

# The retail sector's response to environmental sustainability

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## **Abstract**

The purpose of this research has been to understand the grocery retail sector's response towards achieving environmental sustainability. This response entailed whether or not an environmental strategy has been implemented, the rationale for this strategy, the associated practices undertaken and the accompanying benefits and/or costs that have been realised.

To this end qualitative research with an exploratory design was conducted on 66% of South Africa's large grocery retailers and a number of findings have been made. Firstly, a formal response has been made to achieve environmental sustainability but this response is still in its early stages and tends to focus on externally orientated activities such as stakeholder relationship management or sustainability reporting. Furthermore despite global trends, green consumerism, legislation and non-governmental pressure are not drivers for pursuing environmental sustainability by large grocery retailers. Voluntary choice and an acknowledgement of responsibility for influencing consumer behaviour were identified as the key drivers. Organisation's also do not yet fully understand the impact of their activities on the environment as well as the impact of the environment on them. As a result their journey towards becoming environmentally sustainable remains a contradiction.

Based on the findings made, some of the recommendations made towards achieving environmental sustainability include the adoption of a business case approach, implementation of an appropriate maturity model and entering into partnerships with non-governmental organisations.

## Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I declare that I have obtained the necessary authorisation and consent to carry out this research.

Signed: 

Date: 2009/04/11

## **Acknowledgements**

I did not really believe that you only really grow from being in a challenging situation. The journey of undertaking this research has changed my belief and ultimately helped me to grow.

To my family particularly my parents Nigel and Jean, despite the challenging times thank-you for your understanding, support and interest in my research.

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To probably the largest movement the world will ever see, that of responding to the greatest threat challenging life as we know it, environmental collapse, thank-you for giving me the inspiration and motivation to do this research.

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## Chapter 1 - Introduction to Research Problem

*“Our actions now and over the coming decades could create risks of major disruption to economic and social activity, on a scale similar to those associated with the great wars and the economic depression of the first half of the 20<sup>th</sup> century. And it will be difficult or impossible to reverse these changes.”*

(Stern, 2006, p.ii)

### 1.1. Introduction to Problem

Characteristic of our actions now and over the coming decades will be the contradiction of retailers playing a critical role in driving current human consumption patterns (Clift, Malcolm, Baumann, Connell and Rice, 2005) whilst also being perceived as the best hope for achieving environmental sustainability by influencing consumer behaviour (Michaelis, 2003; Clift *et al.*, 2005). The question asked therefore is what is the role being played by retailers in achieving environmental sustainability in South Africa?

### 1.2. Definition of Environmental Sustainability

The concept of environmental sustainability is an outcome of pursuing sustainable development. Sustainable development implies guaranteeing everyone a decent life without damaging the ecological system to the detriment of future generations (Garvare and Isaksson, 2001). According to the South African National Environmental Management Act (No. 107 of 1998) (DEAT, 1998 p.9) *“Sustainable development means the integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that development serves present and future generations.”*

The environmental and social components of sustainable development are interdependent as social circumstances influence environmental practices and vice versa. The research that has been undertaken focused only on the environmental component of sustainable development and within the context of this document environmental sustainability and sustainability are used interchangeably.

### **1.3. The Urgency for Achieving Environmental Sustainability**

“Radical greening” or strategic pressures created by rising environmental concerns and the threat of climate change, continues to escalate as one of the top ten global business risks (Ernst and Young, 2009). The corporate sector is also responsible for almost 40% of all greenhouse house gas emissions, which continue to accelerate climate change (Economist Intelligence Unit, 2009).

Since 1990 carbon dioxide emissions in Africa have increased by more than 50% and are set to continue increasing (Sengul, Pillay, Francis and Elkadi, 2007). Annually South Africa produces 40% or 356 million tons of the African continent’s total carbon dioxide emissions. Per capita, this equates to 8.18 tons/year compared to a global average on 4.1 tons/year (Sengul *et al.*, 2007). This makes South Africa one of the top 15 global carbon dioxide emitters (GRI, 2009). According to Stern (2006) the negative impacts of climate change that could be expected include:

- Increased flood risk and reduced water supplies
- Declining crop yields and thus the inability to produce or purchase sufficient food
- Increased world-wide deaths from malnutrition and heat stress

- 15-40% of species in ecosystems facing extinction after only 2 degrees Celsius of warming
- Increased inter-regional conflict

Because of an existing economic situation, these impacts are expected to be most severe in sub-Saharan Africa (Sengul *et al.*, 2007) and those countries that are poorest (Stern, 2006).

Exponential growth coupled with society developing technology and markets have been identified as the key factors hastening a global economic and environmental collapse (Meadows, Randers and Meadows, 2004). However, movement towards becoming environmentally sustainable requires humans to reduce their ecological footprint (Meadows *et al.*, 2004).

#### **1.4. Role of the Global Economic Crisis**

Given that concerns on environmental sustainability are seen as a critical business issue, how is the achievement of environmental sustainability affected by the current global economic crisis? There appears to be contradictory views on this matter.

According to a survey done by the Economist Intelligence Unit (2009), because of this crisis, 67% of corporate chief executive officers believe that the pursuit of environmental sustainability will fall off their organisation's corporate strategy agendas. The survey also highlights that those companies with an environmental sustainability agenda in place primarily focus on internal energy efficiency and not on the real adaptation of their companies operations to climate change. Furthermore since the start of the global economic crisis suggestions have been made by the media and business pundits to be cautious

in acting too fast on climate change in case it negatively affects economic growth (Smith and Karlson, 2009).

In contradiction, research undertaken by McKinsey (2009) has highlighted that the global economic crisis has increased the public's expectations of business's role in society. In particular, the impact of environmental issues on shareholder value mattered the most over the long term for management and was also the most important issue for the public (McKinsey, 2009). In the same research it was also highlighted that the pursuit of environmental sustainability improved operational efficiency, increased brand loyalty and access improved access to key markets during the global economic crisis (McKinsey, 2009).

According to Hart and Milstein (2003) a sustainable enterprise should just be another operating condition in the business environment. Governments can establish frameworks for sustainable consumption and production, they can facilitate movement towards these goals but it is ultimately consumers and producers that will determine the extent to which these goals are achieved (Jones, Comfort, Hillier and Eastwood, 2005a). Retailers therefore have a pivotal role to play in encouraging sustainable behaviour whilst satisfying consumer needs. As Durieu (2003) highlights, the main role of the retailer is to respond to consumer demand and are thus the link between consumers and manufacturers.

### **1.5. Research Purpose**

The purpose of this research has been to understand the grocery retail sector's response towards achieving environmental sustainability and has been exploratory in nature. This response included the rationale, strategies pursued,

environmental practices adopted and the associated benefits and costs that have been realised.

### **1.6. Relevance of Research**

Because of their economic maturity, adoption of environmental conventions such as the Kyoto Protocol and globalisation, companies in developed countries have been faster than developing countries in their uptake of environmentally sustainable practices (Winsemius and Guntram, 2002). Moreover these companies have evolved through various stages of environmental progression and are confronted with increasing levels of environmental consumerism (Winsemius and Guntram, 2002).

Despite 67% of global corporate chief executive officers believing that the pursuit of environmental sustainability will fall off corporate strategy agenda's as a result of the current economic downturn (Economist Intelligence Unit, 2009), 77% of South African consumers believe that not enough is being done to take care of the environment (AMPS, 2008). Furthermore for 2009, environmental pressures and climate change are rated as the fourth most important global business risk by Ernst and Young (2009) and the most important socio-political issue for management and the public (McKinsey, 2009).

As highlighted, retailers being the link between producers and consumers, have a critical role in achieving environmental sustainability. Many of the large consumer goods retailers (Datamonitor, 2008 and AMPS, 2008) are marketing their operations and products as being environmentally sustainable, for example "certified organic" or "free range". This raises the question of whether current marketing is largely public disinformation on matters of environmental

sustainability or if it is truly a reflection on care given to the environment (Clift, *et al*, 2005). Furthermore retailers respond to customer demand by supplying products that are available, thus influencing consumer choices and indirectly driving environmentally sustainable outcomes (Clift, *et al*, 2005).

South African companies have generally responded to becoming environmentally sustainable through:

- Sustainability reporting (KPMG, 2006)
- Adoption of sustainability principles for the purposes of reporting (KPMG, 2006)
- Listing on the Johannesburg Stock Exchange Socially Responsible Index (JSE, 2009)
- Compliance to the King II codes on corporate governance (IoDSA, 2002 and KPMG, 2006)
- Implementation of environmental management systems (Hill, 2000)
- Conducting of environmental impact assessments in the execution of projects (Hill, 2000)
- Eco-labelling of goods

Given the broad response of South African companies to becoming environmentally sustainable the response of South African retailer's to the challenge of becoming environmentally sustainable needed to be better understood. Furthermore, no research has yet been undertaken in characterising the sustainability strategies of the grocery retail sector in South Africa.

## **1.7. Scope of Research**

The research focused on investigating the South African grocery retail sector. The grocery retail sector is defined as revenues generated through grocery sales from supermarkets, hypermarkets, cooperatives, discounters, convenience stores, independent grocers, bakers, butchers, fishmongers and all other retailers of food and drink for off-the-premises consumption (Datamonitor, 2008). Because of its broad definition and consumer dependence on it for food items, in comparison to other retail sectors, the grocery retail sector has an important role to play in driving environmental sustainability.

The research was limited to large companies within the grocery retail sector. Large companies are defined as those where:

- Revenue exceeds R4.5bn per year (Datamonitor,2008) and /or
- Consumer shopping preference exceeds 4% (AMPS, 2008)

## **1.8. Research Objectives**

The research aimed to gain a deeper understanding into how the grocery retail sector has responded to the challenge of becoming environmentally sustainable and was thus exploratory in nature. Specifically the research expected to:

- Identify the strategic approach adopted by grocery retailer's in pursuing environmental sustainability
- Identify those drivers promoting the pursuit of environmental sustainability
- Identify the practices adopted in pursuing environmental sustainability
- Identify the qualitative and quantitative benefits and qualitative and quantitative costs associated with adopting these practices

## **Chapter 2 - Theory and Literature Review**

### **2.1. Forward to Literature Review**

From the literature review four core themes were identified within the sphere of the retail sector's response to achieve environmental sustainability. These included:

- Drivers for becoming environmentally sustainable
  - Global move towards achieving environmental sustainability
  - Role of green consumerism
  - Global regulation and environmental conventions
  - Non-governmental and industry pressures
- Strategies that have been adopted in pursuit of environmental sustainability
- The practices that have been pursued in following these strategies
- The outcomes of these practices
  - Benefits and costs
  - Environmental sustainability as a contradiction

### **2.2. Drivers for Becoming Environmentally Sustainable**

#### **2.2.1. The Global Move towards Sustainability**

The move towards sustainability has predominantly been driven by strict international regulations and conventions of environmental protection along with the rise of consumer environmentalism in response to climate change (Chen, Shyh-Bao and Chao-Tung, 2006). This has resulted in the competitive landscape of industries changing across the world (Chen *et al.*, 2006). Although

environmental responsiveness has been mostly viewed as involving compliance, legislation, expense and trade-offs however, increasingly it is also becoming an opportunity (Pujari, Wright and Peattie, 2003; Porter and van der Linde, 1995).

Traditionally companies have been competitive if they had access to the lowest cost inputs, but this is changing to a situation where advantage is obtained from the most efficient and effective use of these inputs. Companies have to change their mindsets to one where resource productivity, environmental improvement and competitiveness are combined (Porter and van der Linde, 1995).

Companies have come to be seen as a large force not only in shaping economic life but also shaping government policy and culture. This is done through satisfying consumer's desires for assurance of the quality of the goods and services they buy (Michaelis, 2003).

Retailing is one of the most diverse and dynamic sectors within advanced capitalistic societies offering an ever increasing range of goods and services to customers. The increasing rate of shopping centre creation and the sophistication of shopping affirm corporate retail power and the role of consumption in society (Jones *et al.*, 2005b). The United Nations Division for Sustainable Development (2003, p35) has argued that *"the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialised countries"*.

As highlighted earlier, the main role of the retailer is to respond to consumer demand and are thus the link between consumers and manufacturers. Retailers influence production processes and consumption, therefore they have a pivotal

role to play in enforcing sustainable behaviour whilst satisfying consumer needs (Durieu, 2003). This brings into question the role of the retail industry within South Africa, its response and rationale towards becoming environmentally sustainable.

### **2.2.2. Role of Green Consumerism**

Worldwide there has been a growing trend towards green consumerism whereby customers prefer to buy products that satisfy high standards of environmental protection (Muldoon, 2006). Green consumerism is defined as the purchasing decisions made by consumers based partly on environmental or social criteria (Muldoon, 2006).

Some companies have begun to understand the potential of the green consumer and have thus branded their products as being environmentally sustainable for example “certified organic”. This branding, also referred to as “eco-labelling” uses devices to identify products with better environmental performance than their competitors (Clift *et al.*, 2005). Aside from marketing purposes, the intent behind eco-labels is for consumers to make choices that will reduce their environmental impact and thus influence how products are made (Rex and Baumann, 2007).

A key element of eco-labelling is “food-miles”. Food-miles are a measure of how far food travels between its production location and the final consumer (Weber and Mathews, 2008). The international trade in food has resulted in the urging of the localisation of the global food supply network in an effort to reduce greenhouse gas emissions (Weber and Mathews, 2008). In the United States,

transportation as a whole accounts for 11% of product lifecycle greenhouse gas emissions between producer and consumer (Weber and Mathews, 2008).

Unfortunately the market share of eco-labelled products is small. In Europe, for example, the market share for eco-labelled products account for only 5% of sales (Rex and Baumann, 2007). So why is green consumerism not as large as expected? Ottman, Stafford and Hartman (2006) highlight that traditionally, eco-labelled products have predominantly been targeted at only satisfying the needs of consumers who are environmentally conscious or who seek the environmental affiliation that the products provide instead of offering features that appeal to the larger market.

In order for green consumerism to grow, green products must appeal to other dimensions such as efficiency and cost effectiveness, health and safety, performance, symbolism and status and convenience (Ottman *et al.*, 2006). An example of such a product is the energy efficient light bulb. Although the product is environmentally superior in comparison to a standard incandescent light bulb, consumers purchase it based on the potential long term savings brought about by reduced energy consumption and a longer life span.

Eco-labelling also has an associated downside. The use of eco-labelling draws greater scrutiny from regulators, special interest groups and consumers. Moreover the accreditation of environmentally sustainable products raises credibility issues (Ottman *et al.*, 2006; Lockeretz and Merrigan, 2005).

### 2.2.3. Regulation and Environmental Conventions

Traditionally the need for pursuing environmental sustainability has been driven by adherence to legislative and regulatory requirements. From a South African perspective these include:

- Right to the environment as part of The Constitution (1996)
- National Environmental Management Act (No 107 of 1999) (DEAT, 1998)
- King II Code on Corporate Governance (IoDSA, 2002)
- Although not directly the Kyoto Protocol (DEAT, 2003)

South Africa's entire environmental governance regime is based on the "environmental right" of The Constitution (1996). As per The Constitution (1996) this right includes access to an environment that is not detrimental to a person's health and to have the environment protected for present and future generations.

The National Environmental Management Act provides the foundation for all environmental governance within South Africa (DEAT, 1998). This act entrenches sustainable development into law. Thus development has to be socially, environmentally and economically sustainable. Built on the premise of democracy adequate public participation and stakeholder engagement on environmental issues is also required by this act. Furthermore this legislation also entrenches the "polluter pays" principle whereby the costs of remedying pollution or mitigating further pollution, environmental damage or adverse health effects are the responsibility of the party causing the pollution (DEAT, 1998).

In order for a company to list on the Johannesburg Stock Exchange (JSE) it is required to comply with the King II Codes of Corporate Governance (IoDSA,

2002). Where a company does not comply it must be able to explain the reasons why it does not comply (IoDSA, 2002). The intent behind the codes is to ensure that the company directors are acting in the best interests of the company. The King II codes highlight that sustainability and corporate citizenship should be integrated into the mainstream business activities and that the board should view sustainability as a business opportunity (IoDSA, 2002). This view encourages companies to partake in triple bottom line reporting. The triple bottom line is a term used to describe the measurement of a company's success not only by its financial bottom line but also by its social or ethical and environmental performance (Norman and MacDonald, 2003)

In August 2009, King III, an updated code, was published. A cornerstone of this new code is the recognition that although the board's primary responsibility is towards the company, its second priority is towards those stakeholders that have an interest in the company. Thus sustainability principles and its importance are prominently featured throughout the updated code (IoDSA, 2009).

