve packaging and wrapping of the product as well as reuse options. Those aspects are also mentioned as a way to generate resource and energy efficiency though the company.

"So that's one thing making sure that whatever packaging that you do for your product is utilized and there is no extra bits to the packaging that will not add to the value of the product. Very efficient and very minimal." (Manufacturer 2, Appendix C, p. 88)

## 4.2.5 Philosophy

The last and most significant Greenness Factor is the philosophy of a B2B organization. Four different philosophies of B2B organizations operating with chemicals are identified. Each philosophy represents a quadrant of the Greenness Matrix (Simula et al., 2009). The philosophy describes the B2B organization's attitude towards sustainability and green Marketing. The philosophy is the Greenness Factor that determines in which quadrant a B2B organization is assigned to. Most importantly, the philosophy influences the other Greenness Factors in either having high or low greenness.

### • Philosophy: Sales Focus

This philosophy merely focuses on the sales of products and is not concerned with the company's sustainability. The manufacturers representing the Sales Focus philosophy direct their entire business activity towards the generation of sales to the business buyer. This philosophy is mostly taken by manufacturers as they feel strong sales pressure.

"A company with a low greenness would design a product without considering that the product is recyclable or bio-degradable or whether it is polluting the environment or not. And they probably don't care because they just want to sell the product." (Business Buyer 2, Appendix C, p. 97)

#### A manufacturer added:

"It is very important to follow a sustainable approach but unfortunately the key motivation for the majority of companies in Business-to-Business is a financial factor." (Manufacturer 3, Appendix C, p. 89)

This might be due to investor's and shareholder's pressure to increase sales. Further, this philosophy might result from "not having an awareness of how to be more sustainable maybe that could be because of their company that is trying to focus on getting income in" (Manufacturer 4, Appendix C, p. 93).

### • Philosophy: Sustainability

Consistent with the concept of sustainability, this philosophy follows a holistic perspective. A company with a sustainability philosophy has all processes in place that cover the three dimensions of sustainability by considering environment, society and economy.

"[...] a company with a high greenness would take a holistic approach. This is again about being and acting sustainable. The company should take all their actions seriously that impact the environment and the community. And in the end this can also influence the economic outcome of the company. In this case, the manufacturer would be concerned about its economic welfare, society and the environment at the same time." (Manufacturer 3, Appendix C, p. 90)

#### • Philosophy: Price Focus

The price focus philosophy is mainly represented by business buyers as it is mostly them that focus on price in the buying process than sustainability issues.

"It is the same with our company, it is the attitude towards that [greenness] and in link it is being driven by the purchase amounts with greater interest on the part of the buyer." (Business Buyer 4, Appendix C, p. 101)

This strong focus on price over sustainability implies that these companies have not implemented any established sustainable processes in place. The business buyers representing the Price Focus philosophy only focus on the price of goods or service that they purchase from the manufacturers.

"Another point of high greenness is the manufacturers that we buy from. In that case I would definitely see us a high green company. We knowthe source we are purchasing from is very sustainable in terms of the manufacturing units and processes they use. That actually benefits us a lot as the cost effectiveness of the companies we buy from benefits us, too." (Business Buyer 4, Appendix C, p.101)

## Philosophy: Environmental Marketing Strategy

The philosophy of Environmental Marketing Strategy aims to communicate greenness in order to position the company as sustainable and environmentally conscious in the market.

"In terms of the marketing initiatives, greenness, recyclability and sustainability are huge in Business-to-Business operations. It is something that a company should involve in their business proposition. And to be seen by their customers which are ultimately the consumers. In terms from a marketing point of view, I feel greenness is very much about sustainability and what a company's propositions are. I think we have got to be seen as an environmentally responsible." (Manufacturer 4, Appendix C, p. 92)

Further, participants acknowledge that companies of the environmental marketing philosophy practice corporate social responsibility and have a strong consideration for the green buyer's needs.

### 4.2.6 The Greenness Factors Defining the Greenness Matrix

In order to give answer to the research objectives, Greenness Factors are developed that define the quadrants of the Greenness Matrix (Simula et al., 2009).

Overall, it can be said that the Greenness Factors cover the full spectrum of relevant aspects of greenness that have to be considered by a B2B when wanting to market itself as a green company. The Greenness Factors are diverse and occur in a variety of B2B organization's activities e.g. ranging from credibility to stakeholder and environmental impacts.

Figure 4.1 outlines the Greenness Factors that form the definitions of each of the quadrants of the Greenness Matrix (Simula et al., 2009). Each quadrant of the Greenness Matrix (Simula et al., 2009) is discussed in Chapter 5.

Therefore, in fulfilment of the research objective the Greenness Factors of both low and high greenness are presented below in Figure 4.1.

Figure 4.1: The Greenness Factors Defining the Greenness Matrix (Simula et al, 2009)

	"Green Washer"	Sustainable superiority
high		
	- ACTUAL SUSTAINABLE CREDIBILITY LOW BUT PERCEIVED AS HIGH	- HIGH SUSTAINABLE CREDIBILITY
	- ACTUAL ENVIRONMENTAL IMPACT OF COMPANY &	- LOW ENVIRONMENTAL IMPACT OF COMPANY & PRODUCT
	PRODUCT HIGH BUT PERCEIVED AS LOW	- HIGH RESOURCE & ENERGY EFFICIENCY
	- ACTUAL RESOURCE & ENERGY EFFICIENCY LOW BUT PERCEIVED AS HIGH	- HIGH CONSIDERATION OF STAKEHOLDERS
	- ACTUAL CONSIDERATION OF STAKEHOLDERS LOW BUT PERCEIVED AS HIGH	- PHILOSOPHY: ENVIRONMENTAL MARKETING STRATEGY BASED ON SUSTAINABILITY
	- PHILOSOPHY: ENVIRONMENTAL MARKETING STRATEGY BASED ON SALES	
BUSINESS BUYER		
Perceived greenness	Honest, non-green	Missed opportunity/Strategic choice
	- LOW SUSTAINABLE CREDIBILITY	- ACTUAL SUSTAINABLE CREDIBILITY HIGH BUT PERCEIVED AS LOW
	- HIGH ENVIRONMENTAL IMPACT OF COMPANY & PRODUCT	- ACTUAL ENVIRONMENTAL IMPACT OF COMPANY &
	- LOW RESOURCE & ENERGY EFFICIENCY	PRODUCT LOW BUT PERCEIVED AS HIGH
	- LOW CONSIDERATION OF STAKEHOLDERS	- ACTUAL RESOURCE & ENERGY EFFICIENCY HIGH BUT PERCEIVED AS LOW
	- PHILOSOPHY: SALES FOCUS & PRICE FOCUS	- ACTUAL CONSIDERATION OF STAKEHOLDERS HIGH BUT PERCEIVED AS LOW
low		- PHILOSOPHY BASED ON SUSTAINABILITY BUT PERCEIVED AS BASED ON PRICE
low		
	low	ANUFACTURER high

**Actual greenness** 

### 4.3 Conclusion

This chapter has outlined the findings of this research. Thematic analysis is used to identify Greenness Factors derived from the interviews with manufacturers and business buyers. Theme descriptions of the Greenness Factors are outlined to get a deeper understanding of them. In fulfilment of the research objective, the Greenness Factors are developed which define low and high greenness in B2B organizations. In identifying the Greenness Factors, the Greenness Matrix (Simula et al., 2009) can be defined and operationalized by future research and marketers. The discussion of the findings follows in Chapter Five.

