



“The Impact of Greenwashing on Green Marketing in Ireland”

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*In partial fulfilment for the Degree of Master of Science in Marketing of the
Institute of Technology Sligo*

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September 2013



ABSTRACT

Concern for the environment is on the increase and businesses today are now facing greater demands from consumers in relation to their environmental impact and sustainability practices. Consumers are now engaging in 'ethical living', adapting their lifestyles and shopping habits in line with environmental impacts (Clark, 2006). Given the increasing market for eco-friendly products and services, this has given rise to the practice of green marketing in many industries (Chen & Chai, 2011). Companies have begun to use green marketing in the hope of incentivising consumers to purchase their products and services. Lee (2008) notes that through green marketing practices, marketers hoped to increase goodwill, market share, and sales. Additionally, government regulation regarding the environment has forced many companies to adopt greener practices.

However, research has shown that, in an effort to gain market share, many companies have engaged in claims of environmental friendliness that are false or misleading, otherwise known as greenwashing. Dahl (2010) states that the term "greenwashing" can be used to describe the ads and labels that promise more environmental benefit than they deliver. It refers to the practice of making unwarranted and inflated claims of environmental friendliness and sustainability in order to gain market share. The purpose of this dissertation is to investigate whether or not consumers in Ireland have experienced greenwashing across selected industries and if so, what impact, if any, this has on their perceptions of green marketing.

While much research has been conducted in the area of green marketing and how it relates to both consumer perception and purchasing power, this has largely been confined to Asia, the Americas, and Southern Europe. Therefore generalisations made for one culture and geographic demographic may often be considered meaningless if applied to another (Rahbar & Wahid, 2011). If marketers are to understand their consumers in Ireland, further research is needed to discover how these consumers perceive green marketing and how this impacts on their green purchase behaviour. Furthermore, no study has examined consumer perceptions of green marketing across the three industries included in this study and in particular, with a focus on the act of greenwashing.

This study used both secondary and primary research in an effort to gain an in-depth analysis into this area. A review of the current literature was conducted to identify current theories and key concepts related to the area of marketing ethics and more specifically, green marketing. These key concepts included the attitude-behaviour gap present in green purchase behaviour and the negative impact of greenwashing on consumer scepticism of environmental claims. Following this primary research was conducted in three forms: surveys, focus groups, and in-depth interviews with marketers in each of the industries that is under examination in this study. There were a number of key findings as a result of this research, among which included the high levels of price sensitivity among consumers in Ireland, regardless of income or environmental values; the impact of age, income, and environmental values on attitudes and behaviours; the lack of experience with greenwashing among consumers resident in Ireland; and the negative impact that would be incurred if consumers were to experience greenwashing. Interestingly, this negative impact was not confined solely to the company engaging in greenwashing practices, but could also have an impact on companies within the same sector and potentially across sectors (although not to the same extent).

Ultimately, the aim of this dissertation is to provide marketers in industry with a knowledge of the attitudes and behaviours of consumers in Ireland in relation to green marketing and to apply the knowledge gained to make recommendations for Irish marketers in their use of green marketing.



Dissertation Submission, M.Sc Marketing 2013, IT Sligo

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Submission Date: 17th September 2013

Title of Research: *The Impact of Greenwashing on Green Marketing in Ireland*

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I hereby certify that I am the author of this entire document and that any assistance I received in preparation for this dissertation is fully acknowledged and disclosed in this document. I have also cited all sources from which data was obtained, words or ideas that are copied directly or paraphrased within this document. Sources are correctly credited according to the accepted standards for professional publications. I declare that this document was prepared by me for the purpose of partial fulfilment of the requirements for the M.Sc in Marketing programme.

Signed:

Date:



ACKNOWLEDGEMENTS

Firstly, I would like to thank my supervisor, Ann Higgins, for her support throughout the year and for all her suggestions, advice and patience in the writing of this dissertation. Her help, guidance, and availability at all times was truly appreciated.

I would also like to thank all of my lecturers throughout this M.Sc in marketing who assisted me in my studies this past year and offered support and guidance throughout the masters process.

To my classmates, I wish to thank you for your friendship and support throughout the year. I know the friendships that have formed this past year will last a lifetime.

Finally, I owe a very special thank you to my family, and especially my parents for their love, encouragement, and support over the last number of years.

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Chapter 1: Introduction to the Research

1.1 Introduction

This study looks at the evolution of marketing ethics with a particular focus on green marketing initiatives and how this is perceived by the Irish consumer. The study will also examine how perceptions impact on consumer buying behaviour, with a particular focus on the attitude-behaviour gap referred to in many recent studies (Durif, Roy and Boivin 2012; Crane 2010; Ewert and Galloway 2006; Gupta and Ogden 2009; Yam-Tang and Chan 1998). Given the changes that the environment has undergone in past decades, concerns over climate warming and the subsequent rise of sustainability concerns has caused an increase in awareness among consumers with many wishing to adopt more environmentally sound behaviour. Government of Ireland (2012) noted that the green economy is one of the most dynamic and rapidly growing markets in the world with consumer preferences as one of its key drivers. These consumer preferences can be reflected in the changing purchasing habits of consumers and the introduction of ethical products and labels such as Fairtrade. In 2012, Fairtrade products seen a 15% growth in sales, with most of this growth concentrated on three commodities – cocoa, sugar, and bananas (The Fairtrade Foundation, 2012). Furthermore many products are now actively promoted on the basis that they are locally produced, organic, consist of recyclable materials or, in the case of the automobile industry, have low emissions.

Green marketing has stemmed from the notion of ethical marketing and social responsibility. Carrigan and Attalla (2001) state that social responsibility in marketing covers a diverse range of issues such as consumerism, environmentalism, regulation, social and political marketing. Mascarenhas (1995) as cited by Carrigan and Attalla (2001) noted that marketers are encouraged to behave in an ethical manner because information about a firm's ethical behaviours is thought to influence both product sales and consumers' image of the company. Polonsky (1994) referred to green marketing as activities which facilitates exchanges intended to fulfil human needs or wants with minimal harmful impact on the environment. Through their acts of green marketing, many marketers hope to generate a positive response from their customers which would result in an increase in goodwill, market share or sales (Lee, 2008).

However, with the rise of green marketing also comes the risk of greenwashing. According to Belz & Peattie (2009) the term *greenwashing* (which conflates 'greening' and 'whitewash') was first coined in 1986 in an essay by Jay Westerveld, an environmentalist, when objecting to hoteliers' practice of placing notices in hotel rooms which asked guests to reuse towels to 'save the environment'. Westerveld noted that there was little to suggest hoteliers concern for the environment and that their interest in washing fewer towels appeared to be motivated by a concern to save costs. Since then greenwashing has become a central feature of debates about sustainability and marketing communications (Belz & Peattie, 2009). Oxford (2013) defines to greenwash as 'disinformation disseminated by an organization so as to present an environmentally responsible public image.' Dahl (2010) states that the term "greenwashing" can be used to describe the ads and labels that promise more environmental benefit than they deliver. It refers to the practice of making unwarranted and inflated claims of environmental friendliness and sustainability in order to gain market share. Practices such as this can cause change in consumer perceptions towards green marketing and may increase scepticism.

The aim of this research is to evaluate whether the Irish consumer has experienced greenwashing in selected industries and if so, determine what impact, if any, this has on their attitudes towards green marketing and specifically consumer buyer behaviour so as to propose recommendations to marketers engaging in green marketing initiatives. Crane (2010) acknowledges that most studies which examine the relationship between specific attitudes towards green consumption and actual consumer behaviour reveal discrepancies between attitudes and behaviours. Many consumers remain sceptical of green products, often due to a lack of credibility and confidence in the companies that market them (Lee, 2008). In order to gain a comprehensive perspective across a broad range of products and services, three separate industries will be looked at for the purpose of this study: the food industry, the cosmetics industry and the motor industry. These particular industries were chosen because of the diversity of consumer choice on offer. Each industry offers the consumer a choice between purchasing a regular product and a greener version of the product. It is therefore representative of industries which have not fully embraced green marketing as their underlying ethos by virtue of the versions of their products/services on offer. Furthermore, by using a cross-industry view it may be possible to ascertain if

consumers' experience of greenwashing in one industry may negatively impact on green marketing initiatives in another.

This chapter will begin by discussing the rationale behind the research undertaken. Following this, a definition of the research problem will be presented together with an outline of the research objectives. Finally, a timescale for the research will be given and the chapter will conclude with an overview of the dissertation.

1.2 Research Rationale

Justification is the foundation of a research problem and must lead the reader toward the core issue of the research problem itself (Carson, Gilmore, Gronhaug & Perry 2001).

Nantel and Weeks (1996) state that it is important that the field of marketing be governed by a form of ethics. Furthermore, they contend that if marketing's true objective is to satisfy the consumer and if it is to have more than short-term consequences then an ethical approach is needed. According to Minteer, Collins, & Bird (2008) the concept of environmental ethics emerged in the 1970s and can be defined as a branch of applied philosophy which is devoted to exploring the foundations of environmental values and the obligations these may generate for society. In relation to the consumer as an individual Clark (2006) states that over the last few years, the term "ethical living" refers to how consumers adapt their lifestyles and shopping habits with the intention of reducing their negative impact (and increasing positive impact) on the world's environments, people, and animals. The evolution of ethics in marketing and the growing consumer desire to lead an ethical lifestyle has caused marketers to respond to these changes with the introduction of green marketing. Prothero (1998) proposes that green marketing is a vital component of the marketing discipline and that its investigation transcends many diverse aspects of marketing.

The emergence of links between the environment and consumption has had an influence on the judgements made by consumers not only concerning the quality of finished products but also the way in which these finished products are manufactured and marketed (Nantel & Weeks, 1996). The combined effects of decreasing world resources and climate change have led to a significant increase in environmental awareness world-

over (Evans, 2011). Customers appear to be more conscious about sustainability-related issues than ever before as evidenced by certain trends such as the popularity of Fairtrade products. The sale of Fairtrade products in the UK for example, have grown by 115% from £712 million in 2008 to £1.53 billion in 2012 and by 16% (from £1.32 billion) compared to 2011 (The Fairtrade Foundation, 2012). As a result, there is a need for businesses to sit up, take note, and act accordingly. Furthermore, increased government regulation regarding the environment has played a role in encouraging businesses to become more eco-friendly in their practices. Businesses in Ireland, for example, must comply with certain European and national laws designed to lessen their environmental footprint in areas such as waste management and chemicals (Europa, 2012). Green has gone mainstream and with it, the rules of marketing have been altered (Ottman, 2011).

Now, more than ever, it is important for marketers to engage in green marketing and promote greener and more sustainable products. Businesses can significantly increase their sales and revenue by catering to the ever-growing market of green consumers (Ottman, 2011). However, in order to effectively engage in green marketing, it is first essential that marketers gain an understanding of how the consumer perceives green marketing and the act of greenwashing and how their perception can influence their purchasing behaviour.

Many consumers are sceptical of greenwashing i.e. the act of misleading consumers regarding the environmental practices of a firm or the environmental benefits of a product or service (Delmas & Burbano, 2011). This study will offer a number of examples of companies that engage in green marketing in its true sense and additionally those that have been found guilty of engaging in greenwashing. The practice of greenwashing can have ongoing repercussions for companies in all future marketing endeavours and ultimately their financial performance as, once proven, it can damage their credibility and lead to a diminished brand image which in turn erodes brand equity.

By engaging in greenwashing activities, organisations demonstrate lack of understanding of the importance of brand values which may ultimately lead to devastating long-term consequences. There is strong empirical evidence that price, location, convenience and brand will still come first for most consumers (D'Souza, Taghian, Lamb, & Peretiatkos 2006; Mandese, 1991; Ginsberg & Bloom, 2004). However, when all of these are equal, companies can differentiate products through their environmental values and so it is

important to understand the perception that consumers have of green marketing as a practice and how it is necessary for companies to be able to substantiate their claims of ethically sourced and environmentally friendly products or services.

Green marketing is a relatively new phenomenon and consequently there has been much new research emerging over the past number of years on how green marketing relates to both consumer perception and purchasing power (Chen & Chai, 2011; Chen & Chang, 2012; Lee, 2008; Rahbar & Wahid, 2011; Subhani, Hasan, Osman & Rudhanil, 2012; Carrete, Castaño, Centeno & González, 2012; Drozdenko, Jensen & Coelho, 2011; Raska & Shaw, 2012). However, this research has largely been confined to Asia, the Americas and Southern European countries. Therefore, much of the findings in recent literature may be considered relevant in a particular cultural and geographical context and may not apply across all consumers in the global village. Prothero, Dobscha, Freund, Kilbourne, Luchs, Ozanne, and Thøgersen (2011) acknowledge that there is a gap between people's positive attitudes towards sustainability and their actual consumption behaviour. They contend that researchers should try to extend understanding of when and why consumers do not behave in accordance with their sustainability values. By discovering consumer perceptions of green marketing it may be possible to determine how these perceptions may or may not influence the gap between attitude and behaviour. This study looks at the practice of greenwashing across various industries and how this may impact on green marketing as a possible explanation of the attitude-behaviour gap that Prothero *et al.*, (2011) speaks of in previous research.

Consumer perception is complex and generalisations made for one culture and geographic demographic will often be considered meaningless if applied to another (Rahbar & Wahid, 2011). This may be evident through the number of conflicting findings from studies already conducted on consumer green purchase behaviour and whether or not consumers are willing to pay a premium for green products. Furthermore, Ottman (1992a, b) as cited by Rahbar & Wahid states that attitudes and demand for green products are likely to be uneven across differing cultures and market segments. Therefore, if marketers are to understand their consumers in Ireland with a view to making successful sales, further research is needed to discover how these consumers in particular perceive green marketing and how this impacts on their willingness to purchase green products over regular products across a mix of industries.

By conducting a cross-industry analysis across the food, cosmetics, and motor industries, this dissertation should allow for a more in-depth perspective to be gained on consumer perceptions of green marketing in industries that offer consumers a choice between ethical or eco-friendly versions of products/services and versions that are not. The aim of this is to determine whether or not experience of greenwashing in one particular industry negatively impacts on perceptions of green marketing in another industry. Although studies have been conducted in Ireland on particular environmental initiatives (Eaton & Stark, 1999; Caulfield, Farrell & McMahon, 2010; Connolly & Prothero, 2008), no study has examined consumer perceptions of green marketing across the three industries included in this study, and in particular, with a focus on the act of greenwashing. This study aims to address the gap in Irish-based empirical research to provide evidence-based proposals for marketers pursuing green marketing within the Irish market.