The most notable global environmental legislation has been the United Nations Kyoto Protocol of 1997 binding industrialised nations to reduce their combined greenhouse gas emissions. The Kyoto Protocol has been ratified by 163 countries including South Africa who became a signatory in 2002 (DEAT, 2003). Although South Africa is not required to commit to emission reduction targets (DEAT, 2003), at 40% of the total African continents carbon emissions South Africa is the largest producer of carbon emissions on the African continent (Sengul *et al.*, 2007). Likewise South Africa's carbon emissions per capita of 8.18 tons/year are higher than the global average of 4.1 tons/year (Sengul *et*

*al.*, 2007). Therefore it is reasonable to expect that future legislation replacing the Kyoto Protocol may require South Africa to commit to a reduction in greenhouse gas emissions. This will directly impact sustainability activities in South Africa.

#### **2.2.4. Non-Governmental Organisation and Industry Body Pressure**

Aside from the legislative pressures and good business sense, the need for being environmentally sustainable is also driven by pressure exerted from non-governmental organisations (NGO's) and industry bodies. NGO's have a key role in influencing policy and decision-making at the highest level both nationally and internationally (Palmer and Birch, 2003). The benefits of NGO's in the environment is portrayed through their involvement of more people in the decision making process, education and awareness raising (Palmer and Birch, 2003).

As a result of the achievement of environmental sustainability being a global issue two bodies have been identified as exerting such influence in South Africa and include The Carbon Disclosure Project and Global Reporting Initiative. Although being a publicly listed entity, the Johannesburg Stock Exchange's Socially Responsible Index has also been identified as exerting pressure on publicly listed companies to move towards becoming environmentally sustainable.

##### ***2.2.4.1. Carbon Disclosure Project***

The Carbon Disclosure Project (CDP) is an international project aimed at assisting the Kyoto Protocol achieve its objectives. It provides a platform for investor and corporate collaboration on climate change. Using a questionnaire

the CDP provides the investment community with information about corporations' greenhouse gas emissions and climate change management strategies (CDP, 2007). For 2008 the CDP issued information to 475 institutional investors with assets of \$55 trillion under management and represents more than one third of the total globally invested assets (CDP, 2009). Thus the relevance and reach of the information released and its impact on shareholder value cannot be undermined.

The information disclosed by the CDP pertains to climate change issues that have been identified as having a significant impact on company value.

According to the CDP (2007) these include:

- Regulatory risks and opportunities
- Consumer sentiment
- Total companywide greenhouse gas emissions
- Steps taken to manage and reduce emissions

Furthermore the information provided by the CDP has been used as input into the formulation of policy, driving non-governmental initiatives and structuring pension fund investment criteria (CDP, 2007). The CDP has also been extended to evaluate the impact of the grocery retail sector's supply chains. A partner to this initiative is Wal-Mart who, in terms of disclosure, is the fourth highest ranked multinational and highest ranked large grocery retailer (CDP, 2009).

In 2007 the CDP was extended to the top 40 companies listed on the Johannesburg Stock Exchange. 82% of the companies that disclosed their emissions are regarded as "high impact" companies (CDP, 2007). Furthermore

South Africa's emissions are amongst the top 15 countries globally (CDP, 2007). The Beverages and Tobacco, Food Products and Food & Drug retailing sector, which has been identified by the CDP as being a high impact sector, is the fourth largest sector by impact and represents 7.3% of emissions (CDP, 2007). The grocery retail sector is a subset of this sector. For the 2008 survey Pick 'n Pay Group, Woolworths Holdings and Massmart Holdings, all South African grocery retailers were participants (CDP, 2009).

#### ***2.2.4.2. Global Reporting Initiative***

The Global Reporting Initiative (GRI) is a collaborating centre of the United Nations Environment Program and has pioneered the development of the world's most widely used sustainability reporting framework (GRI, 2009; KPMG, 2008). The GRI guidelines are considered to be the *de facto* standard for sustainability reporting with more than 2,000 global companies surveyed using the guidelines (KPMG, 2008). According to the GRI (2009) the intention behind the GRI framework is for:

- Organisational performance to be benchmarked
- Enable an assessment to be made of an organisation's commitment to sustainable development
- Comparisons to be made of an organisation's performance over time

The GRI comprises of a 30,000 strong multi-stakeholder network of international experts with more than 1,500 international companies as subscribers to its guidelines (GRI, 2009).

#### **2.2.4.3. Johannesburg Stock Exchange Socially Responsible Index**

The King II Codes on Corporate Governance urge companies to embrace the triple bottom line as a method of doing business (JSE, 2009). In response to the King II codes the Johannesburg Stock Exchange (JSE) launched the Socially Responsible Index (SRI) with a set of economic, social and environmental criteria to measure companies in the FTSE/JSE All Share Index and their ability in meeting the triple bottom line (JSE, 2009). Similar to the CDP, the SRI is intended to assist investment decision making and is also further intended to serve as an aspirational benchmark for recognising those companies that embrace sustainability principles (JSE, 2009). As of November 2008 Woolworths Holdings Limited, Massmart Holdings Limited and Pick n' Group, all grocery retailers, were constituents of the SRI index (Appendix 1).

### **2.3. Strategies Leading to Environmental Sustainability**

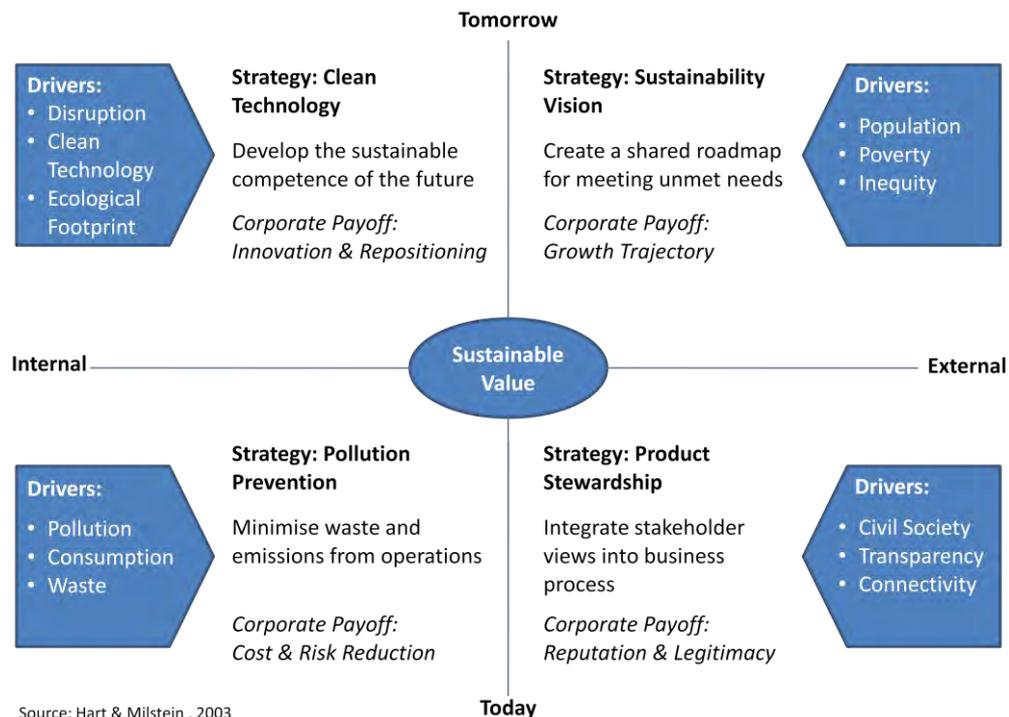
The pursuit of strategies leading to environmental sustainability has, to date, been driven by green consumerism and legislation (Chen *et al.*, 2006) and has thus been reactive. Organisations will proactively undertake environmental sustainability activities provided that it provides some or other competitive advantage (Lee and Ball, 2003). A competitive advantage can either be a company capability or a superior resource, desirable product or recognisable brand name that enables the company to be successful (Mooney, 2007). According to Orsato (2006) competitive advantage can be obtained through either firm positioning or from adopting a resource based view of the firm.

Firm positioning, according to Porter (1998), is about obtaining a favourable competitive advantage in an industry and this is done through either cost

leadership or product differentiation. Cost leadership implies selling products or services at the lowest cost in the industry whereas product differentiation entails offering products or services with unique features for example “certified organic” or “free range”. A competitive advantage must be difficult to imitate for it to be sustainable and it must enable a company to outperform those companies against which it is compared (Porter, 1998). Positioning of products and services is very important from an industry or external perspective particularly with respect to environmental positioning (Orsato, 2006).

According to the resource based view of the firm, competitive advantage should not be seen as a function of industry structure but as resulting from the firm’s use of its resources (Orsato, 2006). Thus the competitive advantage obtained is a result of the firm’s capabilities to acquire and manage resources. These resources are deployed in such a way as to achieve environmental sustainability. The focus on resource deployment and the use of organisational capabilities to achieve this is very important from an internal perspective (Orsato, 2006).

The economic benefits that can be realised from either strategy depend on a number of variables ranging from an organisation’s capabilities to the structure of the industry (Orsato, 2006). However in addressing environmental sustainability concerns, a combination of both firm positioning and the resource based view of the firm may be required. Hart and Milstein’s (2003) framework (Figure 1) integrates these views and provides a method to assess if a company’s strategy is consistent with sustainability.



**Figure 1: Strategies for sustainability**

Different types of sustainability strategies can be deployed depending on the drivers, timeframe (tomorrow, today) and focus (internal or external) with the associated payoffs. To achieve maximum sustainability value an organisation should have a balanced portfolio in all four quadrants (Hart and Milstein, 2003).

Most companies will be heavily skewed towards the lower left quadrant reflecting an emphasis on pollution prevention (Hart, 1997). However without investments in the cleaner technology the company will not be able to address its future growth requirements (Hart, 1997). A bottom heavy portfolio indicates a focus on the organisation’s current operations but leaves it vulnerable to the future. Whereas a top heavy portfolio indicates a sustainability vision but without the operational skills required to implement it (Hart, 1997). A portfolio skewed to the left indicates a preoccupation with achieving environmental sustainability through process and technology improvements (Hart, 1997). A portfolio skewed

to the right runs the risk of being labelled as “greenwashing” (see below) because the underlying operations and technology still cause environmental harm (Hart, 1997).

#### **2.4. Practices for Achieving Environmental Sustainability**

Only 53% of the 1,200 global firms surveyed by the Economist Intelligence Unit (2008) claim to have a coherent sustainability policy. Furthermore out of a list of 16 sustainability policies that include elements on energy consumption, carbon emissions and governance an average of only 4.8 of the 16 have been implemented. Likewise the sustainability of firms supply chains is weakest with many companies lacking clear leadership on the issue of environmental sustainability. Becoming environmentally sustainable is also not clearly integrated with mainstream corporate strategies (Economist Intelligence Unit, 2009).

Albeit that the pursuit of sustainability appears to be weak, the literature review undertaken has identified numerous practices that organisation’s can pursue. These are depicted in Table 1 below. A more detailed list of these practices including source are illustrated in Appendix 2.

**Table 1: Summary of practices for pursuing environmental sustainability**

<b>Internally Focused Practices</b>	<b>Externally Focused Practices</b>
Environmental management systems (e.g. ISO 14000)	Third party accreditation and certification
Product life-cycle analysis	Supply chain environmental sustainability
Ecological footprint analysis	Setting of compliance standards
Environmental impact assessments	Stakeholder relationship management
Pollution management	Sustainability reporting
Green product and process innovation	Green marketing and eco-labelling
Packaging/biodegradability improvement	Clean development mechanisms
Reduced consumption	Natural capitalism
Corporate ethics, values and strategy alignment	Community capitalism
Environmental standard adoption and certification	Urban reinvestment
Knowledge management and competency development	Industrial ecology
Systems thinking	Life-cycle management
Bio-mimicry	Full cost accounting
Eco-efficiency	

**Source:** See Appendix 2

## **2.5. The Outcomes of Pursuing Environmental Sustainability**

### **2.5.1. Benefits and Costs of Environmental Sustainability**

Based on the literature review undertaken, numerous preliminary benefits and costs associated to achieving environmental sustainability have been identified and are depicted in Table 2 below. A more detailed list of these benefits and costs including source are illustrated in Appendix 3. The benefits obtained have assisted in enabling product differentiation and/or cost reduction as well as the resource based view of the firm (Orsato, 2006).

According to Sustainability (2001), which is sponsored by the United Nations Environment Program (UNEP) and uses case study research, corporate sustainable development performance has a positive effect on business success. This is particularly evident with regards to the financial results and the

brand or reputation of the company. These findings are also supported by research undertaken by The Economist Intelligence Unit (2008).

**Table 2: Benefits and costs associated with achieving environmental sustainability**

	Quantitative	Qualitative
Benefits	<ul style="list-style-type: none"> <li>▪ Increased profitability</li> <li>▪ Employee attraction and retention</li> <li>▪ Risk reduction and mitigation</li> <li>▪ Increased productivity</li> <li>▪ Market share growth</li> <li>▪ Brand value</li> <li>▪ Customer attraction and retention</li> <li>▪ Increased shareholder value</li> <li>▪ Regulatory tax incentives</li> <li>▪ Eco-efficiency</li> <li>▪ Access to capital</li> </ul>	<ul style="list-style-type: none"> <li>▪ First mover advantage</li> <li>▪ Increased innovation</li> <li>▪ Enhanced corporate image</li> <li>▪ Employee motivation</li> <li>▪ Environmental activism</li> <li>▪ Improved regulatory standards and relationships</li> <li>▪ Improved health and safety</li> <li>▪ Knowledge management</li> <li>▪ Organisation resilience</li> <li>▪ Competitive advantage</li> </ul>
Costs	<ul style="list-style-type: none"> <li>▪ Implementation ( investment and operational)</li> <li>▪ Certification and endorsement</li> <li>▪ Sustainability marketing</li> <li>▪ Increased consumption</li> <li>▪ Publicity</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased scrutiny /risk exposure</li> </ul>

Source: See Appendix 3

### 2.5.2. Environmental Sustainability as a Contradiction

Green consumerism is often cited as a being a driver of sustainability because through the actions of consumers, organisation's are rewarded for environmentally sustainable efforts (Jones *et al.*, 2005a, Roarty, 1997; Lockeretz and Merrigan, 2005). Green consumerism is also viewed as being a contradiction because it makes environmental sustainability imperatives the responsibility of the consumer whereby wealthy organisation's can continue to exploit the natural environment by masking their activities (Muldoon, 2006). Green consumerism threatens any form of real environmental activism because it is predominantly socially focused without any meaningful foundation

(Maniates, Princen and Conca, 2001) and may be co-opted by organisation's purely for marketing purposes (Darnovsky, 1996).

The use of eco-labelling as a form of product differentiation for targeting specific markets may be no more than a self declaration by a producer or retailer making it meaningless (Lockeretz and Merrigan, 2005). This is effectively a form of "greenwashing". Greenwashing implies disinformation by organisation's in an attempt to portray themselves as being socially and environmentally responsible (Multinational Monitor, 2004).

The issue of environmental sustainability often involves discussions that either the world population is too large, insufficient green technology exists and economic growth is not taking place in the right areas (Maniates *et al.*, 2001). The fundamental issue of consumption is largely ignored because it challenges the social context on which society has been built. It is far easier to focus on the way things are done or produced instead of asking the fundamental question of why they are done or what purpose they serve (Maniates *et al.*, 2001). Furthermore according to the prevailing economic thought, consumption is the purpose of the economy. To challenge this notion requires public policy and even the intent behind environmental activism to be scrutinised (Maniates *et al.*, 2001).

Traditional free market economics dictate that companies seek to minimise costs in order to maximise profits regardless of the environmental implications. Unless legislation compels organisations to behave otherwise, organisations are likely to continue to exploiting the natural environment (Roarty, 1997). Furthermore employment, exports and the protection of industries of a national

importance enjoy higher political priority than the protection of the environment (Roarty, 1997).