# **Chapter Five: Discussion**

#### 5.1 Introduction

This chapter interprets the findings and discusses implications for the research objective. A research summary makes sure that the research question is answered. Academic and managerial implications of the research follow, along with limitations and suggestions for future research.

## 5.2 Research Summary

This research set out to explore Greenness Factors in B2B organizations that make-up low or high greenness through a manufacturer's and business buyer's viewpoint in order to operationalize the Greenness Matrix of Simula et al. (2009). The research question of this dissertation is:

• What are the characteristics manufacturers and business buyers would assign to a company with low greenness? In contrast, what are the characteristics manufacturers and business buyers would assign to a company with high greenness?

Manufacturers and business buyers were interviewed about their perceptions of characteristics that a company with high or low greenness would have. The interviews were analyzed with a thematic analysis. Five super themes were identified which are labelled as Greenness Factors. They define what low and high greenness includes from a manufacturers and business buyers perspective. The Greenness Factors define the quadrants of the Greenness Matrix of Simula et al. (2009) and therefore the Greenness Matrix (Simula et al., 2009) can be operationalized in order to assist B2B organizations with their implementation of greenness.

## 5.3 Interpretation of Quadrants of the Greenness Matrix

This section aims to interpret the quadrants of the Greenness Matrix (Simula et al., 2009) which are defined through the Greenness Factors as shown in Figure 4.1.

The Greenness Factors within each quadrant of the Greenness Matrix (Simula et al., 2009) clearly cover the three dimensions of sustainability, which are environment, society and economy. That supports the close link between the concept of green marketing and sustainability in B2B organizations as outlined in section 2.4. Aspects that cover the environmental dimension relate to the Greenness Factor of environmental impacts of company and product. The societal dimension is reflected by consideration of stakeholders. The dimension of economy includes the Greenness Factor of resource and energy efficiency. Detailed interpretations of each quadrant of the Greenness Matrix (Simula et al., 2009) are outlined in the following sections.

#### 5.3.1 "Green washer"

It is stated by Simula et al. (2009) that green washed products are characterized by an actual low level of greenness. Despite that, the business buyer perceives the product as highly green. The findings of this research expand on the definition of Simula et al. (2009). The research adds that green washers are perceived as being green in all aspects of emissions, waste, resources and energy efficiencies as well as material and packaging. They are perceived to take stakeholder issues and supply chain participants into consideration. In the business buyer's perspective green washers commit to sustainability and are highly credible in their activities. Also the overall impact of the green washer and its products on the environment is seen as being low. Despite the way green washers are perceived, their actual green performance in all aspects is very low. Particular attention must be given to the philosophy of a green washer. Green washers base their marketing strategy on the environmental features of their organization and products aiming to increase the organization's sales. This is a very one-dimensional view as it only focuses on the economic welfare of the B2B organization. According to Charter et al. (2002) this can lead to criticism and pressure from public, business buyers and governments as the B2B organization does not implement sustainability as a concept while promoting sustainability. This is supported by the literature that views green washers make use of false or misleading environmental claims (Ginsberg & Bloom, 2004; Peattie & Crane, 2005). Firms must make sure that a green marketing strategy reflects the actual greenness of a company and products (Simula et al., 2009). In this way credibility and customer loyalty can be achieved. This can for example happen through green labels (for an example see Prothero et al., 1997) or environmental accreditation systems (for an example see Miles, Munilla & Russell, 1997). Otherwise, green washing marketing strategies are most likely to fail in the long term as governments, pressure groups and buyers discover the deception which can result in lost sales and reputation damage.

### 5.3.2 Sustainable Superiority

Simula et al. (2009) suggests that the sustainable superiority quadrant is characterized by a highly perceived greenness which reflects a high level of actual greenness. This is strongly supported by the research findings. A sustainable superiority organization is perceived as highly sustainable credible with low environmental impact of company and product. Stakeholders are strongly considered within the organization's activities while resource and energy efficiency is achieved. The philosophy captures the concept of Sustainability which is implemented into the organization's processes. Porter and Van der Linde (1995) state that good social and environmental performance can lead to good performance in the marketplace. Competitive advantage can be gained through differentiation of the product with its sustainable performance or through cost savings which result from high resource and energy efficiency (Porter & Van der Linde, 1995; see also for an example Hedstrom, Shopley & LeDuc, 2000). These sustainable processes are marketed towards the business buyer with an environmental marketing strategy. Sustainability and green marketing work together effectively as the environmental marketing strategy is based on sustainability. In essence, the company fulfils the business buyer's expectations of greenness. The literature outlines that customer loyalty as a result of customer satisfaction is of high importance as it can generate competitive advantage (Landua, 2008; Peattie, 2001). This constant meeting of expectations through green marketing and the implemented sustainability concept can generate competitive advantage.

### 5.3.3 Honest, Non-Green

An honest, non-green product as described by Simula et al. (2009) shows a low level of actual greenness and is perceived as that by the business buyer. The findings expand on that view. An honest, non-green organization has very low sustainable credibility with a high environmental impact of company and products. This is coupled with low resource and energy efficiency. Stakeholders are not considered by the organization. The business buyer perceives the company as lowly green and both agree that greenness is non existent. The organization's philosophy is only focussed on the increase of sales and decrease of buying prices. This is again a one dimensional philosophy due to the mere focus on the economic welfare of the organizations (Charter et al., 2002). This can lead to public pressure and negative press caused by increasing environmental concerns of business buyers and governmental institutions (Drumwright, 1994; Polonsky, 1995). However, honest, non-green organizations do not pretend to be green and therefore meet the expectations of the business buyer that perceives the organization as non-green. Honesty is a core principle of a green marketing strategy (Prothero, Peattie & McDonagh, 1997). This is admittedly considered by the honest, non-green organization but in order to address the business buyer's increasing environmental concern, it is recommended to implement a sustainable concept into the company strategy (Simula et al., 2009).

## 5.3.4 Missed Opportunity/ Strategic Choice

The missed opportunity product is characterized by Simula et al. (2009) as a product which has a very high greenness which is not perceived by the business buyer for unknown reasons. The findings give further details about this quadrant. An organization with a missed opportunity has high sustainable credibility with a low environmental impact of company and product. Resource and energy efficiencies and the stakeholders are highly considered by the organization. Unfortunately, business buyers do not perceive any of these as highly green. They perceive the organization's philosophy as one-dimensional based on prices rather than sustainability. However, the organization has implemented the sustainability concept into their strategy. This gap may be due to an ineffective green marketing strategy which fails to fully communicate sustainable features of the organization and products (Simula et al., 2009). In essence, the link

between sustainability and green marketing is missing. It is stated by Charter et al. (2002) that green marketing is strongly linked to sustainability as it helps to achieve the dimensions of sustainability through generating and delivering sustainable solutions whilst continuously satisfying customer's and stakeholder's needs (Charter et al., 2002). As a result, an ineffective green marketing strategy cannot satisfy the business buyer's needs as it does not communicate sustainable solutions to the business buyer. Recommendations on how to implement an effective green marketing strategy in various B2B industry sectors are outlined by Iles (2006) and Vaccaro (2009).