1.3 Research Problem

It is evident from the aforementioned literature (Prothero *et al.*, 2011; Yam-Tang & Chan, 1998; Durif *et al.*, 2012; Gupta & Ogden, 2009; Crane, 2010; D'Souza *et al.*, 2006; Ewert & Galloway, 2006; Chen & Chai, 2011) that an attitude-behaviour gap exists between positive attitude towards the environment and consumer consumption behaviour in green products/services. This leads to the dilemma of how consumers perceive green marketing and how effective are green marketing initiatives in altering consumer buying behaviour. This research, conducted during a major economic recession, is based on consumers resident in Ireland and their perceptions of green marketing across selected industries. It also sets out to address the practice of greenwashing and to ascertain if this practice has played a role in increasing consumer scepticism of green marketing. The research problem for this topic is as follows:

'Establish the prevalence of greenwashing across a range of selected industries and evaluate what impact, if any, the experience of greenwashing has on specific consumer buyer behaviour and on attitudes towards green marketing in general.'

1.4 Research Objectives

The objectives of the research conducted were as follows:

1. To conduct a comprehensive literature review relating to the dissertation topic.
2. To investigate whether the Irish consumer has experienced greenwashing across a selected range of products/services.
3. To identify if a reported experience of greenwashing in one industry leads to increased scepticism or negative attitudes towards green marketing in other industries.
4. To establish if Irish consumer attitudes and behaviours towards environmental friendliness are influenced by age, income levels, and environmental values.
5. To make recommendations for marketers engaging in green marketing within the Irish market.



1.5 Chapter Overview

Chapter 1

The first chapter of this dissertation offers an introduction to green marketing and the practice of greenwashing. It outlines the rationale for the research undertaken, outlines the research problem to be addressed and states the overall objectives of the research.

Chapter 2

Chapter Two contains a comprehensive review of the current literature published on the research topic, with particular emphasis on green marketing, greenwashing practices, green purchase behaviour and the attitude-behaviour gap.

Chapter 3

The third chapter outlines the methodology employed to conduct the research and provides a justification for the research methodology chosen.

Chapter 4

This chapter analyses the findings of the primary research collected from surveys, focus groups and interviews and provides a critical review of the respondents' views on green marketing practices, green purchase behaviour and consumer scepticism in relation to greenwashing practices.

Chapter 5

The final chapter of the dissertation proposes a number of recommendations for marketers engaging in green marketing activities which is evidence-based and drawn from the primary research.

1.6 Timeline for the Research

Month	Tasks completed
JANUARY <i>(End of)</i>	Research academic articles and books related to the topic.
FEBRUARY	Meet with supervisor to discuss the proposed topic. Begin writing Chapter One.
MARCH	Begin literature review. Make changes to Chapter One as needed. Decide on methodology methods and begin writing Chapter Three.
APRIL	Continue researching and writing literature review. Make changes to Chapters One and Three as needed.
MAY	Submit Chapters One and Three for review. Prepare first draft of survey questions and source participants for focus groups.
JUNE	Once test survey has been distributed and changes made, distribute survey online. Conduct focus groups. Submit work on literature review to date.
JULY	Collection and analysis of survey results. Write up findings from focus groups and surveys and analyse. Contact companies to ask permission to interview them.
AUGUST	Conduct in-depth interviews and add this analysis. Write concluding chapter of dissertation. Review and editing of dissertation. Addition of any new and relevant research to the literature review.

Table 1: Timeline for the research

1.7 Conclusion

This chapter has provided the rationale for conducting the research and the overall aims and objectives of the study. The study is based upon five research objectives aimed at identifying the prevalence of greenwashing and its impact (if any) on consumer perception of green marketing to result in evidence-based recommendations for marketers in Ireland. This chapter also provides an overview of the subsequent chapters. Finally, a timeline for the research is provided. This study is intended to enhance existing knowledge in the area of green marketing and aims to address the literature gap identified in relation to green marketing practices in Ireland and in particular, with relevance to greenwashing.



Chapter 2: Literature Review

2.1 Introduction

For many years, environmentalists have urged individuals in rich societies to scale back consumption levels in an attempt to reduce the damaging impact to the planet (Clark, 2006). This brought about the emergence of Green Marketing, whereby marketers hoped to increase sales and goodwill from customers by attempting to limit their impact on the environment and has led to the introduction of a wide range of products and services designed to assist their consumer's in achieving this laudable objective. This literature review provides a comprehensive overview of published research in relation to marketing ethics and green marketing; its evolution, green purchase behaviour, creating a green strategy, greenwashing, certification and finally, the future of green marketing.

2.2 The Evolution of Marketing Ethics

Carrigan, Szmigin, and Wright (2004) state that the term 'ethical' is used to convey matters of conscience, such as fair trade and animal welfare, social aspects such as working standards and also self-interested health concerns. Nantel and Weeks (1996) note that ethics is a very complex subject, particularly in business and report that many authors have divided the major philosophical trends in ethics into two large categories: the utilitarian approach and the deontological approach. Utilitarianism is a consequence-based approach to ethics and basically states that a decision concerning marketing conduct is proper if and only if that decision produces the greatest good for the greatest number of individuals. Thus in a business context, all stakeholders that could be affected must be considered in making a decision. (Nantel & Weeks 1996). The deontological approach to marketing ethics is largely based on the work of the philosopher Emmanuel Kant. This approach (also known as duty-based theory) states that the inherent rightness of an act is *not* decided by analysing and choosing the act that produces the best consequences, but rather according to the premise that certain actions are correct because they stem from fundamental obligations. According to this approach, motivations or intentions determine whether a marketing decision is ethical or unethical. From a business

perspective of deontology, decisions that produce good corporate outcomes but significantly hurt other stakeholders in the process are morally unacceptable. This approach to ethics also suggests that in reaching a goal there may be intermediate steps that could be judged as morally inappropriate. Thus an implication of the deontological approach is that sometimes business executives must take actions that do *not* produce the best economic consequences. In other words, one cannot assume that the end justifies the means (Nantel and Weeks, 1996; Cohen, 2001).

2.3 Ethics and Marketing

Nantel and Weeks (1996) state that if the true objective of marketing is the satisfaction of the consumer and the action aims at having more than just short-term consequences, then an ethical approach is needed. According to Fray (2007) ethics and social responsibility are closely linked in the performances of responsible organisations. Social responsibility in marketing covers a diverse range of issues including consumerism, regulation, political and social marketing, and environmentalism (Carrigan & Attalla, 2001). Sheth *et al.* (1988) as cited by Carrigan and Attalla (2001) highlight that until the 1960s, marketers either displayed disinterest in issues linked to their social responsibilities or deliberately ignored them. However, during this decade, high profile consumer activists encouraged some consumers to take a more aggressive stance against the shortcomings of marketing tactics. Today, well organised activists or lobbyists in the form of protest groups such as Greenpeace comprise a more concerted attack (Carrigan & Attalla, 2001). Since the emergence of ethical consumerism, consumers have started to demand a say in the production, processing, and resourcing of products (Lee, 2008). The consumer is no longer merely concerned with the satisfaction derived from a product or service, but also the manner in which the product or service has been obtained, leading to the emergence of a phenomenon linking the environment and consumption (Nantel & Weeks, 1996). Singhapakdi, Karande, Rao and Vitell (2001) note that ostensibly, ethics and social responsibility should have a positive impact on the success of an organisation, given that consumers make ethical judgements which are likely to influence their purchase behaviour.

2.4 Ethical Consumerism


Clark (2006) states that ethical living refers to the process of adapting our lifestyles and shopping habits with the aim of reducing our negative impact (and increasing our positive impact) on the world's environment, people and animals. According to Strong (1996) ethical consumerism can be considered as buyer behaviour that incorporates all the principles of environmental consumerism and more. At the core of their agenda, ethical consumers have the desire to enhance their well being through purchasing behaviour that avoids exploiting or harming humans, animals, or the environment (Ethical Consumer (2003) as cited by Carrigan *et al.*, 2004). According to Clark (2006) there are two main approaches to ethical living. The first approach aims to reduce direct impact on the environment by becoming more efficient in the use of electricity, gas, petrol, and other fuels. The second approach is that of ethical shopping, which involves considering social and environmental matters when making decisions about which products and services to purchase. Awareness of the destruction of natural resources has brought forward the issue of environmental protection. This in turn has created eco-friendly consumption known as "green consumerism" (Moisander, 2007). Companies have attempted to respond to consumer's growing environmental concerns through the introduction of a variety of green products (Kangun, Carlson & Grove, 1991). Examples of green products/services include organic food, green cleaning products, energy saving appliances, and products in recycled and recyclable packaging (Martin & Simintiras, 1995). Furthermore, Chen and Chang (2012) state that green marketing has become an effective approach in achieving product differentiation in this environmental era. The promotion of these green products attempts to influence green consumer behaviour and stimulate green product purchase (Martin and Simintiras, 1995).

2.5 Green Marketing

There is no single definition for green marketing. Many believe that green marketing refers to the advertising and promotion of environmentally characteristic products and associate terms such as environmentally friendly, ozone friendly, recyclable or phosphate free with it. However, green marketing is a significantly broader concept that can be applied to goods and services and one which incorporates many activities such as changes

to the production process, packaging, product modification and the modification of advertisements in moving towards a definition of green marketing. Mishra and Sharma (2012) define it as a holistic marketing concept whereby the production, marketing, consumption, and disposal of products and services happen in a manner which is less detrimental to the environment (Mishra & Sharma, 2012). Polonsky (1994) offered his own definition of green marketing:

“Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment.” – [Polonsky, 1994b, 2]



According to Peattie (2001) as cited by Mishra and Sharma (2012), the evolution of green marketing has seen three phases. The first phase was termed (1) ‘ecological’ green marketing – a period during which all marketing activities were concerned with helping the environment and solving environmental problems. The second phase was (2) ‘environmental’ green marketing whereby the focus shifted on to clean technology that involved designing innovative new products which took care of pollution and waste issues. The third phase was (3) ‘sustainable’ green marketing. Charter and Polonsky (1999) describe sustainability marketing as the process of building and maintaining sustainable relationships with customers, the social environment and the natural environment.

Peattie & Crane (2005) identify the late 1980s as the period when the concept of green marketing truly emerged. However, they acknowledge that the concept itself drew some attention in the 1970s. Polonsky (1994) notes that in 1975, the American Marketing Association (AMA) held the first workshop on ecological marketing in an attempt to examine the impact of marketing on the natural environment. Henion & Kinnear (1976b, 1) as cited in Polonsky (1994) defined ecological marketing at this workshop as:

“The study of the positive and negative aspects of marketing activities on pollution, energy depletion and nonenergy resource depletion.” – [Henion & Kinnear 1976b, 1]

It was during this evolution of green marketing in the 1980s that the concept of the 'green consumer' emerged in parallel as the understanding of social and environmental problems grew (Belz and Peattie, 2009). As the concept of green marketing has become firmly established as a core marketing activity, this has resulted in an increase in corporate activity and caused an upsurge of interest amongst academics to undertake research on green marketing (Peattie & Crane, 2005). Green consumers represented a potential market for any business that could identify green consumers among their existing or potential customer base who were concerned about environmental issues. Such consumers could be convinced to purchase products and brands differentiated by their social and environmental performance (Belz & Peattie, 2009). Through the practice of green marketing, many marketers hoped to generate a positive response from their customers which would result in an increase in goodwill, market share or sales (Lee, 2008). However, in a society that claimed to be sympathetic to the environment, market growth for green products did not live up to expectations and appeared to have achieved limited success by the mid-1990s (Wong *et al.*, 1996). Mintel's (1995) follow up report as cited by Peattie & Crane (2005) showed a significant gap between consumer concern for the environment and the actual purchasing of green products.

Peattie & Crane (2005) identified five marketing practices which contributed to this failure in green marketing activities during that period as follows:

- *Green spinning*: a reactive approach taken by companies that focused on reputation management and risk management by publicising their green stance in defence of public criticisms.
- *Green selling*: an opportunistic response to consumers environmental concerns whereby companies identified the green features and environmental benefits of existing products rather than offering new or alternative products.
- *Green harvesting*: using environmental consciousness as a method of cost savings within a company, for example, through packaging reductions.
- *Enviropreneur marketing*: bringing new green brands into the markets without first conducting the market research needed to assess the consumer's needs and wants.
- *Compliance marketing*: promoting green credentials that are no more than a simple compliance with environmental legislation.

Although green marketing did not achieve the expected success in the 1990s, it has gradually picked up momentum again thanks to the growing concerns about our environment (Lee, 2008). According to Chen & Chai (2011), with these increasing pressures, many companies are becoming more socially responsible and are creating greener products to meet the demands of their consumers. Regulatory pressures from the government also play a part in encouraging green practices. Belz and Peattie (2009) note that governments can influence corporate marketing strategies through financial measures such as taxation and incentives, the promotion of industry self-regulation, command-and-control-style regulation, and the provision of infrastructure. Additionally, given that governments also represent a key customer group for many companies, this may act as an incentive for companies to embrace sustainability practices. Polonsky & Mintu-Wimsatt (1995) hold similar views regarding government legislation, noting that many government institutions, as the watchdogs of society, have played important roles in the integration of green marketing issues.

Prothero (1990) suggests that in order to win over the green consumer and illustrate that they are not manipulating the green cause marketers need to show that they are not merely paying lip-service to the green agenda. Furthermore, Prothero (1990) proposes that companies need to adopt a societal marketing concept so that marketers can take advantage of opportunities arising from green consumerism. However, in order to implement their green marketing strategies, firms are searching for the determinants of green purchase behaviour (Chen & Chai, 2011).

The following section of the literature review will showcase some examples of best practice in green marketing in a range of industries.

2.5.1 Successful Green Marketing Cases in Industry

Case: Toyota

Toyota is one of the world's largest auto manufacturers and was recently ranked number one in 'The 2013 Best Green Global Brands' produced by Interbrand and Deloitte. The study itself measures the environmental perception of 100 global brands and compares it to those companies' actual performance. Makower (2013) quotes Will Sami, a director of Deloitte, on what it means to be one of the "best global green brands": *"It means essentially achieving not just a balance between perception and performance, but actually performing on both. It means that what you're doing in the way of performing is successful in some measure, and there is acknowledgement by stakeholders in the marketplace that you are achieving positive results."*

Toyota first unleashed their Prius model in 2000 and it has since become the best-selling hybrid vehicle in the United States according to Rottkamp (2010). Toyota also engages in green marketing to promote its environmentally friendly image. Rottkamp (2010) notes that in 2005, the company budgeted 50 million dollars into its hybrid vehicle advertising campaign and in 2007 aired a commercial during the Super Bowl, showcasing their "Hybrid Synergy Drive".

Toyota has done much to market their green initiatives. For example, the Toyota Ireland website boasts their environmental policy and environmental brochure coupled with the Toyota European Sustainability Report for 2011 together with their commitment to developing future green technologies and their recycling initiatives. The company's future goal is to build completely recyclable cars with zero emissions (Toyota, 2013).