## 2.6. A Summary of the Literature Review

The relationship between the core themes and environmental sustainability are depicted in Figure 2 below:



**Figure 2: Context of the retail sector's response to achieving environmental sustainability**

The pressures for becoming environmentally sustainable are not restricted to the retail sector alone but apply to all organisations. Some of these pressures include green consumerism, regulation and environmental conventions as well as pressure exerted by non-governmental organisations and industry bodies. In order for organisation's to compete, the influential nature of these pressures has resulted in organisation's having to consider the impact of their operations both internally and externally.

To effectively respond to the challenge of being environmentally sustainable, organisations can implement a number of different sustainability strategies. These strategies either have a current or futuristic timeframe coupled with an internal or external focus. To maximise the potential sustainability value, organisations should not embark on just one sustainability strategy but on a combination of strategies that consider different timeframes and different areas of focus.

In pursuing an environmental sustainability strategy an organisation can execute a number of non-industry specific practices. These practices may be internal or external in nature and can provide numerous benefits that can assist in providing competitive advantage or developing organisational capabilities. Some of these practices may also incur costs.

The achievement of environmental sustainability, however, is not without controversy. Practices of intentional company disinformation, promotion of increased consumption and adverse market systems have been highlighted as contradictory factors in pursuing environmental sustainability.

The retail sector has a critical role to play in promoting environmental sustainability as they are the link between producers and consumers. By responding to consumer demand, influencing consumption patterns and addressing internal operations, retailers have a key role to play in significantly influencing the achievement of environmental sustainability. In consideration of the various industry pressures, strategies and practices, resultant outcomes and the role of retailers in achieving environmental sustainability, the extent to which South Africa's grocery retail sector has responded to becoming environmentally

sustainable has motivated the need for this research. Further motivation for this research is that some of the large grocery retailers are very vocal about their sustainability efforts and their associated accolades whilst other retailers remain silent, prompting the question as to why this is the case.

### **Chapter 3 – The Research Questions**

From the literature review the drivers of environmental sustainability, strategies leading to environmental sustainability, environmental sustainability practices and the outcomes of pursuing environmental sustainability were broadly identified. Furthermore the general sustainability activities pursued by South African companies were also identified. However the extent to which they applied to the South African grocery retail sector needed to be understood.

To understand the response of the grocery retail sector towards achieving environmental sustainability, the following research questions were formulated and the subsequent research was undertaken in an attempt to answer these research questions:

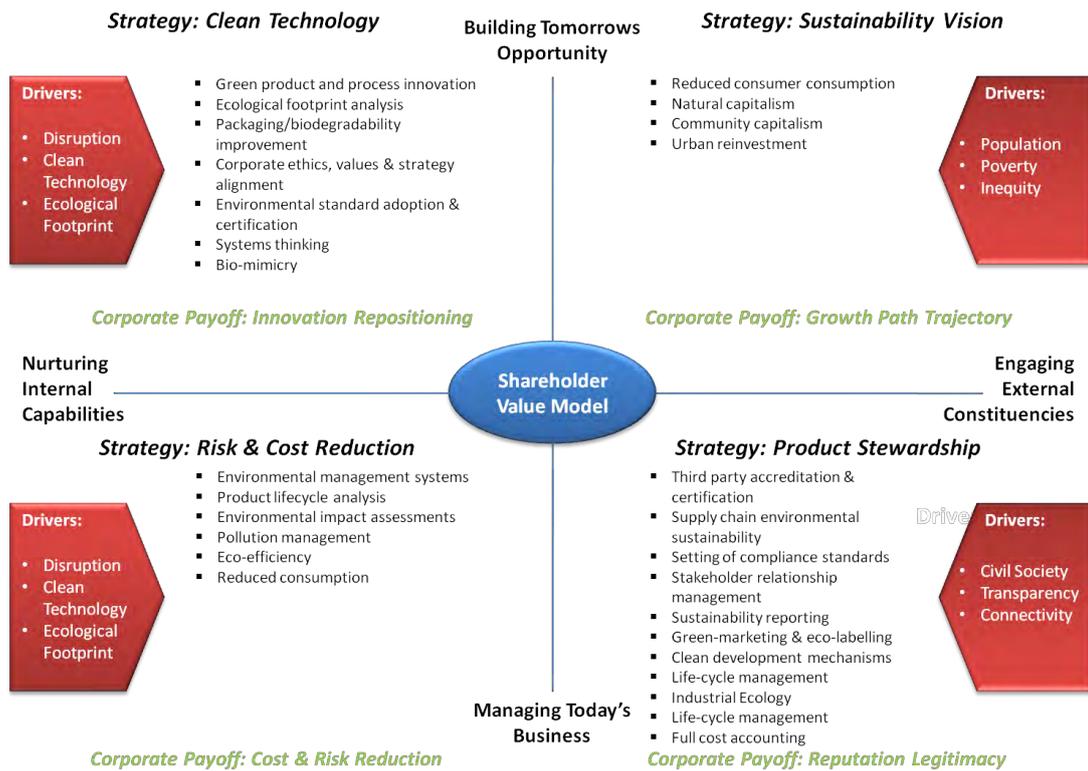
- Research question 1: Has a sustainability strategy been formulated?
- Research question 2: What has been the rationale if any, for pursuing sustainability?
- Research question 3: What practices if any, have been adopted in pursuing sustainability?
- Research question 4: What have been the benefits and/or costs if any that have been realised in pursuing sustainability?

## **Chapter 4 - Research Methodology and Design**

### **4.1. Methodology Followed**

A qualitative study was undertaken with an exploratory design. The choice of the study was based on the literature findings. The undertaking of exploratory research provided the necessary information to answer the research questions as well as diagnose potential problems for further research. The emphasis of the exploratory research was on obtaining deep and insightful information (Zikmund, 2003).

The research was carried out in two parts. The first part built on Hart and Milstein's (2003) shareholder value model (Figure 1) along with the identified practices, benefits and costs of pursuing environmental sustainability. The result of part one of the research is depicted in the model below (Figure 3). This model was used as input into the second part of the research.



**Figure 3: Strategies for achieving environmental sustainability and their associated practices**

The outcomes from part one provided the necessary foundation for semi-structured interviews to be conducted in part two of the research. The second part of the research entailed conducting semi-structured interviews with individuals representing organisation's within the grocery retail sector.

## 4.2. Unit of Analysis

The unit of analysis was the responses from the organisation's.

## 4.3. Population and Sample

The identified population was large South African grocery retailers. The grocery retail industry is defined as revenues generated through grocery sales from supermarkets, hypermarkets, cooperatives, discounters, convenience stores,

independent grocers, bakers, butchers, fishmongers and all other retailers of food and drink for off-the-premises consumption (Datamonitor, 2008).

Large companies are defined as those where:

- Revenue exceeds R4.5bn per year (Datamonitor,2008) and /or
- Consumer shopping preference exceeds 4% (AMPS, 2008)

The population identified by these criteria included the following companies:

- Pick 'n Pay Group
- Shoprite Holdings Limited
- Massmart Holdings Limited
- Spar - South Africa
- Woolworths Holdings Limited
- Metcash Trading Africa Group of Companies (Metro Cash and Carry)

Only large grocery retailers were selected as they constitute 62% of the preferred retail outlets for South African consumers (AMPS, 2008). Grocery retailers which are not large are deemed to be insignificant or fragmented within the overall grocery retail sector (AMPS, 2008).

A detailed description of the research population is illustrated in Table 3 below.

**Table 3: Sample population characteristics**

Company Name	Woolworths Holdings Ltd	Pick 'n Pay Group	Massmart Holdings Ltd	Spar South Africa	Shoprite Holdings Limited	Metcash Trading Africa Group of Companies
Name used in this document	Woolworths	Pick 'n Pay	Massmart	Spar	Shoprite	Metro Cash & Carry
<b>Brands</b>	<ul style="list-style-type: none"> <li>▪ Woolworths</li> <li>▪ Woolworths Financial Services</li> <li>▪ Country Road</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pick 'n Pay</li> <li>▪ Score</li> <li>▪ Boxer</li> <li>▪ Franklin</li> </ul>	<ul style="list-style-type: none"> <li>▪ Makro</li> <li>▪ Game</li> <li>▪ Dion Wired</li> <li>▪ Jumbo</li> <li>▪ CBW</li> <li>▪ Shield</li> <li>▪ Builders Warehouse</li> <li>▪ Builder Express</li> <li>▪ Builders Trade Depo</li> </ul>	<ul style="list-style-type: none"> <li>▪ Superspar</li> <li>▪ Spar</li> <li>▪ Kwikspar</li> <li>▪ Tops at Spar</li> <li>▪ Build It</li> </ul>	<ul style="list-style-type: none"> <li>▪ Shoprite</li> <li>▪ OK Power Stores</li> <li>▪ Checkers Hyper</li> <li>▪ Computicket</li> <li>▪ Shoprite Hyper</li> <li>▪ Checkers</li> <li>▪ U-Save</li> <li>▪ OK Furniture</li> <li>▪ Checkers</li> <li>▪ OK Furniture</li> <li>▪ House &amp; Home</li> <li>▪ Hungry Lion</li> <li>▪ OK Franchise</li> <li>▪ Liquor Shop</li> <li>▪ Money Market</li> <li>▪ Medi-Rite</li> <li>▪ Freshmark</li> </ul>	<ul style="list-style-type: none"> <li>▪ Trade Centre</li> <li>▪ Metro Cash &amp; Carry</li> <li>▪ Liquor World</li> <li>▪ Alliance Cash &amp; Carry</li> <li>▪ Stax</li> <li>▪ Friendly Stores</li> <li>▪ Lucky 7</li> <li>▪ Buy Rite</li> <li>▪ Viva Supa Save</li> <li>▪ Pop-In</li> <li>▪ 7 Eleven</li> <li>▪ Square Deal</li> </ul>
<b>Most Recent Turnover</b>	R21,922mn	R50,135mn	R43,129mn	R26,993mn	R59,319mn	N/A
<b>Consumer shopping preference % (AMPS, 2008)</b>	0.50%	19.40%	0.60%	10.40%	33.40%	0.90%

Based on the research type, three semi-structured interviews were to be conducted with each organisation identified in the population group. The identified sample size was 12 to 15 respondents comprising of three respondents per organisation. The choice of three interviews per organisation was intended so as to triangulate viewpoints from a financial, supply chain (operational) and sustainability line accountability perspective. The use of triangulation enabled a more rounded picture to be generated from the viewpoints obtained and took into account the multiplicity and similarity of the different frames of reference (Denzin and Lincoln, 2005). Aside from triangulation, the rationale for the various viewpoint types was as follows:

- Finance: Insight from a financial performance perspective in terms of the organisation pursuing environmental sustainability
- Supply chain: Insight from an operational perspective. As highlighted earlier the supply chain has a key role to play in an organisation becoming environmentally sustainable
- Sustainability line accountability: Insight from a sustainability line accountability perspective in terms of strategies developed, practices employed and the rationale for pursuing environmental sustainability

The sample selection was judgemental in nature, as the research undertaken required input from certain groups for example finance, supply chain and sustainability line accountability (Zikmund, 2003). Furthermore, being judgemental in nature, guidance in terms of sample selection was provided by expert input from within the sample organisations.

#### 4.4. Data Gathering Approach

Data were gathered by means of semi-structured interviews. The rationale for using semi-structured interviews was as follows (Gillham, 2005):

- The same questions were asked of all those involved
- The questions used ensured topic focus
- Equivalent coverage was ensured. In other words interviewee's could be prompted with supplementary questions
- The time for each interview was approximately the same
- Open questions coupled with structured questions were asked to introduce flexibility into the interviewing process and ensure that rich data were obtained
- They allowed a strong element of discovery whilst the structured focus allowed an analysis in terms of commonalities

The interviews were conducted face-to-face with persons identified in the sample. Using the outcomes of part one, an interview guideline was developed (Appendix 4). The interview guideline was piloted prior to its use in an actual interview setting to ensure that it enabled the efficient and effective answering of the research questions. The use of an interview guideline ensured interview consistency and interviewer neutrality, thus improving the overall quality of the research process (Denzin and Lincoln, 2005).

As part of the semi-structured interview, use was made of open ended and constant sum scale questions in the interview process (Appendix 4). The use of a constant sum scale to obtain information enabled the relative importance of

various attributes such as benefits and costs in pursuing environmental sustainability to be determined (Zikmund, 2003).

A copy of the interview guideline was given to the interviewee at the start of the interview. The responses to the various questions were written in the space provided in the interview guideline by the interviewer (Appendix 4). Furthermore, before the interview commenced, consent to the interview was obtained from the interviewee (Appendix 5).

Where available, to provide context to the company and their response to becoming environmentally sustainable, use was made of the company's annual financial reports. These financial reports were in the public domain.

#### **4.5. Analysis**

The analysis of qualitative data, particularly in unstructured interviews, often can result in the findings of the research being the output of the researcher's interpretation of the data (Denzin and Lincoln, 2005). The unspoken influence of the researcher becomes particularly problematic when the data is contradictory (Denzin and Lincoln, 2005). Furthermore, unless the interviewer takes a high level approach to analysing the interview data, they will be making a subjective interpretation of what the interviewee says (Gillham, 2005). The analysis techniques mentioned in Table 4 below were used to counteract this.

**Table 4: Methods of analysis used**

<b>Method of Analysis</b>	<b>Rationale</b>
Content analysis	The use of content analysis ensured that an objective, systematic and quantitative description of the manifested data took place (Zikmund, 2003).
Comparative analysis	Comparative analysis enabled the findings of each interview to be compared against respondents of the same organisation (Gillham, 2005). This assisted in achieving triangulation of the data obtained and thus improved consistency and quality of the findings (Denzin and Lincoln, 2005).
Constant sum analysis	Analysis of the constant sum results provided an overall assessment of the relative importance of the perceived benefits and costs associated with pursuing environmental sustainability.

#### **4.5.1. Content Analysis**

Content analysis entailed systematically analysing the content of responses to identify specific information for example key words, word frequency, categories of information, characteristics, themes as well as space and time relationships.

#### **4.5.2. Comparative Analysis**

The individual responses obtained from each interview conducted per organisation were compared against each other. The similarities of the responses obtained were identified and combined. Where disparities emerged these were clarified with the respective respondent. The overall result provided a consistent and representative viewpoint of the organisation.

#### **4.5.3. Constant Sum Analysis**

Using the percentage allocations obtained from the interviewee with respect to the benefits and costs of sustainability, the results were aggregated. Those benefits and costs with percentage allocations were then ranked from highest to lowest to reflect the respective organisation's response to pursuing environmental sustainability.

#### 4.5.4. Result of Analysis

The information obtained was used for answering the proposed research questions and in determining the current response to pursuing environmental sustainability by each organisation relative to their competitors. From the research findings, recommendations have been made as to how the response to achieving environmental sustainability can be improved and the opportunities for further research.

#### 4.6. Limitations of Methodology Used

A number of potential limitations associated to the methodology used have been identified and the mitigating actions taken to counter these limitations are highlighted in Table 5 below:

**Table 5: Research methodology limitations and mitigating actions taken**

Potential Limitation	Mitigating Action
The maturity of environmental sustainability in the research population may be low or undeveloped and affected the ability to effectively answer the research questions.	Reference to the company reports prior to the interview and to the interview guideline during the interview was made to clarify any misunderstandings.
The use of judgemental sampling may not be representative and thus the data provided is not meaningful.	The triangulation of different responses from the organisation was used to counteract this ( <i>see Population and Sample</i> ).
The data obtained is sensitive, particularly with regards to competitive position and actions taken to achieve environmental sustainability. This influences the publication of the results of the research process.	Confidentiality agreements were concluded prior to the interviews taking place. Company names have not been disclosed unless permission has been given to do so.
Significant respondent bias may exist in the responses since companies may wish to portray themselves positively from an environmental sustainability perspective.	Potential limitation accepted. Also the triangulation of different responses from the organisation was used to counteract this ( <i>see Population and Sample</i> ).
Because of the research design, the results obtained may not be extrapolated to other industries or companies.	Potential limitation accepted. However the findings from the research undertaken may prompt research to be undertaken in other industries or companies.
Interviewer bias may be present in the results because of subjective interpretation of the data obtained.	Use was made of an interview guideline. Furthermore responses were clarified with the interviewee.