## 5.4 Differences Between Company's Philosophies

Each quadrant of the Greenness Matrix (Simula et al., 2009) incorporates the same Greenness Factors which are outlined in section 4.2. However, the difference between the quadrants is the philosophy. It implies that the philosophy is the Greenness Factor that assigns a company to the respective quadrant of the matrix. According to the findings, the philosophy of a company influences the other Greenness Factors in their orientation of being either high or low.

Avlonitis and Gounaris (1997) view an organization's philosophy as a marketing orientation which includes behaviour and attitude of a company. In that sense, it is outlined that the philosophy positively influences the performance of the organization (Posner, Kouzes & Schmidt, 2006). More importantly, the organization's philosophy has an even greater impact on organization's performance in B2B than B2C (Avlonitis & Gounaris, 1997). To sum up and in support of the literature, a B2B organization's philosophy is the most significant Greenness Factor. Thus, choosing the right philosophy is a crucial requirement for an effective green marketing strategy and a successful performance of the B2B organization.

#### 5.5 Academic Contribution

Academic contributions from this dissertation are to the disciplines of marketing and B2B.

This dissertation adds to the body of knowledge of marketing in two ways. Firstly, it contributes to the scarce research stream that combines the concepts of sustainability and green marketing. It identifies Greenness Factors which make-up low or high greenness. Therefore, the Greenness Factors define the quadrants of the Greenness Matrix (Simula et al., 2009). In doing so, the Greenness Matrix (Simula et al., 2009) can be operationalized by academics and future research is enabled because of the outlined definitions of Greenness Factors.

The contribution to the B2B literature comes from the application of the Greenness Matrix (Simula et al., 2009) to the B2B environment. In general green marketing strategies are discussed very sparsely within the B2B environment. As a part of green marketing, the Greenness Factors that characterize low or high greenness have never been defined before in B2B organizations. This makes it an appropriate contribution to the body of knowledge of green marketing strategies in the B2B environment.

# 5.6 Managerial Contribution

Managerial implications of this research can be applied for both manufacturers and business buyers operating in the B2B environment. Overall, the dissertation contributes to the rising awareness of green marketing strategies in B2B organizations.

Implications for manufacturers relate to their green marketing strategies directed towards the business buyers. With help the Greenness Factors manufacturers are able to fully operationalize the Greenness Matrix (Simula et al., 2009). The Greenness Factors give comprehensive information about what business buyers expect from a company with high or low greenness. Thus, manufacturers can overcome the missing understanding of what business buyers' value and perceive as important factors of a green manufacturer. Hence, manufacturers are able to adapt their green marketing strategies to fully match the business buyers' perceptions and expectations. This allows for the development of more effective green marketing strategies customized to the

business buyers' needs and expectations.

The Greenness Factors and the operationalized Greenness Matrix (Simula et al., 2009) can also guide manufacturers in the process of positioning and re-positioning. Firstly, the defined Greenness Matrix (Simula et al., 2009) assists manufacturers to identify their actual position in the green B2B market. This occurs for manufacturers already operating in the green B2B market. The definitions of each quadrant give orientation in which quadrant the manufacturer can be positioned. For manufacturers that wish to enter the green B2B market the Greenness Matrix can be consulted to chose a clear positioning strategy in the green B2B market. General information can be provided about which characteristics have to be considered in the respective quadrant that is chosen for positioning. Manufacturers can also be assisted with their re-positioning process. Assuming a manufacturer identifies its position in the quadrant of missed opportunity and wishes to re-position itself within the sustainable superiority quadrant. The Greenness Factors in the respective quadrant of the Greenness Matrix give clear information about the aspects the manufacturer needs to consider when changing to the sustainable superiority quadrant.

Implications for business buyers refer to positioning, re-positioning process and selection of suppliers. The defined Greenness Matrix (Simula et al., 2009) can be operationalized by business buyers in their positioning and re-positioning process in the green B2B market the same way as the manufacturers. However, the definitions of the Greenness Factors can assist the business buyers to select an appropriate manufacturer, too. This occurs for example when business buyer intends to implement a green buying strategy. As outlined in section 2.3.3.3, especially in B2B organizations environmental aspects have established as an important buying criterion (Kärnä & Heiskanen, 1998). Thus, the Greenness Factors present a checklist for business buyers with characteristics a manufacturer has to fulfil to be selected as a manufacturer with high greenness. It also enhances the selection process by presenting an overview of aspects that have to be considered when choosing a green manufacturer to buy from.

#### 5.7 Limitations

Apart from the contributions that have been made by this research some limitations occur. These limitations are discussed in this section.

The first limitation results from the complexity of the B2B environment the research is conducted in. In a few cases the differentiation between manufacturer and business customer was difficult and complex. It appeared that some manufacturers partly produced their own products but also bought parts from other manufacturers for their production process. This is addressed by the research which only chooses manufacturers whose main business activity is manufacturing. The same applied for business buyers. Only business buyers were chosen that primarily bought from manufacturers and not produced goods themselves.

Some small methodological limitations surrounded the interviews. Two interviews had to be conducted over the phone due to geographical dispersions of participants and the interviewer. This could possibly influence the result as participants might feel more uncomfortable with a telephone interview than on a personal base. This is addressed by the research by putting the participants at ease with help of informal conversations prior to the telephone interview.

The last limitation of this research posts a possibility for future research as well. In this research only manufacturers and business buyers located in New Zealand are asked. Conducting the research in a different country would probably show different results. This could be an area of interest for future research. Further areas for future research are outlined in the next section.

#### 5.8 Future Research

There are various possibilities for future research. Using the operationalized Greenness Factors, further empirical research into the Greenness Matrix (Simula et al., 2009) such as applying it to other B2B industries can be conducted. This would give the Greenness Matrix (Simula et al., 2009) a broader scope. This would give insights about how different industry sectors define and perceive Greenness Factors. It would be interesting to examine how different industrial sectors would influence the results.

Applying the study to various countries outside of New Zealand could also uncover different Greenness Factors. This would help to generalise the results and make it more applicable outside of New Zealand.

Furthermore, scales could be developed for the Greenness Factors in order to create a valid measure of high or low greenness.

# 5.9 Summary and Conclusion

This dissertation has identified Greenness Factors in B2B organizations that define what high or low greenness embraces through both a manufacturer's and business buyer's perspective. Therefore, the Greenness Matrix (Simula et al., 2009) can be operationalized by organizations in the B2B environment and academics that wish to research that area.

The research outlines the Greenness Factor of philosophy as the most significant one which is an important finding as it influences the effectiveness of the green marketing strategy. This dissertation about green marketing strategies differs from previous research through operationalizing the Greenness Matrix (Simula et al., 2009) in B2B organizations. Thus, marketers and researchers can operationalize the Greenness Matrix (Simula et al., 2009) for academic or practical purposes. While this study cannot be generalized to all types of industries and environments, it is wished by the author that future studies will explore to do so.