Sources: Makower (2013); Rottkamp (2010); Toyota (2013)

Case Study 1: Toyota's Green Marketing Initiatives

Case: Innocent Drinks

Innocent began in 1999 and markets 100% pure organic fruit smoothies and juices as well as other products such as vegetable pots, noodle pots and fruit tubes. The company aims to tap into a growing consumer consciousness about where their food comes from, with a goal of becoming a truly sustainable business. In achieving this goal, Innocent has undertaken a number of steps which it markets and promotes on its products and website. These steps include favouring suppliers certified by independent environmental and social organisations (such as the Rainforest Alliance) and paying a premium for certified fruit; working on sustainability issues in partnership with suppliers; and holding a set of minimum standards for suppliers not covered by existing certification schemes. Additionally, in their pursuit of their aim to reduce the carbon impact of their packaging, Innocent uses as little material as possible per pack; as much recycled or renewable material as possible; materials and pack formats that are easy to recycle and they avoid using high carbon materials. They also suggest ideas for customers to reuse their packaging. Furthermore, they work alongside numerous environmental agencies such as Carbon Trust, The Edinburgh Centre for Carbon Management, and the Water Footprint Network. Innocent have also committed to donating 10% of profits each year to charity, primarily the Innocent Foundation, which funds rural development projects in the countries where they source their fruit.

Source: Innocent (2013)

Case Study 2: Innocent Drinks' Green Marketing Initiatives

Case: Burt's Bees

Burt's Bees has built their business around caring for the environment. Since its foundation in 1989, the company's ethos have been based on earth friendly natural personal care. The ultimate goal of the company is to be the "greenest personal care company on earth." – a goal which they hope to achieve by 2020 by which time they want to be carbon free and operating on 100% renewable energy. A member of the Sustainable Packaging Coalition, Burt's Bees are helping to develop innovative sustainable packaging solutions and have trimmed excess packaging from their products by as much as 50%. In addition, the company are also committed to a policy of sending zero waste to landfills and have outfitted their facilities with energy saving equipment and resource-management software. A further initiative is the company's responsible sourcing of product ingredients and vet their suppliers through the use of supplier self-assessments, third-party certifications, audits, site visits, and a Supplier Code of Conduct. The company markets their various green initiatives via their website and invites consumers to read their sustainability reports which offers the facts and statistics behind their environmental claims.

Source: Burt's Bees (2013)

Case Study 3: Burt's Bees' Green Marketing Initiatives

2.6 Green Purchase Behaviour

Given the destructive changes that the earth's environment has undergone such as global warming and its subsequent side effects such as volatile weather conditions, consumers have become more aware of the damage they are causing and many have chosen to adopt a more environmentally sound behaviour. Stern (2006, p. vi) warns that 'climate change threatens the basic elements of life for people around the world – access to water, food production, health, and use of land and the environment.' The adoption of environmentally sound behaviour may be conscious choices taken to prevent further damage and will manifest itself in a number of ways such as recycling of household waste, reliance on public transport or in green buying, that is, the purchase of environmentally friendly products such as energy-efficient light bulbs or recyclable or reusable packaging (Mainieri *et al.*, 1997). Further manifestations may occur in consumers' choice of political parties such as the Green Party in Irish politics.

2.6.1 Consumption as Voting

Shaw, Newholm & Dickinson (2006) state that the establishment of a consumption culture within society has been accompanied by growing concern among many consumers regarding the impact of their consumption levels both on the natural environment and the well-being of themselves and others. Doane (2001) as cited by Shaw *et al.*, (2006) believes that an increasing number of individuals are looking to act beyond their own immediate interests and instead consider the impact of their choices on the wider society. Increasingly, consumers are seeking to engage and influence the suppliers of products and services through their actions in the marketplace. Crane (2010) notes that the consumer may exercise power in the marketplace through their ability to choose among a variety of similar products which are available for sale. Nowadays, consumers are sending strong environmental signals via their purchase behaviours, forcing companies to change their marketing strategies through the power of "green purchase" (Chen & Chang, 2012). Szmigin and Carrigan (2002) as cited by Carrigan *et al.*, (2004) would agree with this as they argue that we are now seeing a consumer resistance movement that is a legitimate form of consumer empowerment. Various manifestations of consumer empowerment have emerged from consumers' ability to punish those suppliers

deemed to be unethical through acts of boycotting and protesting and to reward those who display genuine ethical credentials through 'boycotting' practices, that is, the deliberate purchase of a company's products/services in support of their policies. These forms of consumer empowerment are targeted at changing traditional marketing and business behaviour (Shaw *et al*, 2006). Gelb (1995) argued that the power of consumer boycotts is on the increase with more consumers refusing to buy a branded product or class of products in order to achieve some form of socially responsible outcome. Furthermore the predominance of the Internet within everyday life has resulted in access to global consumer populations which in turn has resulted in a proliferation of protests against certain brand name products by consumer advocacy groups. Companies such as Gap Inc., Nike and Shell have all been targeted by such protests in the past (Reed, 1999 as cited by Carrigan & Attalla, 2001). Nicholls (2002) argues that the cultural shift towards ethical purchasing is fuelled by increased exposure to and accessibility of information about global concerns.

2.6.2 The Attitude-Behaviour Gap

With the increasing pressure of environmental concerns, many organisations have taken steps to become more socially responsible through developing products that meet the demands of environmentally-conscious consumers. These companies wish to discover the determinants of green purchase behaviour in order to implement their green marketing strategies (Mainieri *et al.*, 1997). According to Martin & Simintiras (1995) the influence of consumer behaviour is a complex act that requires knowledge of its determinants. Ehrenberg and Goodhart (1979) as cited by Kalafatis, Pollard, East and Tsogas (1999) state that over the years a variety of explanatory theories of consumer behaviour have been put forward, deriving from both the social sciences (psychology, sociology, or economics) and the effects of marketing variables and external stimuli such as advertising, packaging, promotion, retail availability etc. Martin & Simintiras (1995) note that environmentally-friendly behaviour can be better understood if the relationship between environmental knowledge and attitudes and how they impact on such behaviour is understood. Correspondingly, Carrete *et al*, (2012) classify factors influencing ecological behaviour as external (e.g. education, culture, family, media), internal (e.g. attitudes, awareness, knowledge), and situational (e.g. legislation and economic rewards).

It is important to look at the factors influencing the consumer's selection process if the market for environmentally sustainable products is to become mainstream (Pickett-Baker & Ozaki, 2008). Hartmann & Ibáñez (2006) concur stating that green purchasing is central to societal transformation purchasing. Thus, green marketers are challenged with the task of increasing the perceived consumer benefits of going green to the addition of emotional value to green brands. Early studies by Dragon International (1991) and the Cone and Roper study as cited by Carrigan & Attalla (2001) suggested that consumers had an interest in ethical issues that did not directly impact on them and propose that they would be discriminatory in their purchasing behaviour should they be given more information regarding ethical and socially responsible activities. However, a study conducted by Mainieri *et al.*, (1997) found that consumers who were seen as environmentally conscious did not act on their concerns through purchasing green products.

Cherian and Jacob (2012) define environmental attitude as the judgement which an individual has towards the protection and promotion of the environment. Gupta & Ogden (2009) articulate that consumer behaviourists have long stressed the ability of attitudes in predicting the actions of people. Similarly, Hoyer and MacInnis (2001) note that people's attitudes affect the cognitive function (their thoughts) and the affective function (their feelings), and thus influence behaviours such as purchasing behaviours. Furthermore, Gupta & Ogden (2009) note a number of situational and dispositional factors that have been suggested for improving the predictability of consumer attitude, citing relevant authors behind the examples given which include:

- The consumer has a specific personality type with a “high need for cognition” (Cacioppo *et al.*, 1986)
- Beliefs are consistent with relevant attitudes (Norman 1975); and
- Attitudes are based on high levels of issue specific knowledge and/or personal experience (Davidson *et al.* 1985; Fazio and Zanna 1981; Smith and Swinyard 1983).

However, the predictive ability of attitude in environmental consumerism has been debatable (Gupta & Ogden 2009). Pickett-Baker & Ozaki (2008) state that an individual concerned about the environment does not necessarily act or behave in a green manner or does not necessarily engage in green purchasing. They refer to this as the value-action

gap. Similarly, Yam-Tang & Chan (1998) noted that although the ordinary consumer may be highly concerned for ecology, they may not necessarily act consistently with this. A high level of environmental concern does not necessarily lead to the same level of purchase action.

Various other authors have also made reference to this value-action gap, otherwise known as the attitude-behaviour gap (Kalafatis *et al.*, 1999; Young *et al.*, 2010; Durif *et al.*, 2012; Wong *et al.*, 1996; Boulstridge & Carrigan., 2000; Prothero *et al.*, 2011). Researchers have attempted to explain this inconsistency between attitude and behaviour by attributing it to a number of factors, for example, Gupta & Ogden (2009) found that several characteristics of the individual - trust, perceived efficacy, in-group identity, and expectation of others' cooperation – were significant in distinguishing between green and non-green buyers.

Plous (1993) as cited by Pickett-Baker & Ozaki (2008) found that individuals do not consider a product in isolation during the selection process. The effort involved in a consumer's decision making may be influenced by past experience of a product, the price or brand loyalty. Yam-Tang and Chan (1998) believe that the discrepancy between attitudes and behaviours is explained, in large part, by the fact that consumers are motivated by self-interest and that acting on personal responsibility may be slowed or prevented by non-environmental motives such as comfort, pleasure, or lower performance standards of the product.

Luzio and Lemke (2013) state that there is a research gap in terms of understanding how green consumers perceive green products in the context of a marketplace. Pickett-Baker & Ozaki (2008) note that studies on the consumption of environmentally-sustainable products have demonstrated that perceived product performance is a significant barrier in the purchase selection. Furthermore, a study by D'Souza *et al.*, (2006) identified six environmental factors that may contribute to the consumer's perception formation about green products - corporate perception; corporate regulatory compliance; product labels, packaging and ingredients; consumer's past experience with the product; and the product's price and quality.

- *Corporate perception*: This reflects the perception the consumer has of how socially responsible a company is and how responsive they are to environmental concerns. The study showed that consumer scepticism towards the purchase of

green products seems to be based on the perception that companies will not produce greener products if it has a negative effect on their profitability.

- *Corporate regulatory compliance:* companies have been given a parameter of legally acceptable environmental responsibility through government regulations. The study showed that respondents are of the opinion that current government regulations are not adequate in protecting the environment but that responsibility for this protection should not just fall in the hands of the government, but by companies too. Customers believe that the protection of the environment should come before profit maximisation.
- *Price and quality perception/Past experience:* consumer perceptions of higher price and lower quality may influence green buying behaviour. The study found that this perception can be linked with negative past experience with green products.
- *Product labels:* product labelling is designed to help customers to make an informed choice about products by communicating the benefits and characteristics of the product in addition to its claim of safety. The study found that although customers read labels they find them hard to understand. Packaging is expected to be recyclable and biodegradable while ingredients are expected to be free from animal testing.

Overall, the study by D'Souza *et al.*, (2006) showed a negative purchase intention towards green products which were found to be higher priced or of lower quality when compared to alternative products (D'Souza *et al.*, 2006). Green marketing requires that consumers must be willing to "pay" for a cleaner environment, whether through higher priced goods, government intervention or modified lifestyles (Polonsky, 1994). However, favouring the findings of D'Souza *et al.*, (2006), Mandese (1991) found that consumers are extremely price sensitive when it comes to buying green, regardless of their expressed concern for the environment. Peattie (2001) echoed these findings, noting that even the greenest consumer is unwilling to pay price premiums. These findings are further re-enforced by Mainieri *et al.*, (1997) whose study showed that while environmental concern among respondents was moderate to strong, this was not reflected in their buying habits and participation in environmental behaviours. More recently, a study conducted by Chen & Chai (2011) found that consumer's positive attitude towards the environment did not influence their green purchase behaviours.

Ginsberg & Bloom (2004) state that the primary function of products and services to the consumer is to fulfil their needs and wants and so the direct benefits of the products should be highlighted. They contend that companies should invoke the environmental attributes of a product on a secondary appeal basis while continuing to push attributes such as price, quality and convenience to the forefront. This is supported by findings from Ottman (1992) who reported that consumers were willing to accept green products once their primary needs for quality, convenience, performance, and affordability were met. A recent study by Durif, Roy & Boivin (2012) looked at perceived risks related to green product consumption. This study concluded that perceived negative risks based on green product attributes included functional financial, and temporal aspects while the physical and psychosocial aspects of green products were perceived positively. Furthermore, Ottman (1992) asserts that consumers' level of acceptance for green products would also increase when they understood how a green product could help to solve environmental problems. Similarly, Kim and Choi (2003) as cited by Chen & Chai (2011) report that consumers are unlikely to engage in pro-environmental behaviour if they believe that their action or effort will not make a difference or contribute towards a positive environmental outcome. In contrast to this, while the green purchasing behaviours of adults are governed by rationality and cognition, Lee (2008) found that successful green marketing among Hong Kong adolescents was tied to four factors: social influence; environmental concern; concern for self image in environmental protection; and perceived effectiveness of environmental behaviour.

Another study by Ying-Ching & Chang (2012) found that consumers appear to hold stereotypes regarding the effectiveness of green products versus regular products. This study found that consumers exhibited different usage amounts of green and regular products with more environmentally conscious consumers overusing a green product in comparison to a less environmentally conscious consumer. The research suggests that marketers need to clearly label and promote the effectiveness of green products as well as the product's sustainability. These findings attest to the importance of understanding the consumers' product usage or consumption behaviours and taking into account the individual differences among consumers.

Ewert & Galloway (2006) propose a different explanation for the value-action gap, suggesting that prior learning, whether within a social network (e.g. friends or family), exposure to media, or more formal education, tends to create a set of attitudinal responses

within the individual that may not represent actual beliefs or behaviours but instead represents a more socially-desirable set of responses. Furthermore, given that this set of responses are not strongly linked to an individual's behaviours or actions, they believe that this may cause the creation of the 'gap' between expressed environmental beliefs and environmental actions.

Yam-Tang and Chan (1998) note that an important implication of this value-action gap is that marketing strategies that are based on the assumption that consumers are deeply concerned about environmental issues and act accordingly may not be effective. Kollmus and Agyeman (2002) examined various models associated with consumer behaviour and concluded that no single definitive model serves to adequately explain the gap between environmental knowledge and awareness, and the display of pro-environmental behaviour.

2.6.3 Green Consumer Profiling

Akehurst, Afonso and Goncalves (2012) state that from the management point of view, recent studies have shown environmental management to have a positive impact on financial performance, thus further incentivising a commitment to green management. In addition, many firms have embraced green marketing strategies and the use of environmental attributes as a source of competitive advantage (Chen and Chai, 2010). D'Souza *et al.*, (2007) as cited by Akehurst *et al.*, (2012) notes that it is important for firms to understand green consumer profiles and behaviour to allow them to develop new targeting and segmentation strategies.