## Chapter 5 – Research Results

### 5.1. Description of Sample

A total of nine interviews were conducted with four of the six major South African grocery retailers over a period of one month. The sample obtained represents 66% of the identified research population. All of the interviews involved the individual accountable for sustainability and where possible, representatives from the finance and supply chain functions. The particulars of the sample are illustrated in Table 6 below.

**Table 6: Particulars of Interview sample**

	Company A	Company B	Company C	Company D	Company E	Company F
<b>Number of interviews</b>	2	3	3	1	Industry Comment	Industry Comment
<b>Functions interviewed</b>	Sustainability Supply chain Finance	Sustainability Supply chain Finance	Sustainability Supply chain Finance	Sustainability	Supply chain	Marketing
<b>Management level</b>	Senior	Senior	Senior	Executive	Executive	Executive

For the purposes of confidentiality the identity of the organisations interviewed has intentionally not been disclosed in the research findings. This is in line with the research methodology outlined in Chapter 4. Ensuring confidentiality is not only deemed to be ethically responsible but also assisted in obtaining unbiased and informative responses from interviewees. Confidentiality has been ensured by coding actual company names from the sample with fictional names as well as by presenting the research findings in such way that the companies could not be identified. Through this process the subsequent quality and content of the research findings has not been altered in any way.

Location dependent, the interviews were conducted either telephonically or face to face for a one hour duration. Where necessary follow up discussions were held to better understand or clarify some of the interview findings. The results of the individual responses within each organisation were triangulated in order to obtain a balanced view of that organisation. Presentation of the results is in accordance with the general layout of the interview guideline (Appendix 4).

Access to key individuals within the organisation's and the subsequent willing participation of these organisations in the research proved to be a challenge. Two of the large grocery retailers identified as part of the research population were invited to participate in the research process but declined to participate. These organisation's only offered industry comment in highlighting that even though the achievement of environmental sustainability may be a key future strategic consideration, it is a not a current area of focus within their respective organisations. Thus of South Africa's six large grocery retailers, four are formally responding to achieve environmental sustainability whilst two have not yet formulated a response.

The research sample and subsequent positioning of each of the organisation's with regard to achieving environmental sustainability was triangulated with the Consumer Goods Council of South Africa or CGCSA. Triangulation of the sample took place by means telephonic discussion with the CGCSA spokesperson. In this discussion the status of each organisation relative to their pursuit of environmental sustainability was verified and thus assisted in validating the research sample.

The sample obtained and the input received has enabled each of the research questions to be answered and has thus satisfied the research objectives.

## **5.2. Research Question 1 Results: Has a sustainability strategy been formulated?**

A number of objectives pertaining to each organisation were encompassed in this question and include:

- Identifying if environmental sustainability has been defined and the formality of this definition
- Likewise, also understanding if a disconnect exists between the definition adopted and the definition that is deemed by respondents that should be in place
- Framing the definition within the context of time and area of focus
- Identifying if the company response supports the definition adopted
- Understanding what the key challenges have been in pursuing environmental sustainability
- Understanding if the global economic downturn has had an impact on pursuing environmental sustainability

### **5.2.1. Applied Definition of Environmental Sustainability**

All respondents agreed that environmental sustainability has been defined for their respective organisation's and although the definition adopted may currently be correct, it may be changed later as and when required.

The definition of environmental sustainability that has been adopted varies between organisations. Four general themes shared between the organisations include:

- Responding to climate change
- Influencing consumer behaviour
- Reducing environmental impact
- Ensuring future business sustainability

#### ***5.2.1.1. Individual Company Findings***

Some quotes from the interview process supporting the general themes and organisation specific themes are highlighted below.

##### Company A

Four key pillars areas have been identified and integrated with the company's long term strategy. These include climate change, transformation (culture and race), sustainability and protecting the environment.

##### Company B

"We have a 'four pillar' approach to sustainability. The four pillars are economic sustainability, transformation, social development and environmental responsibility". A key differentiator highlighted by this company is their focus on 'resilience' rather than sustainability.

##### Company C

"The focus is on addressing the real issues and not just paying lip service through marketing activities". "We focus our efforts on influencing consumer purchasing behaviours and the upstream part of our business i.e. suppliers. We see environmental sustainability as an important focus area for the business because without responsible actions (to mitigate and adapt to climate change) and influences (to work up and downstream from our business), we will not have an environment in which to operate."

Company D

“We took a hard look at two parts, the handprint and the footprint. The handprint is about the positive difference that can be made in being environmentally sustainable whereas the footprint is about negative consequences of our actions. Because we reach millions of consumers, we decided to focus our efforts on consumers.”

### 5.2.2. Role Played by Environmental Sustainability

Although some variation in the responses provided did exist, the majority of respondents felt that achieving environmental sustainability has both a direct and indirect role to play on their organisation (Table 7). An example of a direct role could be consumers demanding more environmentally responsible goods whilst government legislation could be an indirect role.

**Table 7: Direct or indirect role played by achieving environmental sustainability**

	Count of responses				
	Company A	Company B	Company C	Company D	Total
<b>Both indirect &amp; direct</b>	2	1	2		5
<b>Indirect</b>		1	1	1	3
<b>Direct</b>		1			1

Five common themes shared between the organisations were identified and include:

- Role of consumer behaviour
- Corporate responsibility
- Choice or being proactive as the key driver of pursuing environmental sustainability

- Regulatory or non-governmental organisation pressures not being drivers of pursuing environmental sustainability

### ***5.2.2.1. Individual Company Findings***

Some quotes from the interview process supporting the general themes and organisation specific themes are highlighted below:

#### Company A

“Reduce natural resource use for example biodiversity, energy and water. Company A’s customers are never satisfied so pursuing environmental sustainability is a combination of leading customers and being lead by customers. King II has always been there but it is about being proactive.” Also, pursuing environmental sustainability has been leader lead right from the chief executive officer.

#### Company B

“Environmental sustainability is relatively new in South Africa so feedback from customers has not been overwhelming.” Also, “for many years we have sought ways to promote awareness and opportunities for positive action.”

#### Company C

“Customers are not putting pressure on us as they are not prepared to pay the premium. The company’s value system is driving the pursuit of environmental sustainability, although South Africa is still behind the rest of the world.” This company realises that they have to be proactive before being prescribed to. “It is about creating sustainable/green suppliers for tomorrow to ensure that the business survives and minimises the impact of doing business.” It was also

highlighted that retailing is about responding to customer needs and the segment of customers needing environmentally sustainable outcomes is small. Furthermore some of the indirect drivers of pursuing environmental sustainability have included power disruptions that as a result have forced the company to react in an environmentally sustainable way.

Company D

“Customers are not putting pressure on us for environmental sustainability. Down the line they definitely will be. The company does not have a high level of control over its footprint. We have chosen to focus on the positive elements as opposed to understanding just how bad we are. It is good business sense.”

### **5.2.3. Environmental Sustainability Frame of Reference**

The current focus areas of each of the organisations interviewed in relation to their environmental strategy is illustrated in Figure 4 below. The values represented are the average percentage values of interviewee responses from each organisation (Table 8).

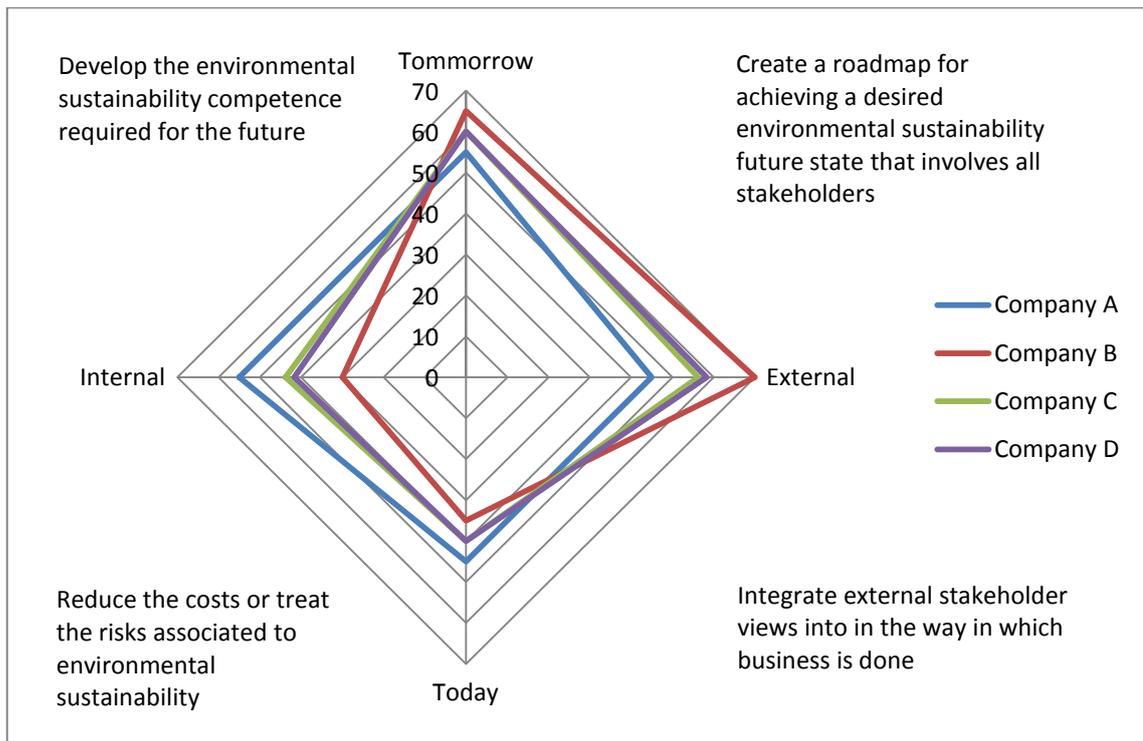
From Figure 4, Company A has the view that it has the most balanced focus in terms of time frame and locus of control. Whilst Company B, Company C and Company D have a focus on current internal activities, their view is that more focus is placed on the external environment and future oriented activities in the top right hand quadrant. This is exemplified in Company B’s case where according to their view, most of the company’s focus is placed on the external environment at 70% and future oriented activities at 65% (Table 8). A greater amount of variation exists between the companies in terms of an internal or external locus of control. However on average more focus appears to be placed

on future orientated activities with an external focus as opposed to current activities with an internal focus.

The responses between interviewees from each organisation also varied (Table 8). Comparatively Company B has the greatest amount of variation in terms of focus on the internal versus the external environment. Likewise Company C has the greatest amount of variation in terms of current and future orientated activities.

**Table 8: Environmental sustainability focus areas**

<b>Average of Apportionment</b>				
	<b>Tomorrow</b>	<b>External</b>	<b>Today</b>	<b>Internal</b>
<b>Company A</b>	55	45	45	55
<b>Company B</b>	65	70	35	30
<b>Company C</b>	60	56	40	44
<b>Company D</b>	60	58	40	42
<b>Average</b>	60	57	40	43
<b>Standard Deviation</b>				
	<b>Tomorrow</b>	<b>External</b>	<b>Today</b>	<b>Internal</b>
<b>Company A</b>	7	7	7	7
<b>Company B</b>	7	14	7	14
<b>Company C</b>	10	8	10	8
<b>Company D</b>	N/A	N/A	N/A	N/A



**Figure 4: Current environmental sustainability focus areas**

All the grocery retailer's responded that they have implemented a response towards becoming environmentally sustainable. The response adopted is particular to the organisation. Three of the grocery retailer's highlighted that strategic plans have been put in place with a definitive time frame focus. Some of these plans have a 20 year outlook and are broken down into five year plans with targets.

### **5.2.3.1. Individual Company Findings**

#### **Company A**

This company has tried to take a balanced view on all components of their business. These include reducing resource utilisation, animal welfare, recycling,

packaging and farming for the future. According to the company, “the company has a 20 year time frame as the supply chains are expected to shift.” Also, “focus originally used to be external but this has shifted internally in an effort to reduce costs.”

#### Company B

According to one respondent, “a larger emphasis is placed on external activities as much of the internal activities have already been addressed”. This statement appears to be in support of the response variance within the organisation (Table 8). Emphasis is placed on organisational resilience, as stated, “environmental sustainability is not viewed in isolation but is seen as one of the four pillars in our sustainability approach”.

#### Company C

One key area going forward is focus on the education of customers because as quoted “the company is focusing on all the LSM (Living Standard Measure) levels, however for the lower LSM’s the primary objective is to eat first and environmental sustainability comes later, if at all.” A second key area of focus is supplier sustainability. Although the company has a very large environmental sustainability intent, it has not communicated this. According to the company, “the company must be sure of this and have a sound base before it communicates it as such to the market as greenwashing is not desired.” It was also highlighted that the company’s response is in relation to the issues that need to be addressed. As stated, “there has been a drastic shift in the past three years from being reactive to focusing on issues pertaining to the future. The company’s focus will shift depending on the issue at hand”.

Company D

No specific timeframe focus has been assigned. As stated, “some activities have happened already, some are ongoing and some are forever.” Also, “whether the response has been complete is the question.”

#### **5.2.4. Key Challenges in Pursuing Environmental Sustainability**

All of the grocery retailers identified that challenges were experienced in pursuing environmental sustainability. The two challenges that were echoed by all the grocery retailers interviewed include:

- Proving the business case for pursuing environmental sustainability
- Stakeholder acceptance of the need for environmental sustainability

Some of the challenges highlighted were unique to the grocery retailer in question. These are mentioned below.

##### ***5.2.4.1. Individual Company Findings***

Company A

For Company A an available budget has been a key issue as, “all initiatives must fit into the business plan and are business case driven.”

Company B

The business is currently decentralised making implementation a problem. According to the company, “at an operational level the focus is on the bottom line and new elements are not really accepted”. Likewise the company is a very large organisation making implementation difficult. Furthermore the integration of sustainability strategies to all the levels of the business across all business processes has been problematic.

#### Company C

At a strategic level the achievement of environmental sustainability is bought into however at an operational level it is a problem. According to the company, “the strategy is in its infancy and awareness is not at a level where it is the primary concern in the ‘engine’ of the business.” Also, “achieving environmental sustainability is seen almost as a compliance issue similar to BEE but just the next level.” Likewise, “it is difficult to be environmentally sustainable whilst remaining competitive.” These challenges have been identified despite it being highlighted by interviewees that achieving environmental sustainability is seen as part of the good governance culture entrenched in the organisation’s culture since its founding.

#### Company D

As stated, “people do not want accountability for initiatives”, thus making implementation difficult.

### **5.2.5. Impact of the Global Economic Downturn on Pursuing Environmental Sustainability**

Sixty six percent of interviewees highlighted that the global economic downturn has not affected efforts to achieve environmental sustainability. The common theme cited for the lack of impact is due to the amount of integration of sustainability initiatives with normal business activities including the use of scorecard mechanisms to measure performance.

However where the global economic downturn was identified as having an impact on pursuing environmental sustainability the common themes identified was that of human energy levels dropping and focus moving towards more

“survivalist issues.” Two organisations, namely, Company A and Company C were of the opinion that the global economic downturn has also been good for the pursuit of environmental sustainability as it has forced the respective efforts undertaken to be more focused on the value obtained.

### **5.3. Research Question 2 Results: What has been the rationale if any, for pursuing sustainability?**

The objective of this question was to identify the organisation’s rationale for pursuing environmental sustainability and whether it takes the pursuit of environmental sustainability seriously or not.

#### **5.3.1. Rationale for Pursuing Environmental Sustainability**

All the organisations highlighted that environmental sustainability needs are a reality and that they should respond accordingly. For example, according to one organisation “environmental sustainability is not open for discussion and is a fact of life. Every little thing counts.” Similarly “it is true that we are destroying the environment and as a result we have to be seen as taking an interest both internally and externally.”

Three organisations also highlighted that responding to potential future customer needs was a key reason for pursuing environmental sustainability. The individual reasons identified by grocery retailers for pursuing environmental sustainability are highlighted below.

### ***5.3.1.1. Individual Company Findings***

#### Company A

The pursuit of environmental sustainability is driven from the top. The organisation wants to maintain its leadership position in the market. Accordingly the company will experiment at the peril of potential failure in order to achieve what they deem as “visible product leadership”. Achieving environmental sustainability is also driven as a result of the organisation’s international affiliation with global brands and the subsequent international standards that must be met. Furthermore as per the company, “environmental sustainability provides innovation opportunities”. Likewise with their customers being very demanding, as stated, “customers see it (environmental sustainability) as business as usual and not something separate”. This customer requirement appears to be particular to the market segment served.