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# Appendix A:

# **Indicative Semi-Structured In-Depth Interview Guidelines**

#### Opening

My dissertation is looking at Green Marketing strategies in the Business-to-Business environment and what characteristics manufacturers and buyers would assign to a company with a high and low greenness. I'm basically looking at how manufacturers and buyers perceive and define greenness and how these perceptions can be operationalized in marketing.

#### Questions

- 1. First of all, what is your definition of "Greenness" in a company context?
- 2. As a manufacturer/ buyer of goods and services, what are the characteristics you would assign to a company with a low greenness?
- 3. In contrast, what are the characteristics you would assign to a company with a high greenness?

# **Appendix B:**

# **Participant Information Sheet and Consent Form**

# Participant Information Sheet



#### **Date Information Sheet Produced:**

31 August 2010

#### **Project Title**

An empirical Investigation of Green Marketing Strategies in the Business-to-Business Environment

#### An Invitation

My name is Nicole Berth. I am a student at Auckland University of Technology enrolled for a Master of Business in the Department of Marketing.

You are invited to participate in my research and I would appreciate any assistance you can offer me. As part of my dissertation I am conducting research into the development of Green Marketing strategies within the Business-to-Business environment. Your participation in this research is completely voluntary and you may withdraw at any time prior to the completion of the data collection.

#### What is the purpose of this research?

This research will be looking at the characteristics of organisations who undertake different Green Marketing strategies. We wish to compare these ideas of Green Marketing strategies between suppliers and their customers. The resulting dissertation will go towards the completion of my Master's degree and there may be further publications from the information in the form of a book, conference presentation and journal article for marketing academics.

#### How was I identified and why am I being invited to participate in this research?

You were chosen to participate in this research because of your operations as a New Zealand manufacturer that uses chemicals within the production process. Furthermore, your company operates in the Business-to-Business environment which is my area of interest.

#### What will happen in this research?

For you to participate in this research I would ask half an hour of your time to discuss your view of the characteristics a company with high greenness and low greenness would have. I would ask you to record the interview by audiotape, but this will only happen with your consent.

#### What are the discomforts and risks?

This is an informal interview regarding your opinion on different Green Marketing strategies and so I do not foresee any discomfort for you in participating. However you may feel a little uncomfortable with the interview being recorded, this aspect is completely optional.

#### How will these discomforts be alleviated?

No information will be recorded without your agreement. You do not have to answer any questions you feel uncomfortable with. Also, you and your company will not be identifiable in the write up of the study so you will remain anonymous.

#### What are the benefits?

Many manufacturers in the Business-to-Business environment operate with chemicals. They are forced to adapt to governmental regulations and public pressure. They will benefit from the research in order to be able to position themselves in the green Business-to-Business market with help of the characteristics that will be identified.

This research will benefit the academic literature in order to help to close a gap by empirically defining characteristics of companies using Green Marketing strategies.

#### How will my privacy be protected?

Your name or your company name will not be used in any of the documentation and write up of the research. It will be assured that any information that would identify your organisation or yourself will not be included in any report on the findings. Only the researcher and the supervisor have access to the data.

You will be given the chance to read the transcripts and dissertation before handing it in.

#### What are the costs of participating in this research?

This research should take up no more than half an hour of your time.

#### What opportunity do I have to consider this invitation?

I would ask that you reply to this letter within 1 week of receiving it so that I might organise travel arrangements to come and see you. However, remember that you are not obligated to participate and can withdraw from the research at any time up until one month after we have had our interview by giving me a call or email at any time prior to the completion of the data collection.

#### How do I agree to participate in this research?

If you agree to participate in this research please contact I and we will set up an appropriate time to meet. You will need to fill out a consent form which I have attached. I will collect this form from you when we meet for the interview.

#### Will I receive feedback on the results of this research?

I will then contact you again in December 2010 to provide you with a copy of the research report. You will be given the chance to read the transcripts and dissertation before handing it in.

#### What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, *Dr Ann-Marie Kennedy*, <u>Ann-marie.kennedy@aut.ac.nz</u>,09 921 9999 ext 5825.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, *madeline.banda@aut.ac.nz*, 921 9999 ext 8044.

#### Whom do I contact for further information about this research?

#### Researcher Contact Details:

Nicole Berth

Nicole\_Berth

0211936999

## **Project Supervisor Contact Details:**

Dr Ann-Marie Kennedy

Ann-marie.kennedy@aut.ac.nz

09 921 9999 ext 5825

Approved by the Auckland University of Technology Ethics Committee on 10<sup>th</sup> September 2010, AUTEC Reference number 10/141 An Empirical investigation of Green Marketing Strategies in the Business-to-Business Environment



# **Consent Form**

Project title:		An Strate	-	Investigation Business-to-Bu			•	
Project Supervisor: Dr Ann-Marie Kennedy								
Researcher:		Nicole Berth						
0	I have read and understood the information provided about this research project in the Information Sheet dated 31 August 2010.							
0	I have had an opportunity to ask questions and to have them answered.							
0	I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.							
0	I understand that I may withdraw myself or any information that I have provided for this project up to one month after the date of this interview, without being disadvantaged in any way.							
0	If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.							
0	I agree to take part in this research.							
0	I wish to receive a	copy of	the report from	the research (please t	ick one	e): YesO N	NoO	
Participant's signature:								
Participant's name:								

Approved by the Auckland University of Technology Ethics Commi	ittee on 10 September 2010
Date:	
Participant's Contact Details (if appropriate):	

Appendices

AUTEC Reference number 10/141

# **Appendix C:**

# Interview Transcripts

Interview transcripts included are for:

- 4 Manufacturer
- 4 Business buyer

# MANUFACTURER 1 (20<sup>th</sup> of October; 3.00 pm):

Interviewer: What would be your definition of greenness within a company context?

Marketing Manager: There is probably a variety of things to consider. Probably, starting

from... it probably goes into the key things of your question below. Of the top of my head I would probably start...If I start from a product end, probably greenness from a product end is how the product is manufactured in terms of its environmental advocacy, I suppose. It's positioning in the market. If you step back from that if you have got a sales team probably the philosophy and culture of the sales team and promoting that product that presents a core belief of the company about

their environmental position, I suppose.

Interviewer: Thank you for that. So what kind of characteristics would you assign to

a company that has a very low greenness?

Marketing Manager: Yes, I mean first of all the products there would be no regard if it just

around raw materials and how they are manufactured in terms of things like biodegradability, the energy that is used. In terms of manufacturing, even social things in terms of if you are just importing a product from overseas and in a sense bastardising a New Zealand opportunity. So it is not limited to environmental, I suppose, it is more about the concept of sustainability. A company with low greenness won't have really any regards for those types of environmental management systems. So they probably just operate by getting away with what they can in terms of where they get their raw material from, the systems that they have in place manufacturing the products. Then going back a step from that,

your investors and shareholders do not really care. So that would be my

used the structure I just talked about. The products, there is no thoughts

point of view of a company with a low greenness.

Interviewer: Is there anything else that comes to your mind about a company that

has a high greenness?