According to Hailes (2007) a green consumer is one who associates the act of purchasing or consuming products with the prospect of helping to preserve the environment. The green consumer is aware that they can contribute to environmental preservation by refusing to purchase products that would be considered harmful to the environment. Therefore, green consumers avoid the purchase of products/services that harm the environment during production, use, or disposal. Those that consume a lot of energy, are excessively packaged, are perceived as risky to health, or contain ingredients stemming from threatened habitats or species are also avoided. Anderson and Cunningham (1972) characterised the green consumer as an individual that not only satisfies their own

personal needs, but are also concerned with the welfare of the environment and society, and that belongs to an above average socio-economic class and with professional occupations which award them recognition and status. They profiled the typical green consumer as female, forty years old, with an above average socio-economic status and a high level of education. Moreover, Carrete *et al.*, (2012) state that traditional research on profiling green consumerism indicates that age and education are important variables for predicting environmental behaviour. They further contend that income is another socioeconomic variable that is generally thought to relate to environmental sensitivity.

Luzio and Lemke (2013) speculate that in order to trace the roots of the “green consumer,” studies have been commonly based on socio-demographic and psychographic variables such as gender, marital status, age, etc., approaches which have largely proved to be unsuccessful in developing a profile of green consumers with many studies offering contradictory and inconclusive findings. Furthermore, they note that overall, socio-demographic variables are considered to be of finite use in characterising the green consumer whereas understanding the green consumer’s psychographic variables such as “environmental knowledge” and “values” appears to have greater success in explaining green consumer’s attitudes and, in particular, their consumption behaviour. Both Anderson and Cunningham (1972) and Banergee and McKeague (1994) would agree with this rationalisation, arguing that psychographic variables provide more relevant insights into green consumer behaviour. More recently, Akehurst *et al.*, (2012) found that demographic variables analysed in their study including sex, age, education, and income are not relevant in explaining ecologically conscious consumer behaviour. In turn, psychographic variables appeared to be more effective in characterising the ecological conscious consumer. Of these psychographic variables analysed, perceived consumer effectiveness (PCE) and altruism (concern for the welfare of the society and others) were of particular significance in explaining ecologically green consumer behaviour. Similarly, Carrete *et al.*, (2012) in their study of Mexican consumers noted that displays of environmentally friendly behaviour were independent of social class and geographical region.

Peattie (2001) postulates that green consumption behaviour varies across industry sectors and product types and also throughout the consumption stages. Luzio and Lemke (2013) give an example of this, noting that green consumers may purchase ordinary products and then compensate with environmentally friendly post-purchase behaviour such as reusing

non-recyclable packaging. Findings from a study by Gupta and Ogden (2009) indicate that green buyers are generally high trusters and also would expect that others engage in green buying behaviour. Hence those consumers that exhibit high trust levels will be more likely to buy green products as they believe that others will do the same. The study also showed green buyers to have a much higher belief in perceived efficacy of green purchases than non-green buyers.

Contrary to previous studies, a recent study by Luzio and Lemke (2013) concluded that green consumer's product demands and consumption processes appear to be too complex, arbitrary and inconsistent to be segmented. They contend that the difficulty in segmenting green consumers may be explained by the ineffective nature of the attempt in the first place, noting that by focusing on segmenting green consumers, this would imply that there is a counterpart of consumers who consistently and deliberately consume with the aim of destroying the environment.

2.7 Product Certification & Branding

A key element to green marketing is credibility, it is critical that companies can back up their environmental claims to avoid "greenwashing" (Ginsberg & Bloom, 2004). Gallicano (2011) states that the number of companies issuing green claims over the last several years has dramatically increased as both consumers and companies pay more attention to their environmental footprint. With this in mind, consumers are expecting more information and disclosure from companies. By using environmental labelling on products, brands can communicate to customers exactly what the specific benefits and characteristics is of that particular product. The primary aim of labelling in addition to informing the customer of these product characteristics is to allow brands and corporations to position themselves in an environmentally positive light. The information provided can form a crucial part of the consumer's decision making process (D'Souza *et al.*, 2006).

Environmental labels are displayed either through environmentally safe symbols or messages. They may provide support to a firm in two ways: (1) endorsing products as being "environmentally compatible" and therefore having minimal impact on the environment which in turn can re-establish consumer confidence in green products, and

(2) the label can project a green image which transcends to a corporate environmental reputation by projecting the image of being environmentally sensitive to stakeholder groups (D'Souza *et al.*, 2006).

According to Belz & Peattie (2009), labelling schemes can refer to a variety of different schemes including both national and international schemes, for example, German 'Blue Angel' and the European Union Eco-label respectively. The schemes can also relate to a particular industry, method of transportation or business conduct (e.g. Fairtrade). Carlson *et al.*, (1993) as cited by D'Souza *et al.*, (2006) states that environmental labels can potentially provoke and modify consumer behaviour as it assists them in making better informed decisions.

Research conducted by Ying-Ching & Chang (2012) suggests that green products should be clearly labelled and promote both the products effectiveness in addition to its sustainability. Furthermore, Raska & Shaw (2012) state that firms must carefully consider how to frame their promotional messages so that the consumer will make positive associations with the firm's environmental initiatives. However, D'Souza *et al.*, (2006) notes that a review and evaluation of the green market indicates that some consumers appear unable to understand the exact meaning of some of the information on product labels. Furthermore, D'Souza *et al.*, (2006) argues that information on product labels which is inadequate, inaccurate, or difficult to comprehend may be the cause of consumer scepticism about dubious product claims.

2.8 Greenwashing

According to Feinstein (2013) heightened public attention to the environment in the late 1980s resulted in the creation of a new breed of consumer who demanded environmentally-friendly products. Consequently, the established niche market for ecologically sage products was transformed into a mainstream industry with the business community responding with a wave of marketing campaigns directed at green consumers. Throughout the years, marketers have been accused of "jumping on the green bandwagon" (Marketing, 1991), "price gouging" (Ottman, 1992; Wang, 1991) and using the term "green" to charge higher prices (Marketing, 1991) as cited by Martin and

Simintiras (1995). Polonsky (1994) states that in some cases, firms have misled consumers in an effort to gain market share while in other cases, firms have not fully considered the accuracy of their claims or effectiveness of their products.

Furthermore, high profile cases involving misleading environmental advertising claims such as those made by British Petroleum and Rover have served to increase scepticism towards green advertising claims. Martin and Simintiras (1995) state that consumer scepticism of green product claims implies that consumers do not hold positive attitudes towards claims by companies regarding their environmental impact. Bonini and Oppenheim (2008) state that although there is evidence that many of today's consumers exhibit strong pro-environment attitudes and a preference for green products and brands, there are also signs of a growing distrust in green marketing initiatives that can often be perceived as misleading or deceptive. While consumer awareness has created a market for environmentally-sound products which companies can tap into, it is recognised that the potential benefit of green marketing is undercut when it is accompanied by false or inaccurate information (Feinstein, 2013). Peattie and Crane (2005) state that companies have now become cautious about launching environmentally-friendly communications campaigns for fear of being accused of the act of "greenwashing". Parguel, Benoît-Moreau and Larceneux (2011) suggest that research needs to determine when and why CSR (Corporate Social Responsibility) communication can positively enhance a corporate brand and when and why it can damage them.

As previously noted, Dahl (2010) states that the term "greenwashing" can be used to describe the ads and labels that promise more environmental benefit than they deliver. It refers to the practice of making unwarranted and inflated claims of environmental friendliness and sustainability in order to gain market share. Delmas & Burbano (2011) note that the skyrocketing incidence of greenwashing can negatively affect both consumer and investor confidence in environmentally friendly firms and products. Policy makers are concerned greenwashing may increase consumer scepticism regarding company's environmental claims and undermine the desires of consumers to lead a greener lifestyle (Raska & Shaw, 2012). Similarly, Chen & Chang (2012) note that the act of greenwashing could endanger the entire market for green purchase and damage the green marketing of virtuous companies.

Delmas & Burbano organise the drivers of greenwashing into three levels: external, organisational and individual. The external drivers include pressure from both non-market actors (regulators and NGOs) and also market actors (consumers, investors and competitors). Organisational-level drivers of greenwashing include the ethical climate of a firm and their incentive structure, the organisational inertia and the effectiveness of intra-firm communication. Finally, individual-level drivers include narrow decision framing (making decisions in isolation), optimistic bias (i.e. over-estimation of the likelihood of positive events or the under-estimation of the likelihood of negative events), and hyperbolic intertemporal discounting (which results in a gap between long-term goals and short-term behaviour).

In short, a greenwashing firm engages in two simultaneous behaviours: poor environmental performance and positive communication regarding its environmental performance (Delmas & Burbano, 2011). However, Ginsberg & Bloom (2004) state that greenwashing is not as prevalent today as it was in the 1980s and early 1990s as now, standards and certifications assist customers in more readily identifying green products. They also state that the development of general principles and specific guidelines on the use of environmental claims by the Federal Trade Commission (FTC) in 1992 give marketers guidelines to follow to avoid exaggerating environmental claims.

In contrast to this, according to the vice president of TerraChoice Environmental Marketing, Scot Case, as cited by Dahl (2010), the problem of greenwashing is compounded by the fact that environmental advertising is not tightly regulated, at least in the United States. The aforementioned FTC environmental marketing guidelines, known as the Green Guides were updated in 1998 (Dahl, 2010). However, according to Laura DeMartino, assistant director of the FTC Division of Enforcement, as cited by Dahl (2010), the Green Guides do not address a number of the claims being made in today's market place. Feinstein (2013) and Delmas & Burbano (2012) concur, noting that regulation concerning greenwashing is lax.

Indeed, while Ginsberg & Bloom (2004) cite the use of eco-labels such as "Blue Angel" in Germany and "Energy Star" in the U.S. as being helpful in assuring customers that they are purchasing green products, it seems that among the hundreds of green labels on the market today, there are only a few which are broadly recognised as being highly reliable (Dahl, 2010). It was found that some labels are attained via self-certification (that

is, through purchase), as was the case with U.S. label Energy Star. However, not all eco-labelling is greenwash and there are now resources available to allow consumers to judge the labels that they are encountering (Dahl, 2010).

According to Raska & Shaw (2012), high levels of scepticism reported among US consumers necessitates the requirement for further research is needed to gain insight into how an organisation might elicit positive consumer responses with its marketing and promotional tools. Empirical evidence would suggest that consumers evaluate firms differently based on whether they believe the firm's green marketing initiatives are self-serving motivations (e.g. increased profits) or public-serving motivations (e.g. to raise awareness for a specific cause). Forehand and Grier (2003) demonstrated that firms tended to be evaluated in a more favourable manner by consumers if the firms motives were considered to be public-serving. Furthermore, the closer motives were aligned with a company's core business model, the more they were viewed as being self-serving. Becker-Olsen *et al.*, (2006) found that the number of negative thoughts about a firm increases if consumers perceive its underlying motives to be profit driven rather than socially motivated. However this did not consider how consumer responses may be affected by levels of brand commitment. A recent study by Raska & Shaw (2012) conducted on Starbucks found that brand commitment had an influence on a consumer's brand attitudes and purchase intentions towards a company with self-serving motives. Specifically, the study found that negative effects of self-serving benefit salience associated with less brand committed consumers can be reduced when an organisation is more forthright and acknowledges some of its self-serving motives as firm's environmental programs would be perceived as more sincere. On the other hand, more brand committed consumers responded similarly and favourably whether or not self-serving motives were a pronounced part of an organisation's overall environmental initiative.

This study by Raska & Shaw (2012) also found that if a company is more forthright in acknowledging their self-serving motives, they can reduce the negative effect of self-serving benefit by less brand-committed customers. Furthermore, they provide evidence that it is the perceived sincerity of a firm that drives this effect – by acknowledging self-serving benefits in addition to public-serving benefits, less brand-committed consumers were found to have a more favourable brand attitude, viewing the firm as more sincere. These results served to reinforce previous findings by Forehand and Grier (2003) who

also noted that firms were more favourably evaluated by consumers when both self-serving and public serving motives were acknowledged. The results provide evidence of the green scepticism that exists in today's marketplace, indicating the need for firms to use a forthright approach in promoting their environmentally friendly practices (Raska & Shaw, 2012).

In addition to this, Raska & Shaw (2012) suggest that firms can reduce the potential backlash caused by the promotion of their environmental programs through the use of marketing tactics that increases brand commitment.



2.8.1 The Seven Sins of Greenwashing

Terra Choice (2010) categorises the common greenwashing practices that firms commit as follows:

Sin of the hidden trade-off	This occurs when a company suggests a product is “green” based on an unreasonably narrow set of attributes without giving just attention to other important environmental issues.
Sin of no proof	This occurs when an environmental claim cannot be substantiated by easily accessible supporting information or by a reliable third-party certification.
Sin of vagueness	This occurs when a claim is poorly defined or so broad that the consumer is likely to misunderstand its real meaning.
Sin of irrelevance	This occurs when companies make environmental claims that may be truthful but are in fact unhelpful or unimportant to consumers seeking environmentally-friendly products.
Sin of lesser of two evils	This sin occurs when claims are made that may be true within the product category, but risk distracting the consumer from the greater environmental impacts of the category as a whole, for example, organic cigarettes.
Sin of fibbing	This sin is common: when environmental claims are made that are simply false.
Sin of worshipping false labels	This occurs when a product, through either words or images, gives the impression of a third-party endorsement where no such endorsement exists, that is, fake labels. Source: Terra Choice (2010)

Table 2: The Seven Sins of Greenwashing

2.8.2 Cases of Greenwashing

This section of the literature review will now explore some cases of greenwashing in various industries.

Case: Royal Dutch Shell

Greenpeace (2012) profiles a number of companies which claim to be playing a helpful role on sustainability but who are, according to Greenpeace, actually standing in the way of progress. Included in these profiles was Royal Dutch Shell, a manufacturer of oil, gas, and petrochemical operating in over eighty countries with over 43,000 service stations worldwide. The report argues that Shell has a track record of producing beautiful ads about caring for the environment which have later been banned as greenwashing. Shell Executives have led the Business Action for Sustainable Development (BASD) and the company has also produced sustainability reports and supported the Kyoto Protocol. Greenpeace accuse Shell of engaging in controversial, risky and polluting forms of oil mining. The company operates the world's deepest oil platform which is over a mile and half deep in the Gulf of Mexico. Greenpeace cite Shell's practice of stripping mines in the Boreal forest to gain access to the Canadian tar sands and the opening up of the Alaskan Arctic seas in its efforts to excavate oil. Furthermore, the company holds powerful positions in several business lobby groups which are hostile to climate change legislation, including BusinessEurope, the European Chemical Industry Council (CEFIC) and the European Roundtable of Industrialists (ERT). Greenpeace state that Shell has been involved in lobbying with these groups to undermine positive action on climate change on more than one occasion. Shell appears to be aware of issues surrounding climate change stating that it is "*one of the biggest challenges facing society*", and proposes that its "*programmes that help drivers to use less energy and emit fewer CO2 emissions*". However, Greenpeace (2012) notes that the company's business model is aimed at developing more of the increasingly marginal sources of highly polluting oil and gas.