#### Company B

According to Company B, “the company has a long heritage of being committed to environmental initiatives” and as such talk about “being a green company rather than a sustainable or resilient company”. This is reflected through the integration of pursuing environmental sustainability with the organisation’s broader strategy. Furthermore the needs of customers are also a key reason for pursuing environmental sustainability. The organisation’s repositioning of its brand to be more line with customer needs echoes this.

#### Company C

The organisation wants to be seen as a leader and know that they have a huge influence due to their buying power. According to the company, “it all starts with

education”. Pursuing environmental sustainability is also part of good governance and as stated, “it is all about responsible corporate citizenship”.

Company D

Aside from pursuing environmental sustainability being the right thing to do, according to the company, “consumers will become more aware and demanding. We don’t want to wait and see what happens”.

### **5.3.2. Seriousness in Embracing Environmental Sustainability**

All of the respondents highlighted that their organisation’s take the pursuit of environmental sustainability seriously. The key theme reflecting the seriousness taken towards pursuing environmental sustainability is the formalisation of environmental sustainability within the organisation. Formalisation includes the implementation of an appropriate strategy, undertaking various practices to achieve environmental sustainability, the appointment of designated individuals and the implementation of appropriate measurement and control systems.

#### ***5.3.2.1. Individual Company Findings***

Company A

For Company A, achieving environmental sustainability is entrenched in the culture through passionate people and as highlighted by them “those that are not passionate are seeing the light”. Similar to Company C, the inclusion of environmental sustainability indicators into performance measurements features prominently. Likewise, “strategic targets have been set with short time frames”.

#### Company B

According to Company B their seriousness towards achieving environmental sustainability is in the fact that it is driven by their chief executive officer and that the company for six years in a row has executed triple bottom line reporting. As stated, “the company was one of the first listed companies to demonstrate its commitment to triple bottom line reporting”.

#### Company C

As is reflected in the theme of the company’s annual financial reports, “we do not inherit the world from our forefathers, we borrow it from our children” hence the organisation’s emphasis on pursuing environmental sustainability. The company also highlights that it intends to “lead by example through being a responsible retailer”. Likewise, “we must mitigate the intensity of our impact and assist consumers to make better purchasing decisions”. The use of environmental sustainability measurement and reporting mechanisms are also used extensively to entrench the right behaviour. This is echoed in the interview responses reflecting that the pursuit of environmental sustainability has been entrenched in the company’s culture since the company’s inception and is not really questioned.

#### Company D

As stated, “environmental sustainability makes business sense and is common sense”.

#### **5.4. Research Question 3 Results: What practices if any, have been adopted in pursuing sustainability?**

This question encompassed a number of objectives, these include:

- Whether or not an approach to achieving environmental sustainability has been formalised and the degree to which this approach has been formalised
- The type of internal and external practices pursued as part of this approach
- Whether or not practices for achieving environmental sustainability practices will be scaled up in future and where the focus will be

##### **5.4.1. Formalisation of Approach**

All of the organisations interviewed have formalised an approach to achieving environmental sustainability. Company D has only designated an environmental sustainability role to an existing position whereas Company A, Company B and Company C have designated a sustainability manager, a board committee as well as a board approved strategy as part of formalising their effort in pursuing environmental sustainability.

##### **5.4.2. Environmental Practices Pursued**

The aggregated count of internally and externally focused environmental sustainability practices are illustrated in Tables 9 and 10 below. Note that the values depicted represent what each organisation is pursuing and not individual responses.

**Table 9: Internally focused environmental sustainability practices**

<b>Internally Focused Practices</b>	<b>Count</b>
Ecological and carbon footprint analysis	4
Environmental impact assessments	4
Pollution management	4
Green product and process innovation	4
Packaging/biodegradability improvement	4
Reduced consumption	4
Corporate ethics, values and strategy alignment	4
Eco-efficiency (water, energy, green architecture etc.)	3
Environmental standard adoption and certification	2
Knowledge management and competency development	2
Systems thinking	2
Environmental management systems (e.g. ISO 14000)	1
Product life-cycle analysis	1
Bio-mimicry	0

**Table 10: Externally focused environmental sustainability practices**

<b>Externally Focused Practices</b>	<b>Count</b>
Stakeholder relationship management	4
Community capitalism	4
Supply chain environmental sustainability	3
Sustainability reporting (GRI, SRI, CDP etc)	3
Third party accreditation and certification	2
Setting of compliance standards	2
Green marketing and eco-labeling	2
Clean development mechanisms	1
Natural capitalism (Supplier orientated)	1
Urban reinvestment	1
Industrial ecology	1
Life-cycle management	1
Full cost accounting	0

### 5.4.3. Future Environmental Sustainability Practices

All of the organisations interviewed will be scaling up their environmental sustainability practices in future.

#### ***5.4.3.1. Individual Company Findings***

##### Company A

Future efforts will be transitioned from being predominantly internally focused to be being externally focused. This emphasis will “very much be on the company’s value chain and trying to improve elements within this value chain.”

##### Company B

Not disclosed as the company deemed this information to be confidential at this stage

##### Company C

Three areas have been identified which will be scaled up and include full sustainability reporting, supplier and internal operation evaluation and the promotion of green consumerism. As stated, “the company is being very cautious because of concerns around greenwashing. Activities that are undertaken have to be durable and sustainable. All the ‘ducks’ need to be in a row (in place) and the deeper elements of environmental sustainability must be looked at.”

##### Company D

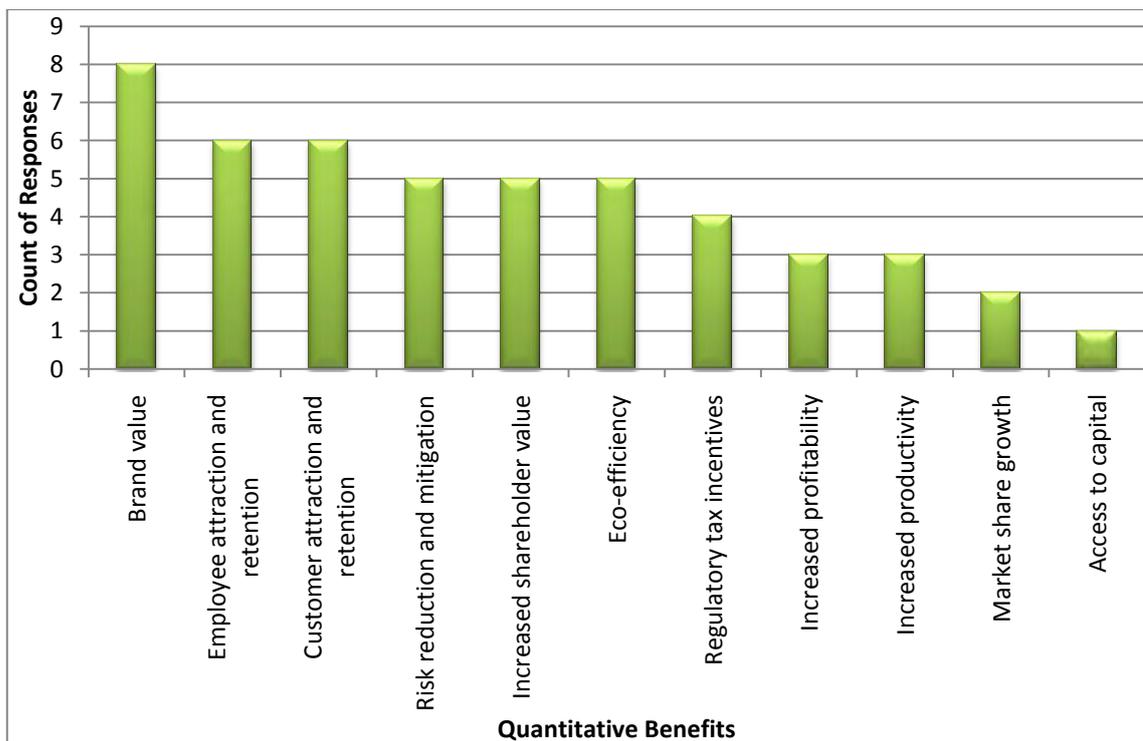
Company D’s environmental sustainability approach is still very new but the company’s future focus will be on what is deemed the “handprint” or positive messages of embracing environmental sustainability. This will be directed towards promoting green consumerism and educating children.

## 5.5. Research Question 4 Results: What have been the benefits and/or costs if any that have been realised in pursuing sustainability?

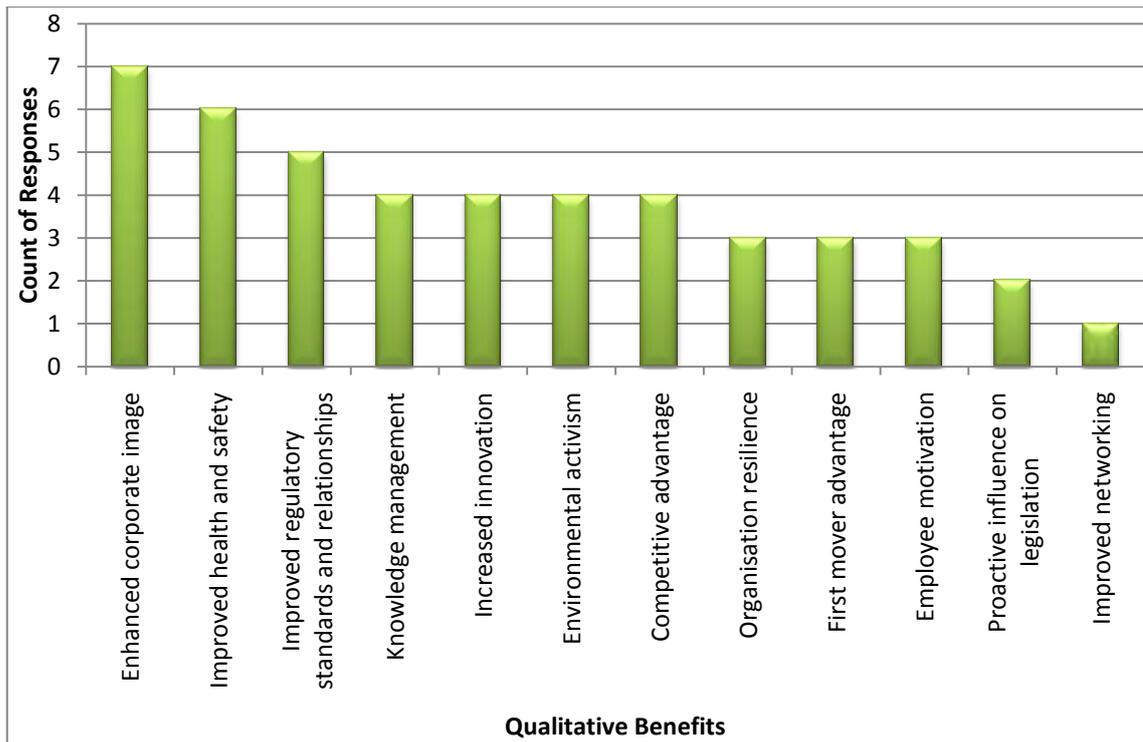
The objective of this question was to understand the benefits obtained and costs incurred to the company as a result of pursuing environmental sustainability. This was from a quantitative and qualitative perspective. Furthermore the benefits and costs to the environment from the approach taken by the organisation were also to be understood.

### 5.5.1. Benefits and Costs Accrued to the Organisation

Based on the count of individual responses the quantitative and qualitative benefits believed to be realised in pursuing environmental sustainability are illustrated in Figures 5 and 6 below.



**Figure 5: Count of quantitative benefits of pursuing environmental sustainability**

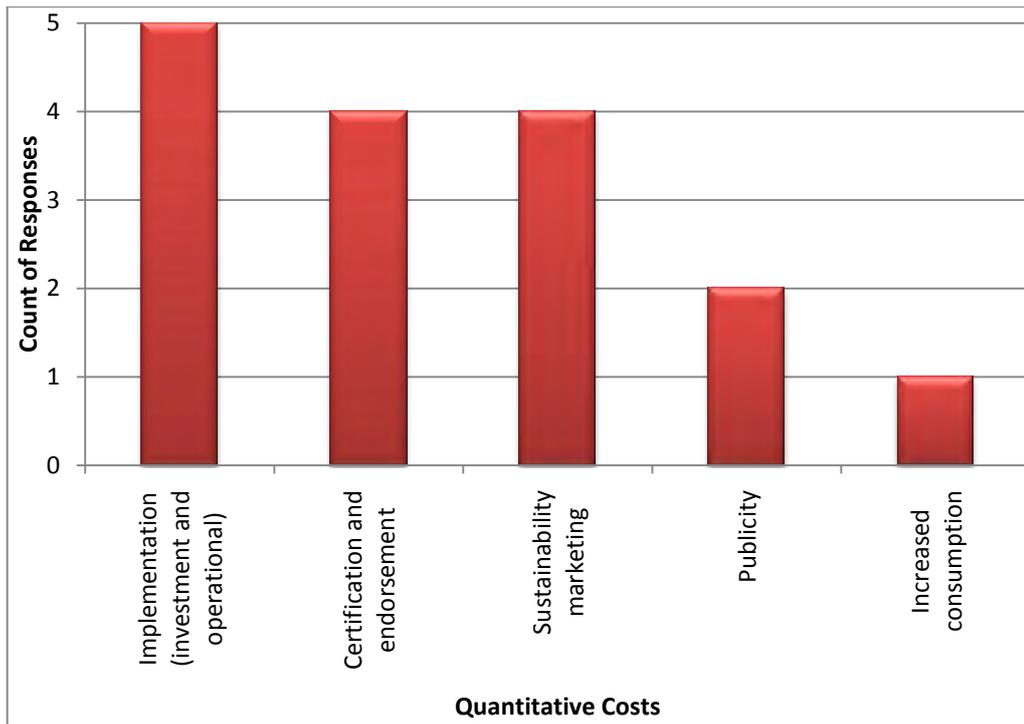


**Figure 6: Count of qualitative benefits of pursuing environmental sustainability**

Two additional qualitative benefits not identified as part of the literature review (Chapter 2) were also highlighted by respondents, these include:

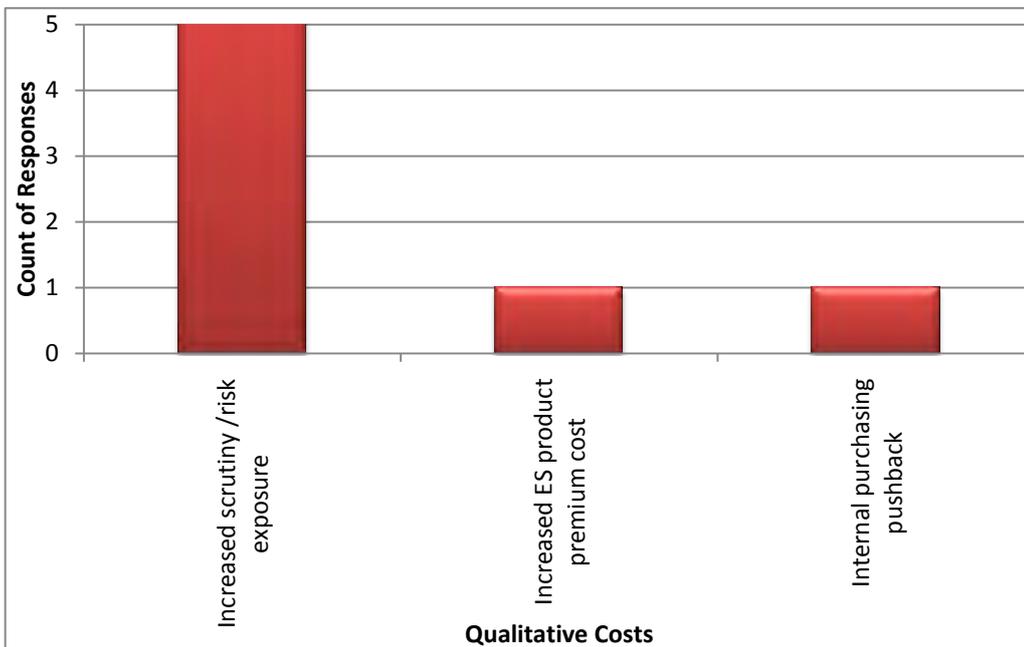
- Proactive positioning of the organisation to potentially influence future legislation
- Improved supplier networking within the organisation’s value chain

Similar to the benefits realised, based on individual responses the perceived quantitative and qualitative costs associated to pursuing environmental sustainability are illustrated in Figures 7 and 8 below.