Marketing Manager:

So stepping back from a product, I suppose how that product is being presented out in the field. To the manufacturing, it is probably totally about systems and processes or whether or not the company is accredited in terms of the recognized management systems that are available. I know our business operates a couple of environmental management systems as the ISO 14001 and we are also diamond accredited with the EnviroMark. Going back from that I suppose, you have to consider who the investors are in the business and the shareholders and their philosophy. And I suppose a real green company would be one that each of those parts. There is a clear environmental positioning including the shareholders views on how the business operates. So to go back to the question, definition of greenness really depends on those different parts. And I suppose the level at which the business operates, if I think about the product, if you start with the product end, a higher level of greenness in my view, is something that is going to have a greater environmental impact or benefit. This is a product you might say it sounds nice but it actually doesn't have as many ...for example if you just have a product that can substantially eliminate carbon emissions or if ....there is a difference between how it actually operates as a product and dealing with low and key environmental issues or how it is promoted. I mean there can be products that are really smart marketing work around them. There are other products out there that aren't marketed that way but created much environmental impact. So I don't know if that is helpful or not.

Well, I suppose when I think about our business we have a relatively high greenness because of...I think it is largely influenced, I suppose, the key that demonstrates that a company's commitment to greenness is around the investment that they put into the manufacturing systems. So, I suppose, in our business with a reasonable high level of greenness so we have got those systems in place we have potentially products that could have a fairly reasonable impact on the environment in an appositive sense. And the key challenge for us is having all our staff believe, that they have that belief around improving the environment. That's probably the challenge. You know, shareholders that can see the benefits, philosophically and commercially, you know, producing environmental products. Working a little bit with our sales staff and sort of conveying that message and the benefits of environmental products because we operate in a market that is way behind in accepting those benefits. Dairy farmers in New Zealand do

not really have a high regard for the environment in my view. So it has been difficult to convince the sales team to sort of talk the benefits of environmental aspects.

Interviewer: Thank you so much for your time and the opportunity for this interview.

# MANUFACTURER 2 (22th of October; 3.15 pm):

Interviewer: So what would be your definition of greenness within a company

context? What comes to your mind when you think about greenness?

Marketing Manager: Immediately the first thing that comes to my mind is recycling. And

making the most of our natural resources without impacting on their use for future generations. It is sort of less waste that has impact on the

environment.

Interviewer: So in your opinion, what kind of characteristics would you assign to a

company that has a very low greenness?

Marketing Manager: Yes, I think it is the way the company takes care of its waste products. If

it just dumps waste products willingly and not having a proper disposal for it that is not being green. A company may not see that immediately but we go home to our families and whatever waste that factory puts out gets into our water system gets into the land, you know, and poisons the land and the water. I come from a country, I am originally from the Philippines and you can see how all these factories by the side of the river have killed everything in the river. At that time the wastewater

system and that killed a very important water way in my country.

I think there would be some companies, it is probably encouraged by the government as well of that particular county, they want to dump waste outside of the country. They don't want to hear about it. They just ship it out. They ship it out to China or India. It was in the news some month back. That some companies here in New Zealand were shipping plastic to China. The carbon footprint is just so huge and what does it do when it gets there. But it is not just the task of the government. People in general should be aware of how it impacts future generations.

Interviewer: Is there anything else that comes to your mind about a company that

has a high greenness?

Marketing Manager: I think a very good example when it comes to a green company,

recently, last January I bought a computer and you can see in its packaging it takes note on how it impacts the environment. There is really very minimal packaging but you can see that the product is still

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quite well protected from any bumps and falls. So that's one thing making sure that whatever packaging that you do for your product is utilized and there is no extra bits to the packaging that will not add to the value of the product. Very efficient and very minimal. Whereas when I first bought a laptop, I had this huge box that came with it and a very huge Styrofoam pieces that were inside the box. And after you take out all the stuff there is this little thing inside it which is just not right. Imagine, how many hours of work went into that, how many material went into that. They could have done it more efficiently as the other company which delivers a laptop that comes in a slim box. I think countries like New Zealand has very strict governmental policies already and if a certain company complies with all these government policies and regulations then the company can call itself a green company. New Zealand is been known of being very protective over its environment. I think if you comply with any government regulations that are there to make sure that the environment gets protected then you are a green company.

Well, high greenness is also about informing the people about green processes that the company has been employing in its manufacturing arena. Also create that awareness amongst the employees and somehow ensure that greenness and hopefully the employees are taking it with them to their families. It is not just a company being green but also communicating that it is green and that it is following green processes. In that way it encourages other people to do so. And for a non-green company probably the other way around, it keeps everything under wraps. I don't think it pays nowadays to be not a green company. Recycling is just more efficient and cost effective. And companies are now under so much financial pressure that they want to save every penny.

About the processes within the manufacturing process, the company should make sure that the machines work efficiently. There are maintained well because if they are not maintained well they do not do their job efficiently. They take up more raw materials. So well maintained machines are important, I suppose. And if you can source your raw material locally that would be better rather than importing these ingredients. Of course the local suppliers would be competing with suppliers from India and China which provide raw materials cheaply so that is one thing you have to balance.

Interviewer:

Thank you so much for your time and the opportunity to talk to you.

#### MANUFACTURER 3 (4<sup>th</sup> of October 2010, 5.30 pm):

Interviewer: Let's start with the first question. What is your definition of greenness

within a company context?

Marketing Manager: I think, greenness takes a holistic viewpoint. For me it strongly relates to

> a sustainable viewpoint really. It is not about seen to be green, it is about truly implementing processes and systems that reinforce sustainability. Greenness in my opinion looks at the environment, the community you are operating in while still being profitable. I guess, greenness is also about balancing the needs of society, environmental aspects and optimal financial results of companies. It is very important to follow a sustainable approach but unfortunately the key motivation for

the majority of companies in Business-to-Business is a financial factor.

As a manufacturer of business goods and services, what are the

characteristics you would assign to a company with a low greenness?

First of all, I think, a company that has a very low greenness is not actually green but wants to be seen as green. This company would

want to create the image of being green although the company does not take any serious actions to implement sustainable processes and

systems. That is the first thing that comes to my mind. That's why it is very important to create credibility to prove real or true greenness. It is

hard to measure though. This can be done by participating or in this

case by not participating in sustainable business networks or certifications of accreditation bodies. You have probably heard of ISO

certifications. So, a company that pretends to be green would not have

any certification to prove greenness. Companies with a low greenness are not concerned with emissions that they create, about air quality

issues and any kind of smells. We are manufacturing concrete products

and a lot of air quality aspects, smell and noise are involved.

Companies with a low greenness would not be interested in the community that is exposed to those smells or pollution in general. They

would also not be interested in any issues that involve safety and health

of workers. In terms of design, I can only think of the aspect that the company would not be interested in material or waste issues. They do

not care about the material source. I could imagine that a lot of waste

would be created and waste would not be recycled. Also the product

itself would not be recyclable and environmentally friendly in that way. I guess, the majority of processes would not be energy efficient as well.

And in contrast, what, in your opinion makes a company that has a very

high greenness?