Source: Greenpeace (2012)

Case Study 4: Royal Dutch Shell's Greenwashing Practices

Case: Mazda

Gang (2012) details ten of the world's worst greenwashers. Among these were America's Natural Gas Alliance (ANGA), Walmart, Fiji Water, Windex, and the Malaysian Palm Oil Council. A notable case among these ten was that of Mazda, a worldwide automaker based in Japan which is consistently rated as one of the most reliable and highly-ranked brands in the car-making industry. In February 2011, Mazda was one of more than 70 companies and organisations who partnered with the Universal Studios film, *The Lorax*, and produced a series of television ads, as well as a PR campaign which involved public schools and libraries, to promote the Mazda CX-5. The story behind the film itself served as a springboard for environmentalists as it taught about the evils of greed and overconsumption of the natural environment. Advertisements for the Mazda CX-5 associated with the *Lorax* touted its eco-friendliness and point out its highway gas mileage. Their PR campaign involved a donation of \$25 toward local libraries for each test-drive of a Mazda. However, although it was offering good mileage, the CX-5 still ran on gasoline and was a SUV, a class of car that has long been viewed as the epitome of wasteful consumption according to Gang (2012). The report argues that it is a mistake to call any car "environmentally friendly" on its own, especially given that this was a gasoline-burning car. The report concluded that Mazda's ad campaign based on the endorsement of the *Lorax* is a case of greenwashing.

Source: Gang (2012)

Case Study 5: Mazda's Greenwashing Practices

Case: The Body Shop

Founded by Anita Roddick in 1976, The Body Shop was one of the first companies to reject animal testing and use Fair Trade, natural ingredients in some of their products. In addition to this, The Body Shop is also known to champion various social causes and support developing communities through the purchase of hemp, shea butter and various other locally harvested products. However, according to Lodhi (2013), as is the case with most big cosmetic companies, The Body Shop's beauty range is in fact full of petrochemicals, synthetic colours, fragrances, and preservatives with many of their products containing minute amounts of botanically-based ingredients. In addition, Lodhi (2013) notes that most of their goods come in plastic tubs or containers, with certain products being irradiated to kill microbes. This radiation is generated from dangerous non-renewable uranium which cannot be disposed of safely. Furthermore, The Body Shop underwent a media controversy having been taken over by L'Oreal in 2006 when it was disclosed that L'Oreal has engaged in animal testing which is in direct conflict with the The Body Shop brand values.

Source: Lodhi (2013)

Case 6: The Body Shop's Greenwashing Practices

2.8.3 The Greenwashing Index

Greenwashingindex.com (2013) aims to educate consumers on how to “read” an advertisement and decide for themselves if what they are seeing is evidence of greenwashing. The site offers consumers the ability to rate or score an advertisement regarding its levels of greenwashing based on a number of criteria as follows:

The ad misleads with words	This involves the viewer/reader asking if they believe the advertisement to be misleading with regards to the company’s/product’s environmental impact through what it is saying.
The ad misleads with visuals and/or graphics	The viewer/reader must question whether they think the advertiser has used green or natural images in a way that is designed to make them think the product/company is more environmentally friendly than it actually is.
The ad makes a green claim that is vague or seemingly un-provable	The viewer/reader assesses whether or not the advertisement is claiming environmental benefits without sufficiently identifying what these benefits are. They must also note whether the advertiser has provided a source for their claims or for more information, in addition to whether these claims are in fact related to the company/product.
The ad overstates or exaggerates how green the product/company/service actually is	The viewer/reader must ask themselves if they believe the advertiser is overstating how green the product/company actually is and whether or not the company is capable of doing the things that are depicted/stated in the advertisement.
The ad leaves out or masks important information, making the green claim sound better than it is	The viewer/reader must ask if they think the advertisement exists to divert attention from something else that the company does or if there is something missing from the advertisement.

Table 3: The Greenwashing Index

2.9 Green Marketing Strategies

Although public opinion polls consistently show that consumers would prefer to buy a more environmentally friendly product when all other things are equal, in the minds of customers, the “other things” are rarely equal (Ginsberg & Bloom, 2004). As the aforementioned studies have shown, consumers are price sensitive when it comes to buying green and concern for the environment is not necessarily reflected in buying habits. According to Chan, Hongwei & Wang (2012) green marketing shares a number of aspects with traditional marketing such as products, price, promotions, and place. Similarly, Ginsberg & Bloom (2004) state that companies must remember the traditional product attributes which customers look for, such as price, availability, convenience, quality and performance and ensure that their green product offerings can match up to the regular products on those attributes. Customers expect all products to be environmentally safe and this expectation should be met without compromising on price or product quality (D’Souza *et al.*, 2006). This section examines possible strategies which organisations may employ in their green marketing activities.

Unruh & Ettenson (2010) describe three broad strategies that companies can use to align their green goals with their capabilities:

- **Accentuate:** this strategy involves playing up existing or latent green attributes in the current company portfolio.
- **Acquire:** this involves a company purchasing another company’s green brand.
- **Architect:** this strategy involves building new green offerings from scratch.

Grant (2008, p.25) defines a green brand as ‘*one that offers a significant eco-advantage over the incumbents and which hence appeals to those who are willing to making green a higher priority*’. Furthermore, Grant (2008) identifies four options for organisations involved in green marketing: 1) green brands; 2) setting new standards; 3) all doing our bit; and 4) network resource systems.



Graph 1: Green Marketing Options

These are explained as follows:

- **Green Brands:** suggests that a company should be offering a credible product or service that makes a significant difference to the environment and benefits the consumer through either cost savings or health advantages.
- **Setting New Standards:** By setting new standards a company can set an example and lead their industry in a certain direction in addition to availing of endorsements.
- **All Doing Our Bit:** involves the notion of involving people with the brand and one another in an attempt to reduce total impact on the environment. An example of this was Ariel's Turn to 30 advertisements.
- **Networked Resource Systems:** advocates the idea of focusing on a need and establishing if it can be met in the future in such a way as to displace some demand for physical products. Network computing has enabled these efficiencies.

By understanding the target consumers, marketers can establish whether or not “greenness” is a selling attribute that should be used. This re-enforces the earlier findings mentioned by Lee (2008) regarding the importance of customer segmentation. A 2002 Roper Survey as cited by Ginsberg & Bloom (2004) divided consumers into five separate green segments as follows:

1. *True Blue Greens*: this segment of consumers has strong environmental values and is four times more likely to avoid products deemed not to be environmentally conscious.
2. *Greenback Greens*: this segment, while more willing to purchase green products than the average customer, do not take part in political protests.
3. *Sprouts*: this segment does believe in environmental causes but will not practice green living and will not buy a green product if there is a higher price tag.
4. *Grouzers*: this segment of consumers tends to be uneducated regarding the environment and is sceptical of the idea that they can affect change. They also believe that green products are too expensive and not as effective as regular products.
5. *Basic Browns*: this segment does not care about social and environmental issues.

If a company’s customers fall into one of the first three customer segments, the company stands to lose business if it is not consistently perceived as a green brand. Ginsberg & Bloom (2004) recommend four strategies that a business may use based on the various customer segments.





Graph 2: Green Marketing Strategies

1. *Lean Green:* Companies engage in pro-environmental activities in order to reduce costs or improve efficiencies but do not publicise their green initiatives. Often, companies using this strategy do not want to promote these initiatives for fear of being held to a higher standard by the public which they may be unable to live up to.
2. *Defensive Green:* This company uses green marketing as a response to a competitor's actions or a crisis in the hope of limiting damage and enhancing brand image. Unless they believe that they can sustain a competitive advantage on its basis they will not continually promote their green efforts.
3. *Shaded Green:* While this company makes substantial investments in long-term environmentally friendly process, they do not choose to use this fact to differentiate themselves from competitors, but instead rely on other product/service attributes.
4. *Extreme Green:* This company has environmental concern at the core of the business with greenness integrated into all processes of the business.

It is important to determine how a customer perceives the greenness of the company and its competitors before choosing the optimum strategy to employ. A shaded green or extreme green strategy may be the best option if a marketer believes that the brand can be

differentiated in an honest and credible way over the long-term. However, a lean green or defensive strategy may be best if the competitor's green strategy is truly better or the cost of becoming greener than competitors does not enhance profitability enough (Ginsberg & Bloom, 2004).

In addition, Kronrod, Grinstein & Wathieu (2012) offer advice for communicating environmental messages. They suggest that when message receivers perceive an issue as important they are affected more by assertive rather than non-assertive phrasing and are more willing to comply with the message. However, they recommend that less assertive language should be used when targeting a general audience of consumers who are possibly less concerned about environmental issues. Cherian and Jacob (2012) champion an effective brand management strategy stating that if brands put in enough effort then consumer attitude should shift towards suitable measures of sustainable consumption. Ottman (1998) is of a similar opinion, noting that through the promotion of effective marketing concepts, consumers that may be considered passive towards the notion of 'green' can be shifted to active consumers willing to pay a premium price for products which are pro-environmental. The next section will examine the future of green marketing for organisations.

2.10 The Future of Green Marketing

Prothero *et al.*, (2011) surmise that from a sustainability perspective, there is a requirement for public policies and the establishment of marketing and business systems which encourage both organisations and people to produce and consume in a socially responsible manner and within ecological limits. Peattie & Crane (2005) state that green marketing needs to act as a bridge between the current western lifestyle and the driving marketing behind this lifestyle, and a future form of marketing that is based around more sustainable production and consumption. They also identify a number of elements of marketing thought and practice that must be reshaped in order to facilitate more substantive progress. These are as follows:

- *A redefinition of the "product"* – in order to promote more sustainable production and consumption, focus needs to go beyond the tangible product and onto how the product is made.

- *A willingness to change markets and products* – new product development and new types of markets will assist in creating a more sustainable economy. These markets will involve “alternative” forms of production and consumption (such as farmers’ markets) in addition to substitution of services for goods.
- *An emphasis on benefits from product use* – rather than keeping the focus on product ownership, opportunities such as hiring products or using community owned products will promote dematerialisation.
- *Marketing communication that aims to inform rather than just impress* – consumers must be educated on sustainable development through both the education system and through society and life.
- *A focus beyond current consumer needs* – this must also encompass the needs of current and future stakeholders.
- *A willingness to manage demand and expectation* – realistic expectations about costs and consequences of consumption must be instigated and demand and expectations must be managed downwards.
- *An emphasis on cost instead of price* – instead of marketing products around price, marketers should be emphasizing issues such as energy efficiencies and the overall costs of ownership and use to differentiate products from the competition.
- *Taking more responsibility* – more sustainable marketing will require companies to and marketers to take more social responsibility and assist their consumers by guiding them towards more sustainable behaviour.

According to Polonsky (2012), the range of terms used to define green marketing (e.g. environmental marketing, ecological marketing and responsible marketing) all have a common focus on the choices and decisions individuals make while conscientiously trying to minimise harm to the environment. However, an effective definition of green marketing must integrate the transformational change needed to restore and improve the environment in addition to creating value for both society and individuals. The difference with transformative green marketing, Polonsky (2012) states, is that unlike the current marketing perspective which focuses on reducing societal harm and meeting human needs, transformative green marketing seeks to improve the natural environment and enhance mankind’s quality of life.

Polonsky (2012) cites a number of barriers to transformational green marketing which centre on the conflict between benefits for the individual and benefits for the society and the environment. Some of the barriers mentioned are:

- Individuals continue to make consumption decisions based on benefits to their own welfare. They see the environment as subservient to human needs. In addition to this, consumers will act in an environmentally-responsible manner only if they believe that it will be in their best interest.
- As no fixed deadline exists for environmental issues, most consumers consider the problems to be somewhere in the future and see no reason to worry about them in the present. This also comes to light in their decision-making, as consumers may have difficulty integrating their decisions with any future consequences.
- Many consumers perceive that their individual choices do not have the ability to make a difference in terms of environmental problems.
- The promotion of ownership of assets to by marketers results in increased consumption.

Peattie & Crane (2005) argue that little of what has happened under the current banner of “green marketing” has had to do with the environment and therefore green marketing should not be written off as a prophecy unfulfilled, but recognised as one whose time has not yet come. Polonsky (2012) contends that for transformational green marketing to occur, the inclusion of macro-issues into consumer, firm and government’s micro-behaviour will be required.

Grant (2008, p. 27) suggests a simpler view that should be embraced:

“Sacrifice is the wrong framework, perhaps instead we need to see the present in terms of stupidity, decadence, ugliness, waste....all on an obscene scale.”

2.11 Conclusion

The concept of ethics and green marketing is a broad one and contains many facets which can be examined. This literature review has attempted to familiarise the reader with the concept of green marketing, its main components and its potential impact on marketing theory based on a number of published works. It is evident that the popularity of green marketing has increased dramatically over the last number of years. Consumers are now engaging in the act of consumption as a voting mechanism, encouraging organisations to behave in a more ethical manner through their green purchase behaviours and acts such as boycotting (Shaw *et al.*, 2006; Crane, 2010, Chen & Chang, 2012, Gelb, 1995).

However, empirical evidence points to the existence of an attitude-behaviour gap in relation to consumers' attitude towards the environment and their actual green purchase behaviours. Various explanations for this gap have been offered including external, internal and situational factors (Carrete *et al.*, 2012); the impact of attitudes on the cognitive and affective functions and thus, behaviours (Hoyer and MacInnis, 2001); individual characteristics such as trust and perceived efficacy (Gupta & Ogden, 2009); and the role of self-interest and non-environmental motives such as comfort or pleasure in consumer behaviour (Yam-Tang and Chan, 1998). The gap may also be explained by consumer's price sensitivity in green purchasing (D'Souza *et al.*, 2006; Mainieri *et al.*, 1997; Mandese, 1991) and consumer sensitivity to the quality of green products/services and the benefits gained from their purchase (Gingsberg & Bloom, 2004; Durif *et al.*, 2012; Ottman, 1992; Chen & Chai, 2011; Ying-Ching & Chang, 2012).

Furthermore, many authors believe that there has been an increase in consumer scepticism thanks to the practice of greenwashing among some of today's organisations. Raska & Shaw (2012) suggest that firms can reduce the potential backlash caused by the promotion of their environmental programs through the use of marketing tactics that increases brand commitments. A number of green marketing strategies suggested by various authors have been detailed (Grant, 2008; Gingsberg & Bloom, 2004; Unruh & Ettenson, 2010). Finally, this literature review addresses various researchers' thoughts on the future of green marketing for organisations and the barriers present to transformation change in green marketing (Peattie & Crane, 2005; Polonsky, 2012).

The next chapter of this study will introduce the research methodology employed in meeting the objectives of the research undertaken.



Chapter 3: Methodology

3.1 Introduction

This chapter provides a justification of the research methodology adopted in this study. An explanation of the qualitative and quantitative research methods chosen are identified and justified. The limitations of the research will also be discussed in addition to data collections methods and analysis procedures.

3.2 Research Methodology

Teddlie and Tashakkori, (2009, p.21) define a research methodology as a “*broad approach to scientific inquiry specifying how research questions should be asked and answered.*”

There are three main research types, exploratory; descriptive; and explanatory. Neuman (2011) offers explanations of these research types. Exploratory research is used to explore a new topic of which there is little known or one which has not yet been explored. The goal of this research is to formulate more precise questions to be addressed in future research. The purpose of descriptive research is to describe a social phenomenon by presenting the specific details of a situation, social setting, or relationship. Finally explanatory research is used to explain why something occurs in relation to issues that are known and described.