\* Increased consumption implies increased resource consumption

**Figure 7: Count of quantitative costs of pursuing environmental sustainability**



**Figure 8: Count of qualitative costs in pursuing environmental sustainability**

Two additional qualitative costs not identified as part of the literature review (Chapter 2) were also highlighted by respondents, these include:

- Increased product premiums from being environmentally sustainable.  
This is a combination of effort and the actual cost of introducing environmentally sustainable products
- Pushback from the organisation’s internal purchasing function

### 5.5.2. Benefits and Costs Accrued to the Environment

The benefits and costs accrued to the environment as identified by each respondent are illustrated in Tables 11 and 12 below.

**Table 11: Benefits accrued to the environment**

Benefits	Count
Reduced resource consumption	6
Unknown or not measured	3
Reduced greenhouse gas emissions	2
Reduced landfill impact	1
Green consumerism	1

**Table 12: Costs accrued to the environment**

Costs	Count
Unknown or not measured	6
Urbanisation	1
Resource consumption	1

### 5.6. Additional research findings

A number of additional items in support of the research undertaken were identified by respondents. The quotes made by respondents in this regard include:

- “Environmental sustainability is not a primary criterion for shareholders but assists in providing a belief in management, although one or two investment houses do require an approach to achieve environmental sustainability”
- “The old guard focus on the bottom line can only be changed with regulation and this needs to be enforced whereby regulation becomes practice”
- “Retailers assume a risk by supplying products, for example green products to consumers who are not ready for it”
- “For environmental sustainability to succeed it is absolutely vital for more businesses to get involved. Society should exert more pressure on government”
- “Retailers cannot please all consumers and therefore a balance must be obtained.” This sentiment is stated in terms of the price conscious versus environmentally conscious customers. As stated by another respondent “LSM 9-10 customers are prepared to pay for the (environmental sustainability) premium. The trick is to bring down the differential to the extent that the choice can be offered without the premium being paid”
- “The larger an organisation is, the more its responsibility grows”. Also supporting this was the statement that, “the larger an organisation is the greater it opens itself up to scrutiny”
- The full impact of waste within the value chain is not considered. “Safe disposals essentially become landfill. Could something else not be done instead of creating landfill?”

## **Chapter 6 – Discussion of Results**

### **6.1. Analysis of Sample**

#### **6.1.1. Quantity of Responses**

Of the planned 12 to 15 semi-structured interviews only nine interviews could be conducted. Despite this, these interviews were conducted with four of the six large grocery retailers identified and as such represents 66% of the research population. Moreover industry comments were obtained from those large grocery retailer's not participating in the research process. The triangulation of the research sample with the Consumer Goods Council of South Africa has increased the integrity of the sample and the subsequent findings made. Thus the quantity of responses received is deemed to provide the required foundation for the interpretation of the results.

#### **6.1.2. Quality of Responses**

As highlighted in Chapter 5, access to key individuals within organisation's and the subsequent willing participation of organisation's in the research process was a challenge. Three key drivers identified for this are:

- Environmental sustainability is deemed to be a sensitive strategic issue for organisations. The non-disclosure and vagueness of responses to certain questions reinforces this perception
- The maturity of the overall response to achieving environmental sustainability is low or in its early stages within some of the organisations. Similarly some organisation's do not yet warrant it important enough to formulate a response

- Because of the overall low levels of maturity in responding to achieve environmental sustainability, organisations are concerned with the reputational risks associated with how the results will be interpreted in the public domain

Despite the challenges encountered, the responses obtained are deemed to be of an acceptable quality. Furthermore, the triangulation of interviewee responses within each organisation as per the research methodology highlighted in Chapter 4 assisted in ensuring the quality of data obtained.

## **6.2. Discussion of Research Question 1 Results: Has a sustainability strategy been formulated?**

### **6.2.1. Applied Definition of Environmental Sustainability**

Based on the themes identified, all of the definitions adopted by the retailers interviewed are aligned in terms of being environmentally responsible as well as recognising their responsibility in influencing consumer behaviour as highlighted by Clift *et al.* (2005), Durieu (2003), Jones *et al.* (2005a), Jones *et al.* (2005b) and Muldoon (2006).

The definition of environmental sustainability that has been adopted by two organisations (Company A and Company B) is in line with the definition provided by the South African National Environmental Management Act (DEAT, 1998) and the globally accepted definition as highlighted by Garvare and Isaksson (2001). This indicates an alignment towards the national and global theme in tackling environmental sustainability needs. The lack of a well defined definition by the other two organisations (Company C and Company D) is

indicative of the early stages of their approach in responding to achieve environmental sustainability.

The definition of environmental sustainability adopted by an organisation is perceived to be important from the perspective of providing a sense of direction and purpose for all the activities undertaken to achieve environmental sustainability. The better defined the definition the more directed the response and vice versa. The research findings made are in support of this and are elaborated further on in this report (Section 6.4.) Lastly the definition adopted also appears to highlight the maturity level of the organisation's response to achieve environmental sustainability. Where the maturity is low or the response is in its early stages the definition adopted is not that well defined. An absence of any definition reflects that organisation's may not yet have fully grasped the concept of environmental sustainability or have not yet accepted its perceived importance.

### **6.2.2. Role Played by Achieving Environmental Sustainability**

The role played by achieving environmental sustainability for South African grocery retailers is mostly both direct and indirect in nature. But the drivers prompting a response to achieve environmental sustainability have been out of choice or from leadership mandate. These have not been out of the recognition of harnessing an opportunity or responding to requirements imposed by the environment or by customers. Thus the findings of the drivers for achieving environmental sustainability are in contradiction of some of the theory and literature reviewed in chapters one and two. These contradictions are discussed in the following sections.

### **6.2.2.1. Role of Green Consumerism**

As highlighted by Clift *et al.* (2005), Muldoon (2006), Rex and Baumann (2007), Weber and Mathews (2008) and Winsemius and Guntram (2002) globally there has been a trend in responding to consumer needs for high standards of environmental protection. However based on the research findings green consumerism is not a driver of achieving environmental sustainability within South Africa. Only one of the grocery retailers highlighted that they were pursuing environmental sustainability because of consumer requirements but that this was more a function of their target market. This may be in support of the findings made by Ottman *et al.* (2006) whereby the environmental response made appeals to individuals who seek symbolism, status or affiliation.

The lack of green consumerism is also in contradiction of the 77% of South African consumers who believe that not enough is being done to take care of the environment (AMPS, 2008) but who are clearly not applying pressure on grocery retailers through green consumerism.

The finding that green consumerism is not a driver for pursuing environmental sustainability in the grocery retail sector in South Africa also alludes to the rationale for a lack or absence of response by some of the large grocery retailers. The population of large grocery retailers along with the Consumer Goods Council of South Africa agree through interview response or industry comment that although green consumerism is not strong now it may become a strong driver in future. This is also reflected in the responses obtained that highlight an increase in future activities (Section 5.4.3.).

#### **6.2.2.2. Regulation and Environmental Conventions**

Evidence of regulations and environmental conventions prompting the achievement of environmental sustainability to have an indirect role on an organisation were not evident in the research findings. This implies that similar to green consumerism, regulation and environmental conventions are not key drivers for pursuing environmental sustainability for large grocery retailers in South Africa. Adherence to regulation and environmental conventions are more as a result of choice and are not currently from legislative or non-governmental organisation pressure such as:

- King II Code on Corporate Governance (IoDSA, 2002)
- Carbon Disclosure Project (CDP, 2009)
- Global Reporting Initiative (GRI, 2009)

#### **6.2.3. Environmental Sustainability Frame of Reference**

As highlighted earlier all of the organisations interviewed have chosen to proactively pursue environmental sustainability. As reflected in the research findings, this has been a conscious choice despite a lack of consumer and legislative pressure. This appears to support the view held by Lee and Ball (2003) whereby organisation's will pursue environmental sustainability provided that it provides some or other competitive advantage. However as will be discussed later competitive advantage does not appear to be one of the primary benefits large grocery retailers have enjoyed from pursuing environmental sustainability.

Based on the research findings in conjunction with Figure 3, only one organisation (Company A) has the view that it has adopted a balanced portfolio

on sustainability from an internal and external perspective as well as from a current and future timeframe perspective. This portfolio, as advocated by Hart (1997) and Hart and Milstein (2003), should ensure that maximum sustainable value is obtained and appears to reflect the relative maturity of the organisation's response to achieving environmental sustainability. This portfolio also enables competitive advantage to be achieved through ensuring that the necessary resource capabilities are developed (Orsato, 2006) and through competitive positioning (Porter, 1998).

Earlier it was highlighted that from the research findings green consumerism does not appear to be a driver of achieving environmental sustainability in South Africa for large grocery retailers. It was also highlighted that influencing consumer behaviour was a key theme for all the organisation's interviewed as part of their response to achieving environmental sustainability. The emphasis on future orientated activities of an external nature by three of the large grocery retailers appears to advocate this approach. According to Hart & Milstein (2003) a portfolio skewed to towards external future orientated activities reflects an emphasis on managing external perceptions and runs the risk of being labelled as greenwashing. Furthermore this also reflects the desire of grocery retailers to obtain competitive advantage through competitive positioning of products and services through product differentiation (Porter, 1998).

Some of the research findings also suggest that that the approach taken by organisation's in responding to achieve environmental sustainability may be of a temporary nature and is subject to change. This appears to once again reflect a low maturity of response to achieve environmental sustainability or a grasp of

the implications of environmental sustainability particularly from the perspective of the resource based view of the firm (Orsato, 2006).

#### **6.2.4. Key Challenges in Pursuing Environmental Sustainability**

Aside from one organisation, large grocery retailers do not appear to see the pursuit of environmental sustainability as an opportunity for creating competitive advantage. This is in contradiction of the view held by Pujari *et al.* (2003) and Porter and van der Linde (1995) that purport environmental sustainability as an opportunity. Also the King III report (IoDSA, 2009) highlights that decision making within organisations must have a long term focus with due consideration for sustainability to continued business success. It could be argued that if organisations did see it as an opportunity, aspects such as obtaining stakeholder buy in and proving the business case of achieving environmental sustainability would not be a challenge. Furthermore the response to achieving environmental sustainability would be “pulled” from within the organisation as opposed to being “pushed” down from the organisation’s leadership.

Notably there is one organisation (Company A) that appears to actively drive the pursuit of environmental sustainability from a business case perspective. If there is no business case the proposed actions are not pursued. This is in support of the findings made by Porter and van der Linde (1995) whereby competitive advantage is obtained by adopting the mindset of improving resource productivity, environmental improvement and competitiveness. This mindset is also reflected in the balanced portfolio and environmental sustainability definition that has been adopted by this organisation.

### **6.2.5. Impact of the Global Economic Downturn on Pursuing Environmental Sustainability**

The research findings highlight that the current global economic crisis has not had a serious affect on the response to pursuing environmental sustainability by South African grocery retailers. This appears to contradict the findings of the survey undertaken by The Economist Intelligence Unit (2009) wherein it was predicted that due to the economic crisis, the pursuit of environmental sustainability would move off the corporate strategy agenda.

From the responses received it is evident that organisation culture and effective measurement systems are essential for the integration and continuity of efforts for achieving environmental sustainability within the organisation. This was cited by the grocery retailers as one of the key reasons for efforts in achieving environmental sustainability not being seriously affected by the global economic crisis.

Where an impact has been experienced this has reinforced the need to validate the business case for achieving environmental sustainability. As alluded to by two organisations this is not necessarily negative but positive from the perspective of ensuring maximum value is realised from the efforts taken in response to achieve environmental sustainability. This appears to be in support of the research findings made by McKinsey (2009) wherein it was highlighted that during the global economic crisis a focus on environmental issues has resulted in improved operational efficiencies.

### **6.3. Discussion of Research Question 2 Results: What has been the rationale if any, for pursuing sustainability?**

#### **6.3.1. Rationale for Pursuing Environmental Sustainability**

The global importance of responding to green consumerism and regulation, as highlighted by Chen *et al.* (2006), do not yet appear to be reason enough in South Africa for pursuing environmental sustainability. However, as part of their rationale, whilst South African grocery retailers may not yet have to respond to green consumerism they appear to acknowledge their role in influencing consumer behaviour and responding to potential future consumer needs. This acknowledgement is in support of Clift *et al.* (2005) and Durieu's (2003) view regarding the role of the retailer in influencing consumerism. Depending on the grocery retailer, the actions taken to influence consumer behaviour appear to be through education and the products made available thus further supporting Durieu's (2003) view.

Another reason cited for achieving environmental sustainability is in response to concerns over the current state of the environment for example climate change. However from the responses received little is divulged by grocery retailers regarding their understanding of the impact of their efforts on the state of the environment. Because of a lack of this understanding the actions undertaken by the organisations may not directly correlate with the intended outcomes.

The issue of pursuing environmental sustainability as result of it being a fundamental business risk did not form part of the rationale given by large grocery retailers. This does not support the findings of Ernest and Young (2009) wherein strategic pressures created by rising environmental concerns and climate change are viewed as one of the top ten global risks. This finding could

be linked to the lack of understanding regarding the organisation's impact on the environment as highlighted above. Furthermore the absence of a response to achieve environmental sustainability by two of the large grocery retailers further demonstrates this. If grocery retailers were more aware of the state of the environment they might see it as a significant business threat.

Of particular interest going forward, is the potential role globalisation and international partnerships may have in influencing grocery retailers to pursue environmental sustainability. The more retailers compete internationally the more they may have to be environmentally responsive. This is reflected in an interview response wherein it was highlighted that as a result of an international partnership the organisation was compelled to be environmentally responsive.

### **6.3.2. Seriousness in Achieving Environmental Sustainability**

As highlighted by Ottman *et al.* (2006), one of key risks of pursuing environmental sustainability is the increased public, regulatory and special interest group exposure. All of the grocery retailers interviewed agreed that their organisations took the pursuit of environmental sustainability seriously. In doing so each organisation emphasised that the organisations culture, employees and public reporting mechanisms are evidence of this seriousness. Thus, it appears that through disclosure, grocery retailers are prepared to expose themselves in order to demonstrate their seriousness towards achieving environmental sustainability.

## **6.4. Discussions of Research Question 3 Results: What practices if any, have been adopted in pursuing sustainability?**

### **6.4.1. Formalisation of Approach**

The formalisation of the approach indirectly correlates with the seriousness taken by organisations in response to achieving environmental sustainability. This approach includes the strategy followed, practices pursued and resources allocated. This observation is based on the strategic emphasis placed on achieving environmental sustainability through leadership mandates and the appointments made. Thus, the will to pursue environmental sustainability appears to be present within some of South Africa's large grocery retailers.

### **6.4.2. Environmental Practices Pursued**

No new additional internal or externally focused practices for achieving environmental sustainability were identified, thus the list of practices (Appendix 2) appears to be fairly conclusive of the practices currently being pursued. Based on the findings made, the view held by the Economist Intelligence Unit (2009) that the pursuit of environmental sustainability practices is weak could not be supported or denied.

#### ***6.4.2.1. Internally Focused Practices***

Of the fourteen internally focused practices identified (Appendix 2), seven of these practices are being pursued by all of the large grocery retailers. These practices include:

- Ecological and carbon footprint analysis
- Environmental impact assessments
- Pollution management

- Green product and process innovation
- Packaging/biodegradability improvement
- Reduced consumption
- Corporate ethics, values and strategy alignment

Of interest is that aside from green product and process innovation and packaging/biodegradability improvement the practices pursued are common, require relatively low levels of investment, are well established and are easily understood. Those practices that are less well established or understood for example bio-mimicry, systems thinking or product-life cycle analysis are not pursued by large grocery retailers.

Furthermore only one of the four large grocery retailers has formally adopted an environmental management system such as ISO 14000. However all of the grocery retailers interviewed highlighted that it was a necessary business precondition that suppliers have formally adopted an environmental management system.

#### ***6.4.2.2. Externally Focused Practices***

Similar to the internally focused practices, those externally focused practices that are common, require relatively low levels of investment, are well established and are easily understood are pursued by large grocery retailers.