Interviewer:

Marketing Manager:

Interviewer:

Marketing Manager:

As I already mentioned before a company with a high greenness would take a holistic approach. This is again about being and acting sustainable. The company should take all their actions seriously that have impacts on the environment and the community. And in the end this can also influence the economic outcome of the company. In this case, the manufacturer would be concerned about its economic welfare and the society and the environment at the same time. It clearly involves a sustainable view. Within the processes, a company with a high greenness would probably try to limit the emissions that are caused by the company to the lowest level possible. The New Zealand Emission Trading Scheme will be introduced soon and will affect business quite a bit in future. So a green company would definitely consider that. Speaking of emissions, a green company takes also care of the air quality and the fumes that are created through the production facilities. I mentioned that before. Also noises and smells must be considered because it directly impacts the community the production facilities are located in. No one wants to live in a suburb that is affected by strong noise or air pollution. We really take care of this. You have to work close with the communities. I think, when it comes to the design process of products a very green company would use less material which means that unnecessary material is avoided and cut out of within the design and production process. Also very important is that waste is treated in the right way. Waste should be limited to the lowest level possible. Resources play an important role for manufacturers, which mean a green company would probably consider where the resources come from. This would include the supply chain as well. If a company is serious about their greenness they will have to look at where resources come from. This process can be quite difficult as it requires close relationships to other business and partners. But it can work out. We have very close relationships with business partners and it benefits the company in many ways. When it comes to the product, it should definitely be energy efficient and energy efficiency should play an important role during the production processes as well. When I think of effects, I can only think of emissions that could affect the environment. And this again goes back to the Emission Trading Scheme.

Interviewer:

Thank you very much for your thoughts and answers.

## MANUFACTURER 4 (20th of October; 10.00 am):

Interviewer: What is your definition of greenness within a company context?

Marketing Manager 1: If you talk about a definition of greenness within a company, especially

a manufacturing company, the definition of greenness from the perspective of a manufacturer is, how we can do things, everything that we do, as close as possible to a sustainable way. How we can reduce energy consumption. Those are probably the two main things as far as I can see from a general company term. And also as a manufacturer, very much a part of the greenness is that we manufacture products that

in many cases intended to reduce the impact on the environment.

Interviewer: That pretty much touches also the next question. What in your opinion

makes a company that has a high greenness?

Marketing Manager 2: I suppose, excelling in being careful in all the processes, whatever the

processes might be, they might be administrative or manufacturing, whatever, that they do their very best in reducing the impact on the environment. It could be simply switching off the lights or solar panels on the roof, the company cars could be hybrids, You could do that. And in our case from a manufacturer point of view, in our product design we always look for a design that reduces the amount of raw material. It isn't always successful but at the end of the day there is a certain minimum requirement and they start to get a little bit contradictive. In that you can design a for instance a pot that would be hugely strong with very little material but that would be so complicated that would be

the maximum amount of effort with the minimal effects with the minimum amount of material and energy utilized in making them.

difficult to use. It is always about that balance to find a good design with

Interviewer: Anything else that comes to your mind?

Marketing Manager 1: That is all I can think of right now.

Interviewer: And what do you think makes a company with a very low greenness?

The first thing would be the attitude of the company. There would be companies that by their own nature are not green. But there is no reason why that the non-greenness cannot be reduced or their greenness can be increased. Even if it is a small amount but it all starts with the attitude. It is the same with our company, it is the attitude towards that and in link it is being driven by the purchase amounts with greater interest on the part of the buyer.

As an example, I suppose, continuing with old energy inefficient machinery. It is about not caring about saving what you can. And a factory having inefficient lighting, it is about thinking about it with new

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energy efficient technology. It comes back again to designing it efficiently. For instance if you can keep the weight down, firstly, you are saving the raw material in the first place for each product, you are saving the energy required to make that raw material, you are saving anything that you don't have to transport that much, that is the fuel component. You have got energy savings in the process therefore manufacturing lessens the material in the process. In the manufacturing process, the less weight you have in there the less time the machine takes to process it therefore less pressure is required which eventually saves energy. And then when you finish it you've then got reduced transport costs when you transport it to the customer. And if it a reusable cradle bin then you can keep reusing for ten, fifteen years without reproducing it. And that's the importance of design, trying to get the maximum performance out of the minimum amount of material. You do the best that you can but sometimes you don't succeed as much as you like. But that's always one of the big things.

We are looking at the whole supply chain. The first thing is how we do something that serves the purpose, that's number one. And from there on you start to trim it and get into the fine details. Are there alternative ways of doing it that would require less material? And you may want to keep them. There is another thing. You try to keep your waste minimum by being careful about your manufacturing processes. And we do have waste especially when we start the machinery, there are pre-heating processes and sorts of things to reduce that scrap-rate. But when we do get that scrap it goes to a recycler. Each part of what you are doing how can that save the environment and how can you make it more sustainable. By reducing energy and then you take it step by step and you come out with all sorts of things. The big thing is that to put the thoughts into practice. And to some degree it is the market that is forcing people to improve. When we design a product we have to look at the whole supply chain even how we handle it in the factory.

Marketing Manager 2: The concept of reusable transit packaging is important which reduces your carbon footprint. In terms of the marketing initiatives, greenness, recyclability and sustainability is huge in Business-to-Business operations. It is something that a company should involve in their business proposition. And to be seen by their customers which are ultimately the consumers. In terms from a marketing point of view, I feel greenness is very much about sustainability and what a company's propositions are.

Interviewer:

Marketing Manager 1: I think we have got to be seen as an environmentally responsible company, scrap and energy and all sorts of things.

Marketing Manager 2: I guess it is about a feel good factor. Costs come into any communication. Cost is a big factor. But it is the feel good factor and PR factor that comes into it.

Marketing Manager 1: I think that more important in people's mind than actually saving money because recycled material is actually very expensive. Some things are not completely cost effective but it is aimed towards saving the environment.

Interviewer: Is there anything else that you can add to what makes a highly green company?

Marketing Manager 2: Again, when you are talking about greenness it comes down to costs. If any company is going to put forward any initiative whether it is lean manufacturing or whether it is energy usage they do it for money. And if they publishing that it is for the feel good factor. So whether it is the process, whether it is PR or whether it is the characteristic everything comes down to money and the feel good factor. Those are the two characteristics. It is a very cynical view, we could talk a whole lot of fluffy stuff but the drivers at the end of the day are money and doing the right thing.

Marketing Manager 1: But the trick is to turn it around to save the environment while saving money. For instance when you reduce the raw materials to produce the products, you save energy that is used to make the product, less time used by the machinery to make that product, you can reduce the weight of the product which saves costs of transportation to the warehouse.

And eventually the recyclability of the product.

Marketing Manager 2: And if you look at the full product life cycle, if at the end of it can be recycled again and again and again then we are looking at a sustainable product and a very green product. And again it comes to that feel good factor and the cost factor. And if a customer comes and buys that green product of me then they will saving on cardboard.

Anything else that comes to your mind about a company that has a low greenness?

Marketing Manager 2: I guess that is a company that doesn't care or is not aware. Or not having an awareness of how to be more sustainable maybe that could be because of their company that is trying to focus on getting income in and are actually not aware, just little things.

Interviewer: Thank you very much for your thoughts and answers.

#### BUSINESS BUYER 1 (5th of October, 11 am):

Interviewer: Okay, The first question. What would be your definition of greenness?

Everything that basically comes to your mind when you think of

greenness.