The nature of this study is both exploratory and descriptive. Initial research conducted was exploratory by means of the literature review. The literature review allowed the author to become familiar with existing information relating to the research topic, determine the feasibility of conducting research and formulate the research problem to be addressed. Following the initial research, primary research conducted to answer the research problem was descriptive in nature. Neuman (2011) states that data –gathering techniques used by descriptive researchers include surveys, field research, content analysis, and historical-comparative research.

Hankel, Sorcher, Beer, and Moses (1982) propose specific guidelines to ensure the usefulness of the research. Firstly, all parties involved in the research should be made aware of the aims of the research. Secondly, the study should provide information on the specific problem and then provide a helpful solution. Finally, the research and its subsequent findings must be both valid and reliable.

The methodology employed throughout this study aimed to gain unique consumer insight into attitudes and behaviours towards green marketing and green purchasing. Although previous studies have investigated the attitude-behaviour gap in relation to this topic, it had yet to be explored in Ireland, across the three industries selected for this study, and in the context of previous customer experience of greenwashing. Through the amalgam of primary and secondary research and qualitative and quantitative techniques a greater understanding of consumer perceptions could be gained and applied against the research problem and the completion of the research objectives.

3.2.1 Secondary Research

Bryman & Bell (2007) states that secondary data is all data previously published about the research topic. The sources of secondary data utilised in this research study were academic journals, relevant textbooks, reports, newspaper articles and relevant websites. An examination of the available secondary data enabled the researcher to gain further insight into the research topic under investigation and identify potential gaps in the theory which allowed for formulation of the research problem. The literature also uncovered the methodology which authors have used previously in investigating similar studies.

3.2.2. Primary Research

Primary data is original information collected by the researcher (Bryman & Bell, 2007). The nature of the research and the research objectives suggest that both surveys and focus groups should be used to gain valuable insight into the consumers' opinion of green marketing. The utilisation of a written/computerised survey allowed for an un-biased response from the chosen sample. Furthermore, surveys allow for an exploration of attitudes, behaviours and perceptions of the respondents. Focus groups were chosen to allow for a more in-depth discussion on consumer opinions on the topic and to probe deeper into responses gathered from the survey. By employing both methods to investigate consumer opinions, the approach chosen should add further depth and insight

into the research problem and allow for further investigation into the attitude-behaviour gap previously referred to. Additionally, a well-rounded view of customer opinions and perceptions is seen to be of particular value in making recommendations to companies engaging in green marketing.

Upon completion and analysis of the results from the survey and focus groups, in-depth interviews with marketing representatives from companies in the food, motor, and cosmetics sector were undertaken in order to glean the professional marketer's opinion on the results attained from consumer research. In addition, it aimed to establish whether or not these marketers were aware of consumer opinions towards green marketing practices and to gain insight into the level of importance they attach to green marketing. Furthermore, these in-depth interviews could help the researcher to gain the marketer's opinion on the attitude-behaviour gap evident in previous empirical research and assist the researcher in making recommendations for marketers engaging in future green marketing initiatives.

3.3. Research Approach

Depending on the form of data generated and the degree of mathematics involved, research studies may be described as being qualitative or quantitative. Qualitative methods are used to discuss an issue in-depth with respondents and are useful for gaining insight into perceptions, attitudes, and opinions. Quantitative methods are used to gain statistical data on a particular subject. This study uses both quantitative and qualitative research methods in order to gain a comprehensive insight and competently address the research question, more commonly referred to as a mixed method approach. Johnson, Onwuegbuzie and Turner (2007, p.123) offer the following definition of mixed methods research:

Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purpose of breath and depth of understanding and corroboration.

Using the mixed method approach strengthens the reliability of the study through triangulation. Hussein (2009) notes that triangulation involves the use of qualitative and quantitative methods in studying the same phenomenon with the purpose of increasing the credibility of the study.

Harrison & Reilly (2011) identify the four major mixed methods designs used. These are: exploratory designs, explanatory designs, embedded designs, and concurrent designs. Researchers using exploratory designs would first collect qualitative data, analyse this, and then build on this using quantitative follow-up. Explanatory designs are the opposite, researchers first collect and analyse quantitative data and build on these findings with qualitative follow-up. If using an embedded design, researchers collect both quantitative and qualitative data either sequentially or concurrently with one form of the data playing a supporting role, or both forms of data supporting a larger design. This particular research study employs the concurrent design to mixed method research. This means that the researcher collects both qualitative and quantitative data simultaneously and analyses both data strands separately before merging the data. This design helps to bring together the strengths of both quantitative and qualitative research to validate the data.

3.3.1 Qualitative Research

Ghosh and Chopra (2005) state that qualitative data is data in the form of descriptive accounts of observation or data that is classified by type. Qualitative data sources include observation, interviews, questionnaires, documents and texts and the researcher's impressions and reactions. This type of research is used to gain insight into people's attitudes, behaviours, perceptions, culture, value systems or lifestyles. For this reason it was decided that qualitative research style was essential in identifying the attitude-behaviour gap evident in green purchasing behaviour and in addressing the research objectives of the study.

3.3.2. Quantitative research

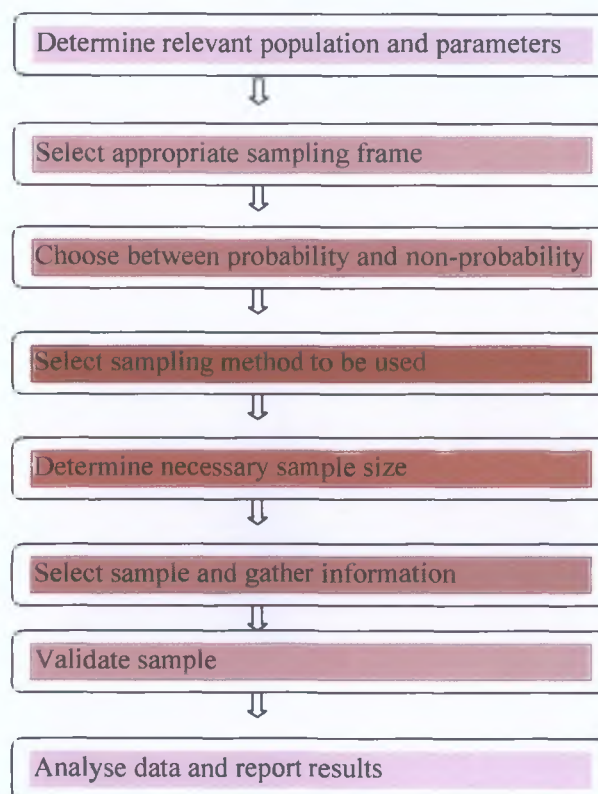
Quantitative data is data that can be expressed numerically or classified by some numerical value (Ghosh and Chopra, 2005). Common forms of quantitative methods include surveys, documentaries, observation and experiments and points to the passive roles of the researcher during data collection. Quantitative research will be used to gain a

statistical analysis of the respondents based on age, sex, profession and a range of other factors to see if a pattern can be identified in respondent characteristics.

In order to increase validity and credibility of the research undertaken, both qualitative and quantitative research methods have been used in data collection.

3.4. Sampling

In the selection of population to be researched, there are many different samples which a researcher can choose from. Macionis and Plummer (2002) state that a population is the people who are the focus of the research. A sample then is the part of the population that we select to measure and observe. The aim of this study was to gain as wide a representation of the population of Ireland as possible by sending surveys country-wide. By choosing a sample of the population, the researcher can target a proportion of the entire required population without incurring the cost, quality and feasibility issues which may be encountered by a researcher in trying to target the population as a whole. The sampling procedure undertaken as part of the study is as follows:



Graph 3: Sampling Procedure for Research

The relevant population to this study is consumers resident in Ireland. The parameters for the study were that the respondent population sample be over the age of 18 and resident in Ireland. The aim of this study was to take a representative sample from different socio-economic backgrounds. Therefore the sampling frame (or sample of the population to which surveys were sent) was residents in Ireland in a range of occupational statuses which included public servants, private sector workers, students, unemployed, self-employed and other.

The two approaches to sampling which one may take are probability sampling and non-probability sampling.

Probability sampling involves selecting members of the sample through a random process with each member of the population having the same probability of being chosen for the sample. Types of probability sampling include random sampling, systematic sampling, stratified sampling, cluster sampling, area sampling, and multistage sampling. Random sampling occurs when each member of the population has an equal probability of being included in the sample. Systematic sampling occurs when the researcher selects random a random number from a population list, selects that individual and then selects every second, third, fourth etc person after this random start. Stratified sampling involves dividing the population into categories that are mutually exclusive and collectively exhaustive. There may be one or more basis of stratification of the population in this form of sampling e.g. age, sex, demographics. Cluster sampling is oriented around the selection of groups rather than individuals within the population such as neighbourhoods or schools and these groups are randomly selected from the population. Area sampling is an advance on cluster sampling in which geographic areas serve as the basis for determining the population categories. Finally, multistage sampling divides the population into groups or clusters from which a few of the clusters or areas are then sampled. The advantage to probability sampling is that it is possible to estimate the amount of sampling error. However, probability sampling incurs greater time, cost and complexity in comparison to non-probability sampling.

Non-probability sampling, by contrast, is not based upon any probability principles or laws. It is not objective as the sample members are chosen consciously by the researcher. This form of sampling includes convenience sampling, purposive sampling, quota sampling, and judgement sampling. Convenience sampling occurs when the sample is

selected based on the convenience of the sampler, and the availability and willingness of the sample to respond. Purposive sampling is a sample within which members are chosen to meet the needs of the study and meet a predetermined criteria. Quota sampling selects respondents from a clearly defined group. Finally, judgement sampling selects a sample that the researcher judges to be representative of the population.

Non-probability convenience sampling was chosen to support the primary research of this study. Due to time and financial constraints it would not be possible for the researcher to survey the entire population. Non-probability convenience sampling allows the researcher a low-cost method of reaching the sample population. Surveys were distributed both online and offline. The online surveys were conducted through Survey Monkey and were distributed through the FAS email network and social networking sites. Surveys were also distributed among other accessible offline channels for respondents to fill in and return so as to include other occupations. This included the distribution of surveys throughout various social clubs and also to participants in FAS courses in their offices in Sligo to ensure that the unemployed were also well represented throughout the study. This mixture of channels allowed the sample to include a variety of ages, genders, occupations, pay-grades and citizens from various counties throughout Ireland. The survey questions are included in Appendix III of this study.

Similarly, a non-probability convenience sample was chosen for the focus groups. Due to time and travel costs it was not feasible to have participants from all over the country. For this reason, participants of the focus groups were residents of the North-West region of Ireland and included respondents from Sligo, Leitrim, Monaghan, and Donegal. Respondents were sourced from notices placed on a notice board in FAS Sligo and unknown acquaintances of the author's relatives and friends residing in the North-West region.

Given the volume of companies throughout the motor, food, and cosmetics sectors in Ireland, it would not be possible to conduct interviews with them all. Instead, a number of emails were sent out requesting interviews with various companies in these three sectors and interviews arranged with those who responded and agreed to participate in the study. A copy of the email sent to companies is included in Appendix II.

3.5 Research Instruments

On careful consideration and analysis of various research methods the researcher decided to utilise questionnaires, focus groups and in-depth interviews to collect quantitative and qualitative data. These methods were considered to be the most effective methods in order to gain the data needed to achieve the research objectives and answer the research problem. Furthermore, the use of the triangulation approach strengthened the reliability of the study.

3.5.1 Questionnaire Survey

The initial primary research approach chosen was a questionnaire survey. This section of the study will discuss why surveys were chosen along with the questionnaire design and distribution methods employed by the researcher. The survey questions are included in Appendix III of this study.

A survey is a procedure in which information is collected systematically about a set of cases (such as people, organisation, objects). The cases (or sample units) are selected from a defined population and the aim is to construct a data set from which estimates can be made and conclusions reached about this population.

(Thomas (edited by Greenfield), 1996, p.115)

Neuman (2011) states that the survey is the most widely used data-gathering technique for the social sciences and can take many forms such as phone interviews, internet opinion polls, and questionnaires. Surveys were chosen as a research method for a number of reasons. Firstly, the anonymity of respondents should encourage more truthful answers and an un-biased response from the chosen sample. Secondly, a wider sample can be reached within the restricted time-period of the dissertation by distributing computerised surveys. Furthermore, surveys allow the researcher to mix qualitative and quantitative research in one method through the use of various question styles. They allow for an in-depth exploration of attitudes, behaviours, perceptions, expectations and knowledge of the respondents in addition to yielding various classification variables. Surveys are appropriate when one wants to learn about self-reported beliefs or behaviours (Neuman, 2011). It must be noted that there are disadvantages to survey use. In this case,

the main disadvantage of using email-distributed surveys include low response rates. In order to try and avoid this, respondents were sent an email to inform them of the type of survey that would be administered within the coming week followed by a reminder email two weeks after the questionnaire was sent. Other disadvantages include a lack of control over the conditions in which a questionnaire may be completed; respondents' reactions to the questions cannot be observed nor physical characteristics such as age and sex clarified; compatibility with various web software and hardware combinations must be considered; and finally there is no one present to clarify questions for respondents or to probe for more information if respondents give incomplete answers. This final reason highlights the importance of creating a well-designed questionnaire.

3.5.1.1 Questionnaire Design

Neuman (2011) states that there are two key principles which guide the writing of good survey questions. These are to avoid possible confusion and to keep the respondent's perspective in mind. According to Neuman (2011) there are a number of pointers to consider when writing survey questions among which are:

- Avoid jargon, slang, abbreviations, confusion and vagueness.
- Avoid double-barrelled questions, leading questions, and questions beyond respondent's capabilities.
- Avoid overlapping or unbalanced response categories.

These pointers were taken into account in the design of the survey. In addition to this the researcher considered question style. It was decided that a mix of open-ended and closed-ended questions would be use to gain both qualitative and quantitative data. The survey also included a number of statements and Likert scales. (Appendix III).

3.5.1.2 Questionnaire Distribution

This study is based on surveys distributed via online and offline channels. As previously stated online surveys were distributed throughout the FAS email network and social networking sites to examine a mixed population sample with a variety of ages, employment statuses, income levels, and county origins. These surveys were distributed throughout June and early July 2013. Prior to distribution, it was necessary for the researcher to gain a disclaimer from the director of FAS (Appendix I). Surveys were also distributed throughout various classes in FAS Sligo offices and local social clubs. A total

of 1300 surveys were distributed via online channels with a further 80 surveys distributed via offline methods.