These practices include:

- Stakeholder relationship management
- Community capitalism
- Supply chain environmental sustainability
- Sustainability reporting

Aside from supply chain environmental sustainability, based on their nature, these practices appear to be orientated around the image and perception of the organisation. As highlighted by Hart (1997) and Hart and Milstein (2005) the risk of predominantly pursuing these practices is that it may lead the company towards perceptions of greenwashing. Other externally focused practices (Appendix 2) are pursued to varying degrees by large grocery retailers.

Optimising the supply chain from an environmental sustainability perspective appears to support the view made by Weber and Mathews (2008). However the rationale for this focus from a cost or greenhouse gas emission perspective is not clear.

Of interest is that only two of the large grocery retailers are currently pursuing the eco-labelling of products. This appears to somewhat contradict the earlier findings of green consumerism not being a driver of achieving environmental sustainability within South Africa but is aligned to the growing worldwide trend of green consumerism (Clift *et al.*, 2005). However this contradiction should be interpreted through the view held by Rex and Baumann (2007) whereby consumers are given the choice of limiting their impact on the environment and thus eco-labelling may be intent on appealing to specific market niches (Ottman *et al.*, 2006).

#### **6.4.3. Future Environmental Sustainability Practices**

Although all of the large grocery retailers indicated that they will be scaling up their future practices for achieving environmental sustainability, the promotion of green consumerism was consistent with two of the grocery retailers. The promotion of green consumerism may be in support of the views held by Jones

*et al.* (2005b) and Michaelis (2003) wherein retailers have been identified as having a responsibility in driving the achievement of environmental sustainability by influencing customer choices.

## **6.5. Discussion of Research Question 4 Results: *What have been the benefits and/or costs if any that have been realised in pursuing sustainability?***

### **6.5.1. Quantitative and Qualitative Benefits Accrued to the Organisation**

The main benefits of pursuing environmental sustainability appear to be outcomes that are consistent with the types of external practices pursued (Research Question 3). Furthermore these benefits also appear to be consistent with the predominant future and externally focused environmental sustainability frame of reference (Research Question 1). These benefits include:

- Brand value
- Enhanced corporate image
- Employee attraction and retention
- Customer attraction and retention
- Increased shareholder value
- Improved regulatory standards and relationships

Improved eco-efficiency and improved health and safety standards also appear to be outcomes that are consistent with the types of internal practices pursued (Research Question 3).

Although the benefits highlighted are consistent with the literature review (Chapter 2), they are predominantly orientated towards the marketing aspect of the organisation. Thus payoff's (Figure 1) such as cost reduction, innovation,

repositioning and increased growth (Hart and Milstein, 2003; Pujari *et al.* 2003; Porter and van der Linde, 1995) are not yet being fully realised. As alluded to earlier this may be as a result of the company's area of focus and the practices pursued in response to achieving environmental sustainability. Furthermore this may also be indicative of the early stages of implementing environmental sustainability efforts.

### **6.5.2. Quantitative and Qualitative Costs Accrued to the Organisation**

The costs associated with pursuing environmental sustainability appear to be as a result of implementation, the marketing of the environmental sustainability efforts and the subsequent risk exposure brought about from responding to environmental sustainability.

### **6.5.3. Benefits and Costs Accrued to the Environment**

Although reduced resource consumption was highlighted by respondents as being the predominant benefit of pursuing environmental sustainability, overall the impact on the environment as a consequence of the actions taken by large grocery retailers does not appear to be a key consideration. This is evident from the quantity of "unknown or not measured" responses.

## **Chapter 7 – Research Conclusion**

### **7.1. Overall Findings**

#### **7.1.1. Formal Response to Achieve Environmental Sustainability**

The majority of large grocery retailers are formally responding to achieve environmental sustainability. The response taken is indicative of the overall seriousness adopted by the organisations interviewed, despite the response still being in its early stages.

#### **7.1.2. Absence of Green Consumerism**

Green consumerism is not a driver of pursuing environmental sustainability in the large grocery retailer sector. This is despite South Africans feeling that not enough is being done to protect the environment whilst contradictorily also not driving green consumerism through large grocery retailers.

#### **7.1.3. Choice and Conscience Are the Current Drivers of Pursuing**

##### **Environmental Sustainability**

Despite global trends legislation, pressure from non-governmental organisations, green consumerism and risk are not the primary drivers of pursuing environmental sustainability in South Africa by large grocery retailers. However large grocery retailers are responding to achieve environmental sustainability out of a desire to be proactive as they realise that aside from their influence on consumer choices they have a responsibility to the environment.

#### **7.1.4. Early Stages of Responding to Achieve Environmental Sustainability**

The maturity of the response to achieve environmental sustainability by large grocery retailers is low or at its early stages. This is echoed through the

predominantly external or perception focused practices that have been adopted. The associated risk to these practices is greenwashing. Also indicative of a low maturity level is the amount of internal variation within the organisations interviewed regarding their understanding of environmental sustainability, the practices pursued and the associated benefits and costs realised.

#### **7.1.5. Impact of Global Economic Crisis**

The global economic crisis does not appear to have had a negative impact on the response to achieve environmental sustainability by large grocery retailers. In some instances the impact has been positive from the perspective that acceptable value must be realised from the efforts undertaken. This has resulted in an improvement of the overall effectiveness and efficiency of the activities undertaken.

#### **7.1.6. “So What” of Achieving Environmental Sustainability Not Grasped**

The implications of responding to achieve environmental sustainability and the associated impact on the environment are not yet understood by large grocery retailers. Although some grocery retailers have made great strides, generally, environmental sustainability is seen either as a compliance or risk related issue as opposed to an opportunity for developing competitive advantage or having a positive impact on the environment.

#### **7.1.7. Pursuing Environmental Sustainability Must Be Leader Lead**

Organisational buy-in represents the greatest challenge for achieving environmental sustainability by large grocery retailers. Where buy-in has been successful pursuit of environmental sustainability has been leader lead and entrenched in the organisation through measurement and control mechanisms.

### **7.1.8. Environmental Sustainability Remains a Contradiction**

Based on the findings highlighted, achieving environmental sustainability appears to currently be a contradiction. Greater focus is placed on the outcomes of business activities as opposed to fundamentally questioning the “so what” or manner in which these activities are executed. Consumption is also the primary driver of modern economics. Until human consumption patterns change and achieving environmental sustainability becomes an entrenched reality across all spectrums of society, achieving environmental sustainability will remain a lowly second priority.

## **7.2. Recommendations on the Way Forward**

The recommendations made are based on what has been observed to be working well within the organisation’s interviewed as well as new recommendations.

### **7.2.1. Measurement and Control Systems**

The implementation and use of environmental sustainability indicators as part of the organisation’s performance management system appears to entrench the right behaviour and culture within organisations. It is recommended that these indicators be extended across all levels and functions within organisations. Not only will employees be incentivised to embrace the pursuit of environmental sustainability but they will also be held accountable for delivering environmentally sustainable outcomes.

### **7.2.2. Adopting a Business Case Approach**

Achieving environmental sustainability will remain to be seen as a compliance or risk related issue until such time that the benefits it yields will improve the

organisation's competitive advantage. To achieve this it is recommended that organisation's adopt a business case approach whereby all efforts to achieve environmental sustainability must have a positive business case over the long-term even if the business case is poor in the short-term . The application of this approach must work in conjunction with also adopting a more balanced (Figure 1) focus.

### **7.2.3. Implementation of Maturity Model**

The practices adopted and benefits yielded vary across organisation's and the rationale for the adoption of these practices also vary within the organisation's themselves. It is recommended that organisation's adopt a maturity model as the foundation of their response to achieve environmental sustainability. Typically the activities, outcomes, issues, global trends and organisational capabilities that can be encountered on a journey to achieving environmental sustainability relative to a timeline would be included in this model.

Such a model would assist in gauging the gap between the organisation's current capabilities for achieving environmental sustainability against their intended outcomes. Understanding this gap will not only assist in identifying the necessary remedial actions to be taken but will also provide direction on a strategic and operational level as well.

### **7.2.4. Sourcing and Promotion of Green Products**

To promote green consumerism in South Africa it is recommended that the option of choices available to consumers in purchasing environmentally sustainable products is increased. Aside from the products being supplied by environmentally sustainable suppliers these products should not carry an

increased price differential over existing products. Such products will appeal to a broader customer base as opposed to only those consumers that can afford them at a higher cost.

#### **7.2.5. Partnerships with Non-Governmental Organisations**

As the global drive towards achieving environmental sustainability increases large grocery retailers should proactively partner with non-governmental organisations that focus on achieving environmental sustainability. It is envisaged that such a partnership will be built on the premise of a win-win foundation whereby the activities of the grocery retailers will be opened up to scrutiny but also solutions addressing the organisation's most pressing environmental sustainability problems may be generated faster. Furthermore the perception and reputation of the grocery retailer will be further enhanced. However, the critical success factor to this recommendation is selecting the right organisation to partner with.

### **7.3. Opportunities for Further Research**

#### **7.3.1. Environmental Sustainability Maturity Model**

Throughout the research process no maturity model detailing the journey of achieving environmental sustainability was encountered. Further research should be undertaken with the intent of defining a maturity model for achieving environmental sustainability. Such a maturity model will provide immense value to academia and business by providing a framework for not only achieving environmental sustainability but also for assessing the maturity of response. The potential elements of such a model are highlighted in section 7.2.3.

### **7.3.2. Drivers of Green Consumerism**

The drivers that will change the behaviour of ordinary consumers to that of becoming green consumer's must to be better understood particularly within South Africa's diverse population. Aside from the positive business ramifications, the journey of changing the mindsets of consumers will be easier to navigate.

### **7.3.3. The Response of Suppliers Towards Achieving Environmental Sustainability**

As was mentioned in the main research findings focus is often placed on the end outcomes as opposed to understanding how these end outcomes were derived. Therefore research should be undertaken into understanding how suppliers to grocery retailers are pursuing environmental sustainability. This is particularly important in the advent of supply chains shifting as a result of climate change and will assist in providing insight into the overall value chain from the producer to the end-consumer.

## References

- All Media and Products – AMPS (2008), *Eighty20 FP: South African Advertising Research Foundation –SAARF*. [Internet]. Available from <http://www.eighty20.co.za/databases/fp/result.cgi> (accessed 10/4/2009)
- CDP (2007). *Carbon Disclosure Project South Africa Report 2007 JSE Top 40*. [Internet]. Available from: [http://www.nbi.org.za/documents/CDP\\_2007/cdp\\_sareport2007.pdf](http://www.nbi.org.za/documents/CDP_2007/cdp_sareport2007.pdf) (accessed 16/5/2009)
- CDP (2009). *Carbon Disclosure Project Global 500 Report*. [Internet]. Available from: <https://www.cdproject.net> (accessed 06/11/2009)
- Chen, Y. (2008) The Positive Effect of Green Intellectual Capital on Competitive Advantages of Firms. *Journal of Business Ethics*. 7,271-286
- Chen, Y., Shyh-Bao, L. & Chao-Tung, W. (2006) The Influence of Green Innovation Performance on Corporate Advantage in Taiwan. *Journal of Business Ethics*. 67, 331-339
- Clift, R., Rosalind, M., Baumann, H., Connell, L. & Rice, G. (2005). Eco-labels and Electric Monks. *Industrial Ecology in Europe*. 9(3),4-7
- Constitution of South Africa (1996). *Constitution of South Africa*. [Internet]. Available at: <http://www.info.gov.za/documents/constitution/1996/index.htm> (accessed 16/5/2009)
- Datamonitor, (2008). *Food Retail in South Africa: Industry Profile*. New York: Datamonitor. Rep No: 0044-2058

Denzin, N.K. & Lincoln, Y.S. (2005) *The Sage Handbook of Qualitative Research Third Edition*. California: Sage Publications

Department of Environmental Affairs and Tourism (DEAT). (2003) *International Conventions and Protocols on Climate Change*. DEAT. [Internet]. Available from:

[http://www.environment.gov.za/Documents/Documents/2003May26/climate\\_change\\_conventions\\_26052003.html](http://www.environment.gov.za/Documents/Documents/2003May26/climate_change_conventions_26052003.html) (accessed 10/4/2009)

Department of Environmental Affairs and Tourism (DEAT). (1998) *National Environmental Management Act*. DEAT. [Internet]. Available from:

<http://www.environment.gov.za> (accessed 27/6/2009)

Darnovsky, M (1996) The green challenge to consumer culture: The movement, the marketers and the environmental imagination. In Muldoon, A. (2006) *Where the Green Is: Examining the Paradox of Environmentally Conscious Consumption*. *Electronic Green Journal*. 23, 1-17

Durieu, X, (2003) How Europe's retail sector helps promote sustainable production. In Jones, P., Comfort, D., Hillier, D. & Eastwood, I. (2005b) *Sustainable Retailing and Consumerism*. *Management Research News*. 8(10), 34-44

Economist Intelligence Unit. (2008). *Doing good: Business and the sustainability challenge*. New York: Economist Intelligence Unit.

Economist Intelligence Unit (2009). *Countdown to Copenhagen: Government, business and the battle against climate change*. New York: Economist Intelligence Unit.

Ernst & Young (2009). *The 2009 Ernst & Young business risk report: The top 10 risks for global business*. EYGM Limited.

Garvare, R. and Isaksson, R. (2001) Sustainable Development: Extending the Scope of Business Excellence Models. *Measuring Business Excellence*. 5, 11-15

Global Reporting Initiative-GRI (2009) *Global Reporting Initiative*. London. [Internet]. Available from [www.globalreporting.org](http://www.globalreporting.org) (accessed 16/06/2009)

Gillham, B. (2005) *Research Interviewing- The range of techniques*. New York: Open Up

Hart, S.L. (1997) Beyond Greening: Strategies for a Sustainable World. *Harvard Business Review*. January-February, 68-76

Hart, S.L. & Milstein, M.B. (2003) Creating sustainable value. *Academy of Management Executive*. 12 (2), 56-67

Hart, S.L. (2005) *Capitalism at the Crossroads*. New Jersey: Wharton School Publishing

Hill, R.C. (2000) Integrated Environmental Management Systems in the implementation of projects. *South African Journal of Science*. 96, 50-54

Institute of Directors South Africa - IoDSA (2002) *King Report of Corporate Governance for South Africa – 2002*. Institute of Directors: King II Report

Institute of Directors South Africa – IoDSA (2009) *King of Code of Governance for South Africa 2009*. Johannesburg. [Internet]. Available from: [www.iodsa.co.za](http://www.iodsa.co.za) (accessed 27/06/2009)

- Johannesburg Stock Exchange – JSE (2009). *JSE SRI Index*. Johannesburg. [Internet]. Available from: <http://www.jse.co.za/sri/> (accessed 16/06/2009)
- Jones, P., Comfort, D., Hillier, D. & Eastwood, I. (2005a) Retailers and sustainable development in the UK. *International Journal of Retail & Distribution Management*. 33(3), 207-214
- Jones, P., Comfort, D., Hillier, D. & Eastwood, I. (2005b) Sustainable Retailing and Consumerism. *Management Research News*. 8(10), 34-44
- KPMG, (2006) *2006 Survey of Integrated Sustainability Reporting in South Africa*. South Africa: KPMG Sustainability Services
- KPMG, (2008) *KPMG International Survey of Corporate Responsibility Reporting 2008*. Netherlands: KPMG Global Sustainability Services
- Lee, K. & Ball, R. (2003) Achieving Sustainable Corporate Competitiveness: Strategic Link Between Top Management's (Green) Commitment and Corporate Environmental Strategy. *Greener Management International*. 44, 89-101
- Lockeretz, W. & Merrigan, K.A. (2005) Selling to the Eco-conscious Food Shopper. *Nutrition Today*. 40(1), 45-49
- Maniates, M.F., Princen, T. & Conca, K. (2001). Confronting Consumption. *Global Environmental Politics*. 1(3), 1 - 9
- McKinsey (2009) *McKinsey Global Survey results: Tackling sociopolitical issues in hard times*. United States: McKinsey
- Meadows, D., Randers, J. & Meadows, D. (2004). *Limits to Growth: The 30-year Update*. White River Junction: Chelsea Green Publishing Company