Marketing Manager: Sure, no problem. I guess for me greenness within a company, I sort of

think, greenness tends to pigeonhole to be more the sort of environmental, you know, aspects. Whereas for me, I think, a company to have truth greenness they need to be sustainable. And for me that is doing business in ways that don't erode the potential for future generations so making sure that, you know, the way that you conduct business and the processes that you have in place is going to ensure that we have a sustainable future for future generations. And that means covering various aspects. Of course it is going to cover environmental; it is going to make sure that businesses are financially viable so it is, you know, economic sustainability and also socially sustainable. So, taking care of the community and being aware of how your business operates in the wider community. So I think, that is the way our business here operates and that is my definition for greenness

in the company context.

Interviewer: As a buyer of business goods, when you think of a company which has

a very low greenness, what would you say makes a company with a low

greenness?

Marketing Manager: I think one thing that I tend to see is that a company has a low

greenness; they use a lot of "greenwash". So they try and disguise their lack of credibility or their lack of independent certification by say we do this we do that. On the outside they appear to be quite green but if you actually really look into it is just full words and no action. It is no actual established processes or business initiatives that actually do display that they have, you know, initiatives that say that they are a green company. Also, if they are manufacturing and designing products they have taken no consideration in the fact that there are maybe further impacts or effects on the environment. They might be designing products that are throw away items, they haven't really considered the life cycle of a product and processes involved to manufacture. And also at the end of the product's life cycle what happens to it then, the effects that can happen to the environment as well then. Basically, I guess, it is a company that is operating in complete disregard to their environment

and local community.

Interviewer: And in contrast, what would you think makes a company that has an

extremely high greenness?

Marketing Manager:

I think a key thing for a company that really wants to display a high greenness is to be transparent. And has established processes and established business initiatives that are independently audited by a third party. So, for example they have ISO 9001 certification that measures their quality systems maybe the ISO 14001 or the New Zealand equivalent which is the EnviroMark accreditation that manages ISO and audits their environmental management systems. Also, certifications to certify their health and safety processes or their building warranty fitness to make sure that those essential tools are in place first and foremost. A business that Is truly green needs to have those established initiatives that measure and reduce their energy consumption, makes sure that their waste is appropriately sorted, recycled and reused where possible and have just general initiatives that promote high standards of environmental sustainability, really. I guess, from product design and product manufacture point of view once again, I guess it is on the flipside, you need to consider the entire life cycle of a product and ensure that all the processes used to create, all the energy that goes into creating or manufacturing a certain product that there is measurements in consideration and put in place on the potential impacts that you may have.

I guess, also for companies that buy manufactured products, it is really essential to ensure that you form alliances with other business partners or suppliers that operate on the same ethos, that also have those true sustainable issues and operate at the same level. So I guess, a company that wants to be truly green must adopt a sustainable procurement policy. And that is making sure that their suppliers that supply them with a range of products or they take into consideration the packaging, the wrapping that goes into it and reducing that type of waste is...I guess, there is a number of initiatives that can go in but it is really understanding before process rather than thinking: oh, we are a green company, we buy a recycled product but it is also packaged with lots of plastic and lots of carton which almost defects the purpose at the end of the day.

Another big thing, a company needs to have corporate social responsibility, too. So, I think that a key thing. You can be the best company at recycling and the best company at reducing your waste but you also definitely need to consider the wider community around you and supporting that by providing sports support for schools, and charity such as breast cancer awareness. So aligning yourself and providing

support in that manner, too. And that goes back to the initial definition of greenness and. So you are happy to preserve your environment and your business is sustainable for the future.

And I guess, another thing that is probably a characteristic of a green high company would be obviously considering all the negative effects or impacts that a company may have on the environment and making sure that they are measured so that they know how much waste that they are producing, how much energy that they are consuming, how much water that they are using and measuring that, and creating initiatives to either reuse that waste or that water or offset it in a way with the carbon credits that you can buy now. But I think if you have got a high green company that can think outside of the box and be quite creative if they have got any access of photocopied paper that's been double sided printed and used to its life but instead of recycling you would give it to the Council. One thing that we have done is, we did shredder it and provided it to Animal rescue that they can provide it to the pets .Just thinking outside the box. So, once again you are reusing your waste but using it in a proactive manner as well that can benefit once again the wider community.

Interviewer: Thank you very much for your thoughts and answers.

#### BUSINESS BUYER 2 (7th of October; 6.30 pm):

Interviewer: Okay, question number one. What is your definition of greenness within

a company context?

Marketing Manager: For me greenness in a company context is that the company is trying to

work in all the steps of the production and supply chain whilst considering the environment. For me greenness within a company

context has a lot to do with sustainability.

Interviewer: That basically already touches the second question, what

characteristics would you assign to a company with a very low

greenness?

Marketing Manager: With the processes as I said if you work in a company that has a low

greenness for me would mean that this company uses a lot of paper, everything would be paper based. And also when you have electronic processes you also have to consider that this costs energy and you have to consider that this energy could be used somewhere else. So, all the material that they source should be from an environmentally friendly

source. The production processes should not pollute the environment.

Also the product itself that they produce should not pollute the

environment, and should even be recyclable. And also not only the production processes, also the administration counts. A company can use more energy or less energy, more paper or less paper. I think it is very hard to achieve a true and true green company because it is very complex. The organisation and the supply chain are behind it. But for me basically a company that has a low greenness regarding production processes, the only thing that I could think of is that they have ineffective processes and they would use more energy than they would normally have to and they would have inefficient systems; that they do not consider the environment while setting up those processes. So instead of choosing more environmentally devices they would go for the best price option. Regarding the design of the product, you can use different materials for your product so you have the choice between environmentally sustainable material or material that is for example not bio-degradable. A company with a low greenness would design a product without considering that the product is recyclable or biodegradable or whether it is polluting the environment or not. And they probably don't care because they just want to sell the product. And that is part of the design stage where you source the raw material for the product. For the product itself I would think it is quite overlapping to the first question.

Interviewer:

We can move on to the next question if you prefer.

Marketing Manager:

Especially when you consider a manufacturing company of which we are talking here you have to consider where all your unused materials go that leave the production for example water. Resources that you use to cool down for example in the plastics production; where does the water go? Does the company care about cleaning the water or not. Do they filter their fumes and gases that leave the factory? I think a nongreen company would not care if it pollutes the environment and it would not care about the people that live around the facilities and the community.

Interviewer:

Okay and the other way around, what makes a company that has a really high greenness or if you link greenness to sustainability what makes a very sustainable company?

Marketing Manager:

I doubt that a really pure green company exists...probably not... even dairy farms show side effects. But I think a green company is a company that considers the environment in all their production stages and all their processes, that is always striving for efficiency in their production so that there is no waste or left-over material that could be used elsewhere And also, a company that looks at the origin of the raw

materials because. if you have a green company and you do not care where the products come from, they might come from the most polluting plant in the world, the whole concept of greenness would stand on very wobbly feet. So I think you really have to look at the whole supply chain to define a green company. So within the processes the first thing that comes into my mind when I think of a green company is the paperless office and also the energy that you use within the company. I know for example about a company that used their servers to heat a pool which was located across the server room which is a very efficient way to use the heat of the servers. But that is just one example and I think in the process stage high greenness for me is to consider the environment in all stages. Also the design of the product, you can design the products from different materials if it is recyclable or bio-degradable and also sourced from a sustainable company. You could even design it in a way that makes the product work for the environment instead of polluting the environment. A product that helps to limit the effects on the environment caused by other products. The product itself should be recyclable. There could be some kind of made to protect the environment. I don't think that a company specifically needs to create a product that helps to protect the environment. It should be enough that the product considers the environment that is around it. The effects of a company's operations on the environment, as I said before, the company should consider its community, people that work and live in the community and also the people that work in the factory. The company should consider all stakeholders and all the pollution that a company might cause that you account for that. And that the company limits its impacts as far as possible.