3.5.2 Focus Groups

Following analysis of the findings of the questionnaire, focus groups were used to gain a more in-depth insight on the research problem and to probe further into some of the key themes emerging from the questionnaires. The focus group used a qualitative format in order to validate survey results. Neuman (2011) states that the focus group is a special qualitative research technique in which people are informally interviewed under a group discussion setting. The main purpose of focus groups is to gain insights by listening to a group of people from the targeted population. It allows the researcher to learn and understand what people have to say and why, and can explore and define issues in customer terms. As with survey use, there are both advantages and limitations to the use of focus groups. In regards to this dissertation, the advantages of using focus groups were as follows:


- It allowed the researcher to probe participants regarding certain survey questions that required further insight.
- Participants gave their opinion on findings established from the survey and offered possible reasons as to why they believed these findings to be the case.
- Interaction between participants of various gender, age, employment status and beliefs allowed for debate regarding certain topics that were discussed during the focus group.

Disadvantages or limitations were as follows:

- Participants for the focus groups were confined to the North-West region of Ireland and did not cover representatives from other regions due to time and travel costs associated with getting participants to Sligo to take part in the focus groups.
- At times it was difficult to encourage participation from all group members and maintain the intended focus of the focus group.

A number of factors had to be considered before the focus groups could be conducted to include the number of participants, the recruitment of participants, the setting in which

they would take place and the discussion guide. In addition, it was necessary to gain respondents permission to record the focus group. Each focus group conducted included six participants. As previously stated, the participants were recruited through notices placed on a notice board in FAS Sligo in addition to acquaintances of the researcher's friends and relatives that were unknown to the researcher. This allowed for an un-biased response as there was no direct connection between the researcher and participants. Prior to conducting a focus group, themes and questions were drawn up from the survey findings to be discussed throughout the focus groups (Appendix IV). All participants gave permission for the focus group to be recorded. Both focus groups were conducted in a classroom in IT Sligo on different dates outlined below.



	Profile	Location	Date
Focus Group 1	Participants included four females and two males ranging in age from 22 to 45 with varying employment statuses including full-time employed, part-time employed, unemployed and students.	IT Sligo	1 st August 2013
Focus Group 2	Participants included three males and three females ranging in age from 21 to over 60 with varying employment statuses including full-time employed, part-time employed, unemployed, and student.	IT Sligo	6 th August 2013

Table 4: Schedule of Focus Groups

3.5.3 In-depth Interviews

Following initial consumer research utilising surveys and focus groups, findings were analysed and in-depth interviews were subsequently undertaken with companies from the motor, food, and cosmetics sectors. The interview method chosen was semi-structured in-depth interview where the questions were prepared beforehand (Appendix V).

Domegan & Fleming (2003) state that the in-depth interview technique uses extensive probing throughout the course of a personal interview so that the respondent explores their perspectives on a particular topic. In the case of this study, in-depth interviews were chosen to gain insight from the marketers of the selected companies regarding the key findings and themes extracted from the consumer research undertaken. The purpose of this was to establish whether or not these marketers were aware of these consumer perspectives and whether they are considered when determining their green marketing strategies. In addition, by conducting these in-depth interviews it enabled the researcher to fulfil the research objective to make recommendations for marketers operating in Ireland in their use of green marketing.

The use of semi-structured interviews allowed the researcher to use pre-prepared questions (Appendix V) as a general guide upon which to conduct the interview while providing the flexibility to ask additional questions and request clarifications as required. Easterby-Smith, Thorpe and Lowe (1991) suggest that the following situations are appropriate for the use of semi-structured interviews:

- When the interviewee's opinions or beliefs about a particular topic or situation must be understood.
- In developing an understanding of the interviewee's world whereby the researcher wants to influence it.
- When there is highly confidential or commercially sensitive subject matter involved.
- When the step-by-step logic of a situation is not clear.
- When the interviewee is most susceptible to in-depth feedback in a one-to-one situation.

Saunders *et al* (2000) states the advantages and disadvantages of conducting face-to-face in-depth interviews.

Advantages of In-depth Interviews:

- There is control over the time, date, and place of the interview.
- They allow for flexibility and can be adjusted around the interviewee.
- Interviews are easily administered as complex documents or long questionnaires are not required.

Disadvantages of In-depth Interviews:

- Interviews can be inconvenient as they require both parties to be present at the time of interview.
- They are a more costly and time consuming method of research as travel may be required.

3.5.3.1 Administration of In-depth Interviews

Collis & Hussey (2009) note that the semi-structured format involves asking predetermined questions but also allows probing in order to obtain more detailed information about a particular answer or to explore new and relevant issues that may arise from a particular answer. A total of three interviews were conducted with marketing executives from the food, motor, and cosmetics industry. The interviews were scheduled following an explanatory e-mail providing information on the objective of the research and securing agreement for participation (Appendix II). The interview questions were tailored to each of the three sectors. Open-ended questions were used to allow for flexibility and the exploration of the topic. These questions were e-mailed to participants in advance to allow them to review and prepare for the interview and permission was required from all interviewees to record the interviews for subsequent analysis. Two of the three interviews were conducted over the phone. The third interviewee stated that they did not have the time to speak directly but instead emailed on their answers to the questions sent. Additionally, two of the three companies interviewed asked to remain anonymous. The company from the food sector gave permission for their name to be

included in this study. Transcripts of the interviews are included in Appendix V of this study. Interview schedules are given as follows:

Company	Interview Format	Interview Date	Interview Duration
Glenisk	Phone Interview	26/08/2013	25m 30s
Motor Sector	Phone Interview	28/08/2013	23m 46s
Cosmetics Sector	Answers emailed	Received 27/08/2013	N/A

Table 5: Schedule of Interviews Conducted

3.6 Research Limitations

A number of research limitations have been identified in the completion of this study. Firstly, the study was limited to an examination of the food, cosmetics, and motor sectors and did not account for green marketing activities in other sectors. Also, due to the allocated timeframe and willingness of companies, only one company within each sector was interviewed. Given that these companies already engaged in green marketing, it did not allow for comparison against companies that are not actively using green marketing to promote their products. In addition, focus group participants were confined to the North-West region of Ireland due to time and travel constraints. Furthermore, the use of online surveys did not allow for clarification of the respondent's profile nor did it allow for further probing of some of the answers provided. However, the researcher tried to counteract this limitation through the use of focus groups to allow for additional exploration of the key themes noted throughout survey analysis. Finally, a further limitation was the researcher's ability to analyse the source material and the potential for bias.

3.7 Ethical Considerations

There were a number of ethical considerations to be considered in the undertaking of this research. Firstly in the collection of research, it was necessary to ensure respondent's privacy. In addition, it was necessary to make respondents aware of the purpose for the research being conducted. Before collecting survey responses from the FAS email

network the author got a disclaimer from the director of FAS. As focus groups were undertaken it was necessary to receive prior permission from respondents to record the focus group. Anonymity of all respondents was protected in the transcripts of focus groups conducted. Similarly, in conducting the in-depth interviews, participants were made fully aware of the overall objective and purpose of the research and assured that the information given would not be used for any other purpose than that of this study. Permission was also required to record the interviews. Finally, in gathering research information and analysing responses the author had to abide by current data protection laws. All data was stored on a password-encrypted computer.

3.9 Conclusion

This chapter has provides justification for the research methods employed in this study. It discusses the overall research design and data collection methods employed by the researcher in addition to the advantages and disadvantages of the methods used. Furthermore, the chapter has also outlined the ethical considerations considered in conducting this study. The limitations of the study are also identified. The following chapter will present the primary research findings in detail and provide a discussion of these findings.



Chapter 4: Findings, Analysis & Discussion

4.1 Introduction

This chapter presents an analysis of findings of the primary research with particular emphasis on key themes (discussed in Section 4.4) to include key motivators in consumer purchase behaviour; the impact of age and employment status on attitudes and behaviours; differing attitudes towards sectors; the experience and impact of false claims on levels of consumer scepticism and; consumer expectations.

Primary research was undertaken in three formats – surveys, focus groups, and in-depth interviews. From the analysis of the survey results, key themes emerged and were discussed further during the focus group stage of the primary research process. Finally, in-depth interviews were undertaken with marketers in each of the three sectors chosen in order to gain a deeper insight in the research findings.

4.2 Survey Distribution

A total of 1300 surveys were distributed via online channels including the FAS email network and social media sites. A further 80 surveys were distributed by hand to classes in FAS Sligo and local social clubs. The total response to these surveys was 582 of which 409 surveys were fully completed and valid. This gave a completed response rate of 31.46%. The data was analysed using Survey Monkey online survey programme. The survey itself consisted of a total of 20 questions including open and closed questions, together with ranking questions and a Likert scale rating question (Appendix III). Further breakdowns of some of the answers provided is included in Appendix VI.

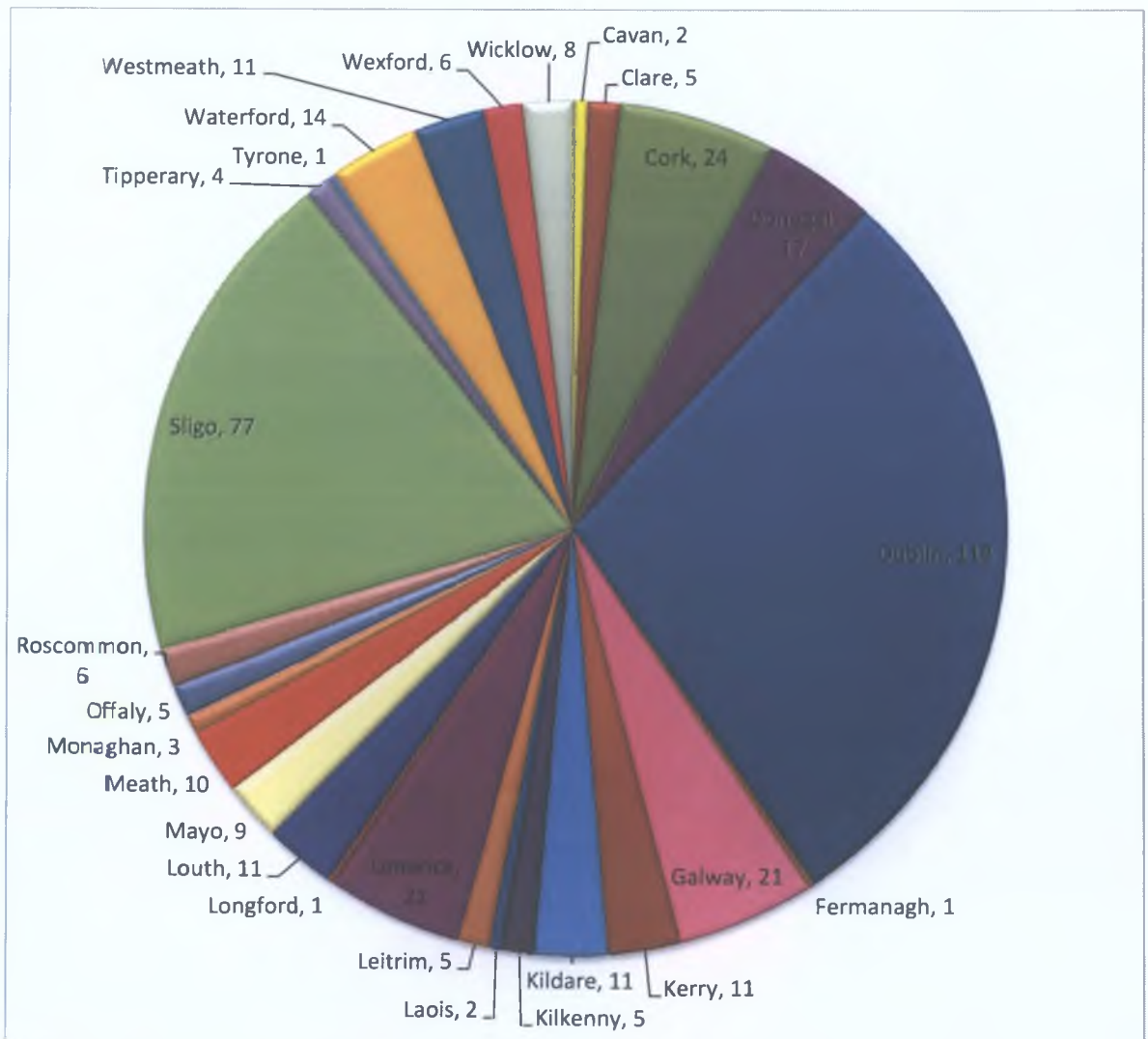
4.3 Survey Analysis

This section of the study will analyse the data gained from surveys under the key headings of Respondent Profile, Environmental Attitudes, and Respondent's Recommendations. Following this, a discussion of the key themes emerging from this data will take place in Section 4.4 of this study.

4.3.1 Respondent Profile

The questionnaire asked respondents to state their county of residence, age bracket, and employment status in order to develop a respondent profile for the purpose of this study.

4.3.1.1 County of Residence



Graph 4: Response to Q.1 (Appendix III) 'In which county do you currently reside?'

As illustrated by the above graph, responses were gathered from 27 of Ireland's 32 counties, giving depth and validity to the research based on consumers resident in Ireland. The majority of respondents were resident in Dublin and Sligo with 29% and 19% respectively. Fermanagh, Tyrone, Cavan, and Laois had the least respondents with only one or two responses for each county.

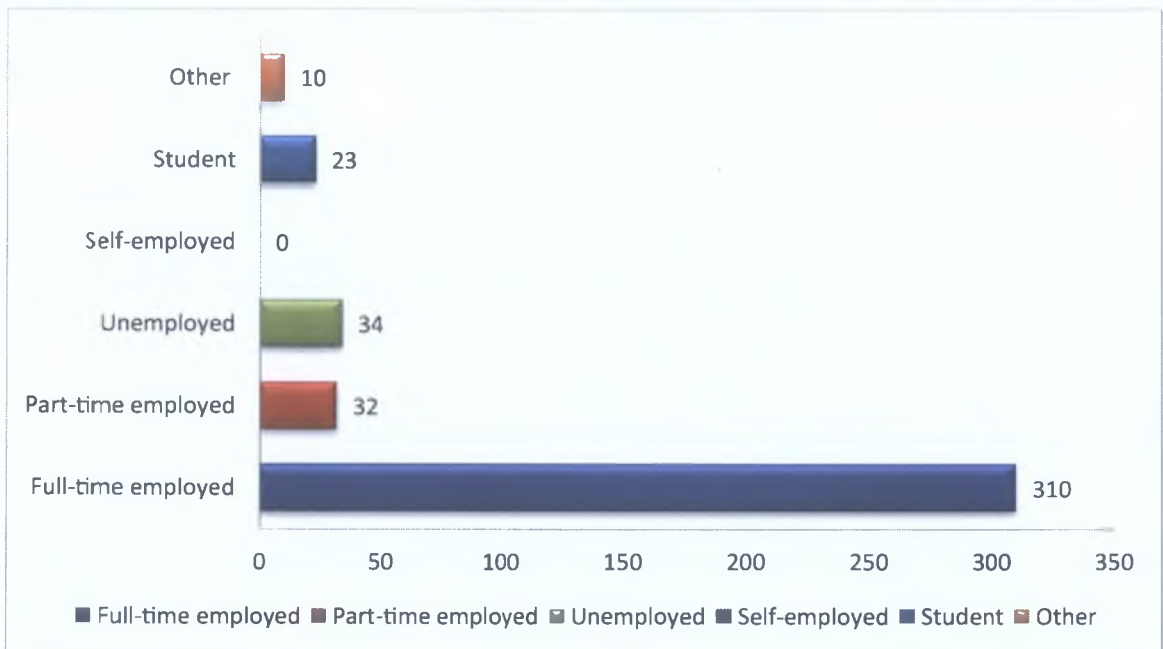
4.3.1.2 Age Range

Age	Number of Respondents
18-24	45
25-29	27
30-39	56
40-49	104
50-59	144
60+	33

Table 6: Response to Q.2 (Appendix III) 'What is your age range?'