- Michaelis, L. (2003) The role of business in sustainable consumption. *Journal of Cleaner Production*. 11(2003), 915-921
- Muldoon, A. (2006) Where the Green Is: Examining the Paradox of Environmentally Conscious Consumption. *Electronic Green Journal*. 23, 1-17
- Multinational Monitor. (2004) Behind the Lines. *Multinational Monitor*. 25(4), 4
- Mooney, A. (2007) Core Competence, Distinctive Competence, and Competitive Advantage: What Is the Difference? *Journal of Education for Business*. , 110-115
- Moore, S.B. & Manring, S.L. (2009) Strategy development in small and medium sized enterprises for sustainability and increased value creation. *Journal of Cleaner Production*. 17, 276-282
- Norman, W. & MacDonald, C. (2003) Getting to the Bottom of Triple Bottom Line. *In Press, Business Ethics Quarterly*, 1-19
- Orsato, R. (2006) Competitive Environmental Strategies: When Does It Pay To Be Green?. *California Management Review*. 48(2), 127-143
- Ottman, J.A., Stafford, E.R. & Hartman, C.L. (2006) Avoiding Green Marketing Myopia: Ways to Improve Consumer Appeal for Environmentally Preferable Products. *Environment*. 48(5), 24-36
- Palmer, J.A. & Birch, J.C. (2003). Education for Sustainability: the contribution and potential of a non-governmental organisation. *Environmental Education Research*. 9(4), 447-460

Porter, M. & van der Linde, C. (1995) Green and Competitive. *Harvard Business Review*. September – October 1995, 120-134

Porter, M. (1998) *Competitive Advantage: Creating and Sustaining Superior Performance*. United Kingdom: Free Press

Pujari, D., Wright, G. & Peattie, K. (2003) Green and competitive: Influences on environmental new product development performance. *Journal of Business Research*. 56(2003), 657-671

Rex, E. & Baumann, H. (2007) Beyond ecolabels: what green marketing can learn from conventional marketing. *Journal of Cleaner Production*. 15, 567-576

Roarty, M. (1997) Greening business in a market economy. *European Business Review*. 97(5), 244-254

Sengul, M., Pillay, A.E., Francis, C.G. & Elkadi, M. (2007) Climate change and carbon dioxide (CO<sub>2</sub>) sequestration: an African perspective. *International Journal of Environmental Studies*. 64(5), 543-554

Stern, N. (2006). Stern Review on the Economics of Climate Change. London: HM Treasury. [Internet] Available from: <http://www.sternreview.ork.uk> (accessed 06/11/2009)

Smith, M. & Karlson, H. Achieving both economic growth and reduced environmental pressures in the current financial climate. *ECOS*. 148, 30-31

SustainAbility. (2001). *Buried Treasure*. London: SustainAbility. Edition 1

- United Nations Division for Sustainable Development (2003). In Jones, P., Comfort, D., Hillier, D. & Eastwood, I. (2005b) Sustainable Retailing and Consumerism. *Management Research News*. 8(10), 34-44
- WBCSD, (2008) Impact beyond the bottom line: Why measuring impacts on society makes business sense. Switzerland: World Business Council for Sustainable Development.
- Weber, C.L. & Matthews, H.S. (2008) Food-Miles and the Relative Climate Impacts of Food Choice in the United States. *Environmental Science & Technology*. 42(10), 3508-3512
- Weber, M. (2008) The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*. 26, 247-261
- Winsemius, P. & Guntramm U. (2002) *A Thousand Shades of Green: Sustainable Strategies for Competitive Advantage*. London: Earthscan
- Yeoh, P. (2008) Is carbon finance the answer to climate control? *International Journal of Law and Management*. 50(5), 189-206
- Zikmund, G. (2003) *Business Research Methods*. Ohio: South-Western

## Appendix 1 – SRI Index Constituents

26 November 2008

### 2008 SRI Index Constituents

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(in alphabetical order)

Absa Group	Kumba Iron Ore
Advtech	Liberty Group
African Bank	Liberty International
African Oxygen	Lonmin plc
African Rainbow Minerals Ltd	Massmart Holdings
Allied Electronics Corp	Medi-Clinic
Allied Technologies	Merafe Resources
Anglo American	Metropolitan Holdings
Anglo Platinum	Mondi Ltd
Anglogold Ashanti	MTN Group
ArcelorMittal South Africa Ltd	Murray & Roberts
Aveng	Nampak
Barloworld	Nedbank Group
BHP Billiton	Netcare
Bidvest group	Northam Platinum
Brait SA	Oceana Group
Capitec Bank Hldgs Ltd	Old Mutual
Discovery holdings	Pick n Pay
Exxaro Resources	Pretoria Portland Cement
Firstrand Limited	Remgro
Foschini	SABMiller
Gold Fields	Sanlam
Grindrod	Santam
Group Five/South Africa	Sappi
Harmony	Standard Bank Group
Hulamin	Sun International Ltd
Highveld Steel	Telkom
Illovo Sugar	Tongaat Hulett
Impala Platinum Holdings	Truworths International
Investec plc	Woolworths holdings

Source: JSE (2009)

## **Appendix 2 – Practices for Achieving Environmental Sustainability**

*(Please Turn Over)*

## **Appendix 3 – Benefits and Costs Associated with Pursuing Environmental Sustainability**

*(Please Turn Over)*

## Appendix 4 –Interview Guideline

### Interview Guideline

#### 1. Introduction

- *Personal introduction:* Grant Hansel, undertaking MBA research with GIBS. Thank them for their time and participation.
- *Purpose of the study:* Indicate the purpose of the study i.e. to understand how the retail sector has responded to achieving environmental sustainability and this includes the rational, environmental practices undertaken and the benefits and costs realised. Emphasise that the research is on the environmental component and not the social component of sustainability.
- *Research process:* Highlight the methodology that has been followed to collect the data and how it will be analysed. Give an indication of companies participating in the research process and the intent on how the results will be used.
- *Interview process:* Provide an overview of the interview process. Also, to build trust highlight that the interviewee’s company’s sustainability report (if applicable) has been read and the interviewee’s insights are sought. If required, provide a copy of the interview guideline to the interviewee.
- *Interviewee consent:* Obtain the interviewees consent via a consent letter. Agree on the terms of obtaining the information and how the information will be made public.

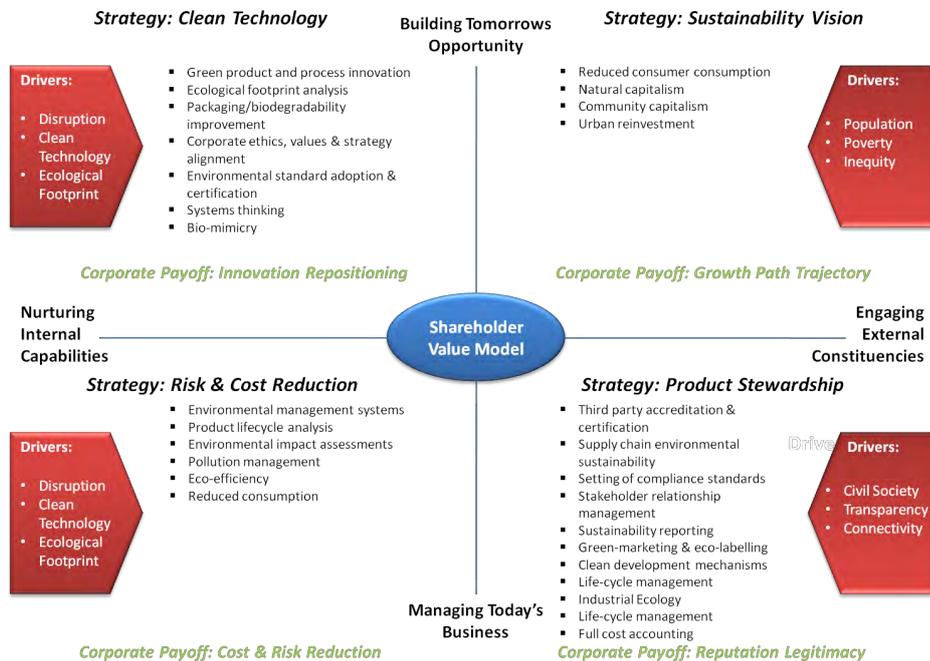
#### 2. Demographic Information

Obtain the following demographic information:

Demographic Details
Interviewee name:
Company:
Designation and position:
Years in the company’s employ:
Area of focus in the company:

#### 3. Sustainability Strategy – Research Question 1

**Model Overview:** Provide an overview of the sustainability model, the drivers, the strategies involved, common practices, the areas of focus and the timeframes.



Source: Adapted from Hart 2005; Hart and Milstein, 2003 and Appendix 2

**Questions:**

3.1. Has environmental sustainability been defined for your organisation?

Yes / No

3.2. If yes, what is the definition of environmental sustainability that has been adopted by your organisation?

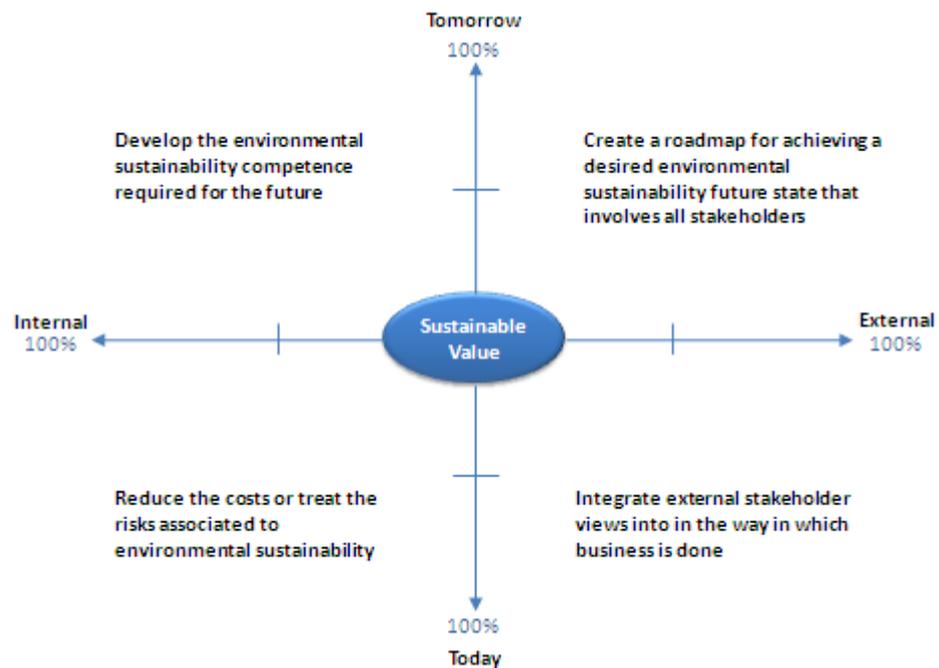
3.3. What do you think the definition of environmental sustainability should be as applied to your organisation?

3.4. Do you think that achieving environmental sustainability has more of an indirect role to play on your organisation or is it something that has more of a direct impact on your organisation?

Direct / Indirect

3.5. Why do you think this?

3.6. Where would you position your company on this model with respect to each of the axis by giving each axis a rating out of 100%?



3.7. Has your organisation developed and implemented a response to achieving environmental sustainability?

Yes / No

3.8. What has this response been?

3.9. What has been the time frame focus (current vs. future) of this response?

3.10. What has been the locus of control (internal vs. external) of this response?

3.11. What have been the key challenges of incorporating the achievement of environmental sustainability into the broader corporate strategy?

3.12. Has the global economic downturn affected the organisation's response to achieving environmental sustainability?

3.13. If so, how?

#### **4. Rationale for Sustainability – *Research Question 2***

*Questions:*

4.1. What has been the company's rationale for addressing environmental sustainability?

4.2. Do you think that the company takes environmental sustainability seriously or not?

4.3. Why do you think this?

### **Sustainability Practices – Research Question 3**

*Questions:*

4.4. Has the achievement of environmental sustainability been formalised for your company i.e. is there a policy in place, is a sustainability manager or role been appointed, has a strategy been implemented, is there a board representative etc?

Yes / No

4.5. If yes, what has been formalised in your company?

4.6. What practices for achieving environmental sustainability has the company embarked on and are these internally or externally focused? (Include additional items on the table.)

Example of practices:

Internally Focused Practices	Externally Focused Practices
Environmental management systems (e.g. ISO 14000)	Third party accreditation and certification
Product life-cycle analysis	Supply chain environmental sustainability
Ecological and carbon footprint analysis	Setting of compliance standards
Environmental impact assessments	Stakeholder relationship management
Pollution management	Sustainability reporting
Green product and process innovation	Green marketing and eco-labelling
Packaging/biodegradability improvement	Clean development mechanisms
Reduced consumption	Natural capitalism
Corporate ethics, values and strategy alignment	Community capitalism
Environmental standard adoption and certification (Organic, recyclability etc.)	Urban reinvestment
Knowledge management and competency development	Industrial ecology
Systems thinking	Life-cycle management
Bio-mimicry	Full cost accounting
Eco-efficiency	

4.7. Will your company be scaling up their practices for achieving environmental sustainability in the future?

Yes / No

4.8. If yes, where do you think their focus will be?

## 5. Sustainability Benefits and Costs – Research Question 4

*Model Overview:* Provide an overview of the potential benefits and costs to the company

		Quantitative	%	Qualitative	%
<b>Benefits</b>	▪ Increased profitability			▪ First mover advantage	
	▪ Employee attraction and retention			▪ Increased innovation	
	▪ Risk reduction and mitigation			▪ Enhanced corporate image	
	▪ Increased productivity			▪ Employee motivation	
	▪ Market share growth			▪ Environmental activism	
	▪ Brand value			▪ Improved regulatory standards and relationships	
	▪ Customer attraction and retention			▪ Improved health and safety	
	▪ Increased shareholder value			▪ Knowledge management	
	▪ Regulatory tax incentives			▪ Organisation resilience	
	▪ Eco-efficiency			▪ Competitive advantage	
	▪ Access to capital			▪	
	▪			▪	
<b>Costs</b>	▪ Implementation ( investment and operational)			▪ Increased scrutiny /risk exposure	
	▪ Certification and endorsement			▪	
	▪ Sustainability marketing			▪	
	▪ Increased consumption			▪	
	▪ Publicity			▪	
	▪			▪	
	▪			▪	

*Questions:*

- 5.1. Are there any benefits or costs that may have been left out? (Include these on the table.)
- 5.2. If there have been any benefits or costs to the environment what have these been?

<b>Benefits</b>	<b>Costs</b>
▪	▪
▪	▪
▪	▪

- 5.3. Taking 100 percentage points divide these between those benefits you think your company has obtained from pursuing environmental sustainability.
- 5.4. Taking another 100 percentage points divide these between those costs you think your company has incurred from pursuing environmental sustainability.

## 6. Closure of Interview

### *Questions:*

- 6.1. Is there anything else you would like to add that you may think will be of relevance to this research?

- 6.2. Are there any questions that you would like to ask me regarding this research?

### *Closing comments:*

- To build trust, share some of the findings of the research to date without company disclosure.
- Enquire as to whether or not the interviewee can be contacted further to clarify any further items.
- Thank the interviewee once again for their time and input. Do this personally and via email.

## Appendix 5 – Informed Consent Letter

### Informed Consent Letter

I am conducting research as part of an MBA with GIBS. The research I am conducting aims at understanding the grocery retail sector's response to the challenge of achieving environmental sustainability. In particular to your company I would like to know:

- If an environmental sustainability strategy has been implemented
- The rationale for this strategy
- The practices and initiatives undertaken in following this strategy
- The benefits and costs that the company has realised in pursuing environmental sustainability

The information I require will be asked by means of an interview, recorded, and later analysed. The information you provide will be treated as confidential and the particulars around the company will not be disclosed. The interview should not take more than one hour to complete.

Your participation is voluntary and you can withdraw at anytime without penalty. If you have any concerns in this regard please contact me or my research supervisor. Our details are provided below:

Researcher: Grant Hansel  
Email: [grant.hansel@gmail.com](mailto:grant.hansel@gmail.com)  
Telephone no: 082 773 3554

Research supervisor: Donald Gibson  
Email: [gibsond@gibs.co.za](mailto:gibsond@gibs.co.za)  
Telephone no: 011 771 4288

Signature of participant: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of researcher: \_\_\_\_\_

Date: \_\_\_\_\_