Interviewer: Thank you very much for your thoughts and answers.

#### BUSINESS BUYER 3 (21st of October, 12 am):

Interviewer: Let's start the interview with the first question. What is your definition of

greenness within a company context?

Marketing Manager: I think, to be green as a company is to offer a sustainable solution to

minimize our impact on the environment. But it's also part of a bigger picture of corporate social responsibility as a whole which impacts the

marketplace, the environment, the community and the workplace.

Interviewer: As a buyer of business goods, what are the characteristics you would

assign to a company with a low greenness?

Marketing Manager: That is quite simple to answer. A company that has a very low

greenness to me is a company that doesn't consider how their products and services are impacting the environment and of course the communities in any aspect of their business. It might sound pretty simple but I think that's what makes a company with a very low level of greenness. And that is kind of the key point that comes to my mind.

Interviewer:

And in contrast, what characteristics would you assign to a company that has a high greenness?

Marketing Manager:

My point of view is, a highly green company examines every aspect of its business processes. And by saying that, I am including all processes. A company with a high greenness looks at processes from sourcing products. I suppose, it looks at the material to make the products and of course it looks at aspects of disposal and packaging. These aspects are of major importance and must be considered. A green company must ensure that the environmental impact is minimised. And that is what greenness is really about. It is a whole concept of greenness behind that. And it is very complex and sometimes difficult to implement. I feel that a lot that greenness and sustainability plays an important role in Business-to-Business. It is actually huge in Business-to-Business. Especially in the last couple of years. Also, I suppose, a company with a high greenness includes the people who drive the company's actions. It should also look at the stakeholder. The stakeholder can majorly help to inform the sustainability approach at all stages of the lifecycle.

I assume another important point would be the strategy of a company if it wants to be green in a way. A green strategy would basically give the framework for the greenness. I guess, a good green strategy would include different aspects. It should definitely seek to achieve specific goals. One thing that comes to my mind immediately is a green procurement policy. From my own experience I can say that it plays an important role in a lot of processes. In general, we look at the procurement policies of the supplier and we choose carefully. So it is important for us. I cannot judge about other companies but we do. It is mainly linked in the entire supply chain, I think. As a green company you have to look at the entire supply chain. It does no good any green company when they try to be green and buy from a manufacturer that is impacting the environment in a very negative way by for example polluting the areas around the factory. That is not acceptable. So the supply chain would be an important aspect, I suppose. A green company would not only look at manufacturers abut also at warehouses or warehousing of goods. What is happening in the different parts of the

supply chain which is really a complex thing to look at when you think about it? And this is kind of linked to aspects of delivery and the transport of the products. How sustainable are those delivering and transport processes. And I guess you look at how much fuel is used and how efficient these processes are as well. That needs to be included into thoughts of a company that wants to be green. These are the main points, I think. Another aspect would probably be the disposal of products in general. When a product reaches the end of its life cycle how do you dispose the products. What kind of processes does the company have in place to ensure that the waste does not impact the environment in a negative manner? How does the company ensure that the waste is disposed in an appropriate way? Another aspect that comes to my mind, a green company must obviously involve the customers in a way. I guess, a green company would want to know what customers want and fulfil customer's needs.

Interviewer: Thank you very much for your thoughts and answers.

#### BUSINESS BUYER 4 (22th of October, 2 pm)

Interviewer: What is your definition of greenness within a company context? What

comes to your mind when you think about greenness of a company?

Marketing Manager: I don't know if there is really a proper definition of greenness in that

case. I think greenness for me covers a pretty broad spectrum within a company context. For me greenness captures the protection of the environment and certainly sustainability as being sustainable is

probably the most important feature of greenness.

Interviewer: And what characteristics would make a company with a very low

greenness?

Marketing Manager: A low green company is one that does not put a lot of initiative in caring

about the environment or being green in any way. There are lots of companies, in contrast, that have very poor green initiatives and systems strategies that they adapt to. They do not take care of environmental guidelines, no ISO regulations; just ignore the amount of waste that is produced by manufacturing or production of the goods. And don't have proper regulations of the amount of energy used. They use very low budget methods which in a way might be cost effective but

can be degrading to the environment.

Interviewer: As a buyer of business goods, what characteristics, in your opinion,

would a company have with a very high greenness?

Marketing Manager: Yes, I can do that. Let's put it that way. A company with a high

greenness tries not to increase the impacts on the environment or tries to keep the environmental impacts as low as possible. It is pretty obvious that you have to be credible in terms of being green. Credibility is everything especially in New Zealand.

Interviewer:

Is there anything else that comes to your mind?

Marketing Manager:

Another thing that a green company would maybe initiate is the introduction of reusing old packaging. It would be also cheaper for the company. Our company is practicing that very successfully. So a green company in that case would pick up old boxes and reuse them to pack the products for a second time, or also many times. Oh, another thing could be to use old newspapers or papers from the offices to stuff up boxes with fragile products. Instead of using bubble wrap old packaging can be reused. So that in a way. I think helps the environment. I would define it as a cost effective green initiative. Green would also be someone who reduces his carbon footprint by reducing excessive transportation costs. Like hiring companies for transportation that use fuel efficient trucks and transport. I am not sure if something like hybrid trucks are on the market yet but that would be something to consider as a green company as well.

Another point of high greenness is the manufacturers that we buy from. In that case I would definitely see us a high green company. We know the source we are purchasing from is very sustainable in terms of the manufacturing units and processes they use. This actually benefits us a lot as the cost effectiveness of the companies we buy from benefits us too. And over the years we built a good report with the companies and we share similar attitudes in terms of treating our employees in the right way; and keeping in terms the safety and high efficient production and distribution aspects. This has cost advantages for us as well

In a way if one company adopts such concepts you eventually chose a company in your supply chain that have similar sustainable guidelines and that follow similar sustainable practices. And that is very important because it is the whole supply chain is using cost effective and environmentally friendly and conscious concepts because it has to start from the source right up to the end of the distribution cycle. And it creates more credibility for the whole supply chain as well.

We are also trying to adopt environmentally friendly methods, use more sustainable methods in that way in and out the whole supply chain. Kind of sustainable methods. We are trying to reduce waste during our packaging processes as I mentioned before and see that all our products are packed efficiently that not too much packaging is used but

that the product is still well packed. Since we use older cartons and boxes disposed by other companies, we try to mix and match our products that they fit into those cartons. But again it's quite difficult because we have to make sure that most of the products are transported well and are not damaged and do not break during the transportation. We try to meet the standards but again it is not always successful.

Interviewer: Thank you for your thoughts and time.