The age range of respondents to this study also varied significantly with the majority of respondents hailing from within the 40-59 age range. It is likely that much of this large number of responses within this age range was a result of the large number of surveys distributed throughout the FAS email network.

4.3.1.3 Employment Status



Graph 5: Response to Q.3 (Appendix III) 'Which of the following best describes your employment status?'

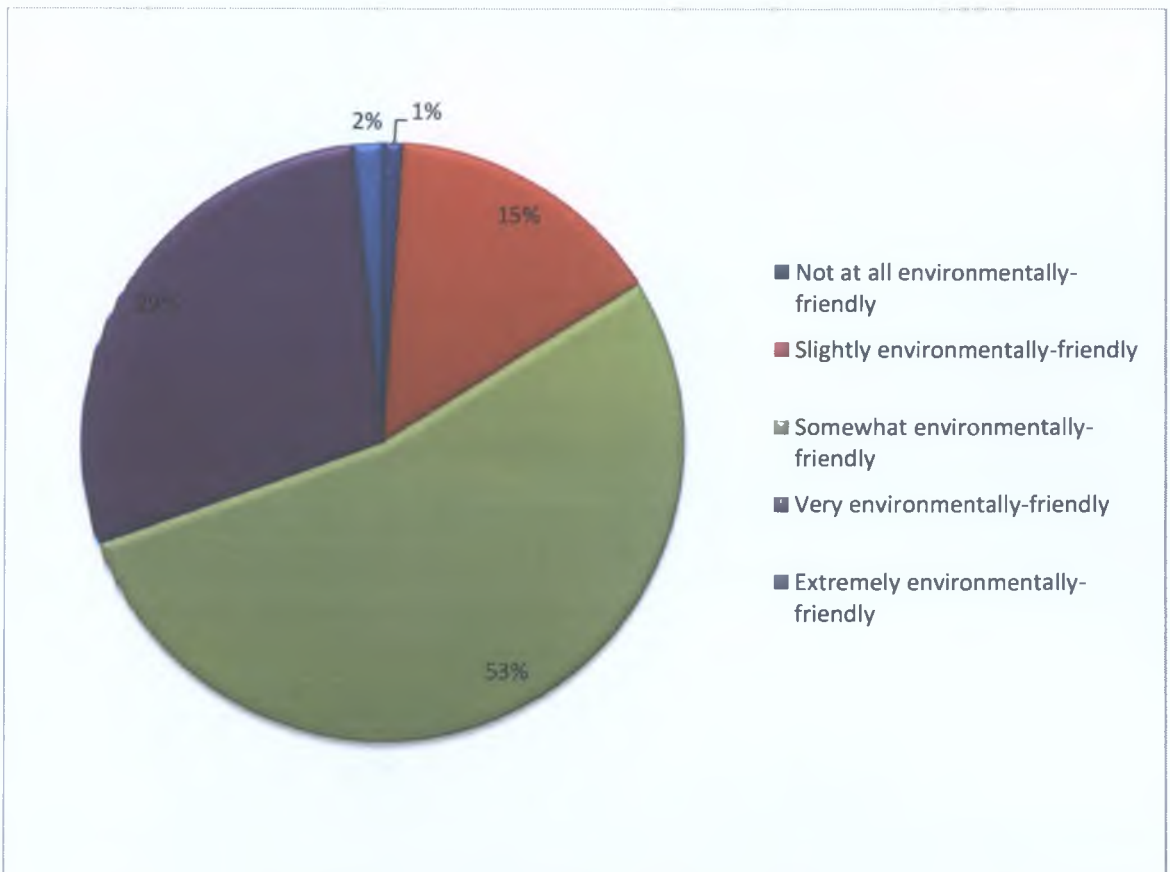
In addition to building a profile of respondents this question was asked with the research objective of establishing whether consumer attitudes and behaviours are influenced by income levels. The majority of respondents to this survey were full-time employed, however all other categories bar self-employed are also represented. Those who listed their employment status as 'Other' stated that they were job-sharing, in contracted employment, or completing an internship.

To summarise this section on respondents' profiles, the majority of survey respondents are in full-time employment, aged between 40 and 59 and are resident in Dublin and Sligo. All other age ranges and an additional 25 counties are represented in the survey responses in addition to various other employment statuses with the exception of the self-employed. The following section of survey analysis will examine respondent's environmental attitudes.

4.3.2 Environmental Attitudes

This section of survey analysis examines respondents' environmental attitudes and behaviours such as recycling and green purchasing. It also looks at respondents' willingness to pay a higher price for environmentally-friendly products or services, their purchase motivators, experience with environmentally-false claims, and the impact of environmentally-false claims on brand loyalty and levels of consumer scepticism both within and outside certain sectors.

4.3.2.1 Perceived Environmental Values



Graph 6: Response to Q.4 (Appendix III) 'How environmentally-friendly would you consider yourself to be?'

This question set out to discover respondent's perceptions of how environmentally-friendly they are. Later survey questions ask respondents about their recycling habits, green purchasing habits, and purchase considerations. Therefore this allowed for a comparison between how environmentally-friendly respondents considered themselves to

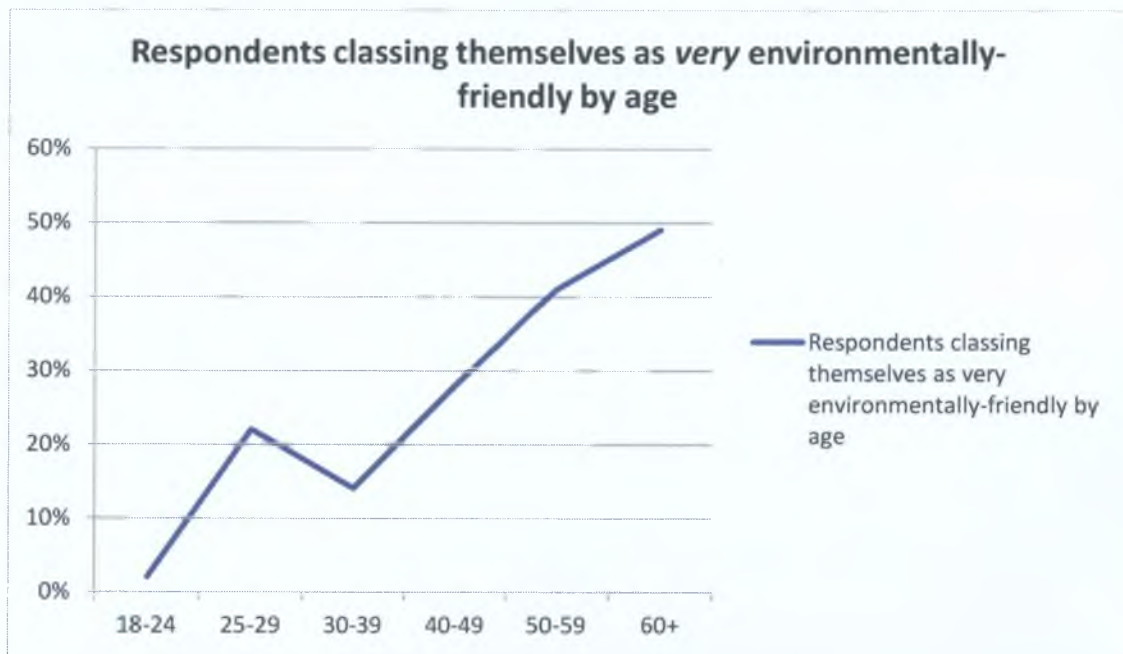
be in their answers to this question and respondent's environmentally-friendly behaviours and attitudes in response to the questions that follow.

Respondent's perceptions of their environmental-friendliness varied significantly with the majority of respondents choosing the medium option of 'somewhat environmentally-friendly'. A significant number of respondents also stated that they were very environmentally-friendly with a lesser amount perceiving themselves as being 'slightly' environmentally friendly. Very small percentages of respondents stated that they were either 'not at all' or 'extremely' environmentally-friendly. As previously mentioned, Carrete *et al.*, (2012) state that traditional research on profiling green consumerism indicates that age and education are important variables for predicting environmental behaviour.

Included in Appendix VI is a breakdown of respondents' answers to this question based on both their age and employment status. Students and part-time employed were the only employment classes that had a percentage of respondents answering that they were not at all environmentally-friendly. In almost all employment statuses, the majority of respondents classed themselves to be somewhat environmentally-friendly. For students, the vast majority classed themselves as slightly environmentally-friendly. Those in full-time and part-time employment had between 34% and 22% respectively class themselves as being very environmentally-friendly compared to 9% and 0% respectively for unemployed and students. In all categories bar students, a very small percentage classed themselves as extremely environmentally-friendly. These findings may provide support to findings by Anderson and Cunningham (1972) who characterised the green consumer as belonging to an above average socio-economic class and with professional occupations. Similarly, Carrete *et al.*, (2012) noted that income is a socioeconomic variable that is thought to relate to environmental sensitivity.

Age also showed an impact on perceived environmental-friendliness. The 18-24 age group was the only group in which respondents classed themselves as being not at all environmentally-friendly. The majority of respondents in this age group considered themselves to be slightly environmentally-friendly. In all other age groups bar the 60+ age group, the majority of respondents classed themselves as being somewhat environmentally-friendly. From the 40-49 age group onwards, the percentage of respondents classing themselves as being very environmentally-friendly increased with

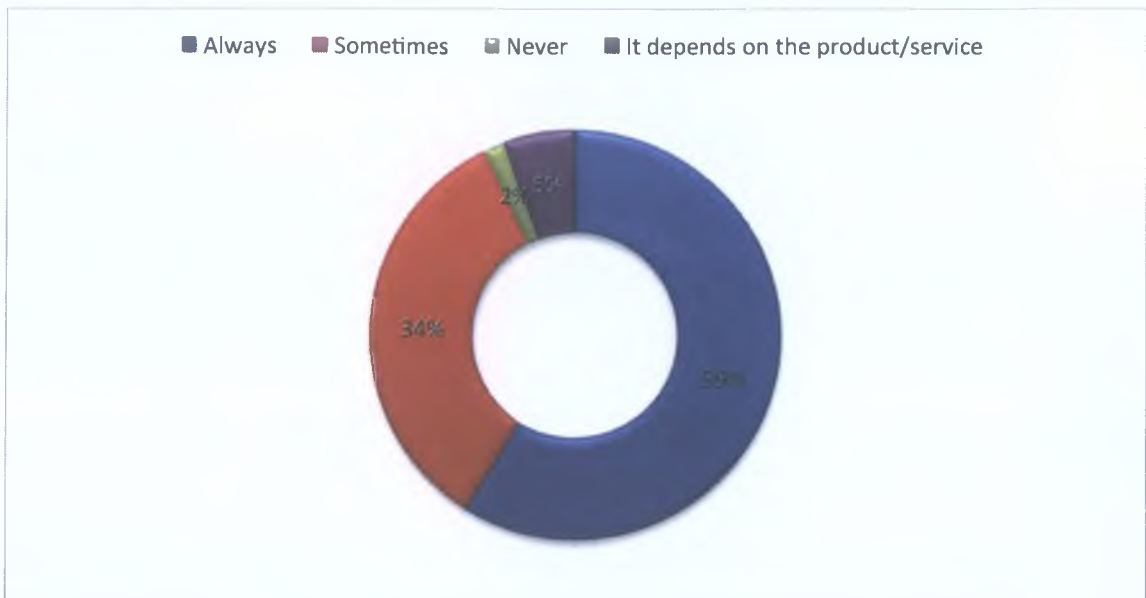
the majority of respondents in the 60+ age group classing themselves as this. This gives a level of support to findings by Anderson & Cunningham (1972) who profiled the typical green consumer as forty years old, albeit, female. However, the findings of this study indicate that environmental-friendliness continues to increase beyond forty years of age into older age brackets as illustrated in the below graph.



Graph 7: Illustration of increase in environmental-friendliness as age increases

However, a recent study by Luzio and Lemke (2013) indicated that socio-demographic variables are considered to be of finite use in characterising the green consumer whereas psychographic variables such as “environmental knowledge” and “values” have greater success in explaining green consumer’s attitudes and consumption behaviours. Similarly, Akehurst *et al.*, (2012) found demographic variables to be of little use in explaining ecologically conscious consumer behaviour. These previous findings would indicate that employment status and age should have little impact in characterising environmental-friendliness. This study, however, indicated that this was not the case, finding that those in full or part time employment, and those aged forty and above, classed themselves to be more environmentally-friendly.

4.3.2.2 Recycling Habits



Graph 8: Response to Q.5 (Appendix III) ‘Do you recycle?’

In response to question 5 (Appendix III) which asked respondents if they recycled, almost 59% of respondents stated that they always recycle, followed by almost 34% who noted that they sometimes do. Smaller percentages of respondents stated that their recycling habits either depends on the product or service or that they never recycle. Respondents commented on what they recycled – including bottles, plastics, or cans or a combination of these and other recyclables. Of those who stated that they ‘sometimes’ recycle or their recycling depends on the product/service a common theme is that they will recycle when it is possible or convenient or when there is a service in place. One respondent pointed out that their recycling was dependent on how well labelled the product was in terms of whether or not it could be recycled:

“Not all packaging is labelled well in terms of recyclability – if in doubt I will err on the side of caution and put with general waste.”

Finally, of those respondents that stated that they never recycled, one respondent commented that they were simply “too lazy” to do so.

Included in the Appendix VI is the breakdown of responses to this question based on perceived levels of environmental-friendliness. As one might expect, the percentage of

respondents who answered that they 'always' recycle increased as levels of environmental-friendliness increased.

4.3.2.3 Average Weekly Spend on Green Products



Graph 9: Response to Q.6 (Appendix III) 'On average, what do you think you spend on green products on a weekly basis?'

When asked to state their weekly spend on green products (Q.6, Appendix III), the majority of respondents (just over 40%) stated that they spend between €0 and €10. This was followed by almost 29% who stated that they spent between €11 and €25 each week on green products. Almost 18% of respondents stated that they did not know what their weekly spend on green products was while almost 12% stated that they spent between €26 and €50 per week on green products. A very small percentage of respondents stated that they spent over €51 per week.

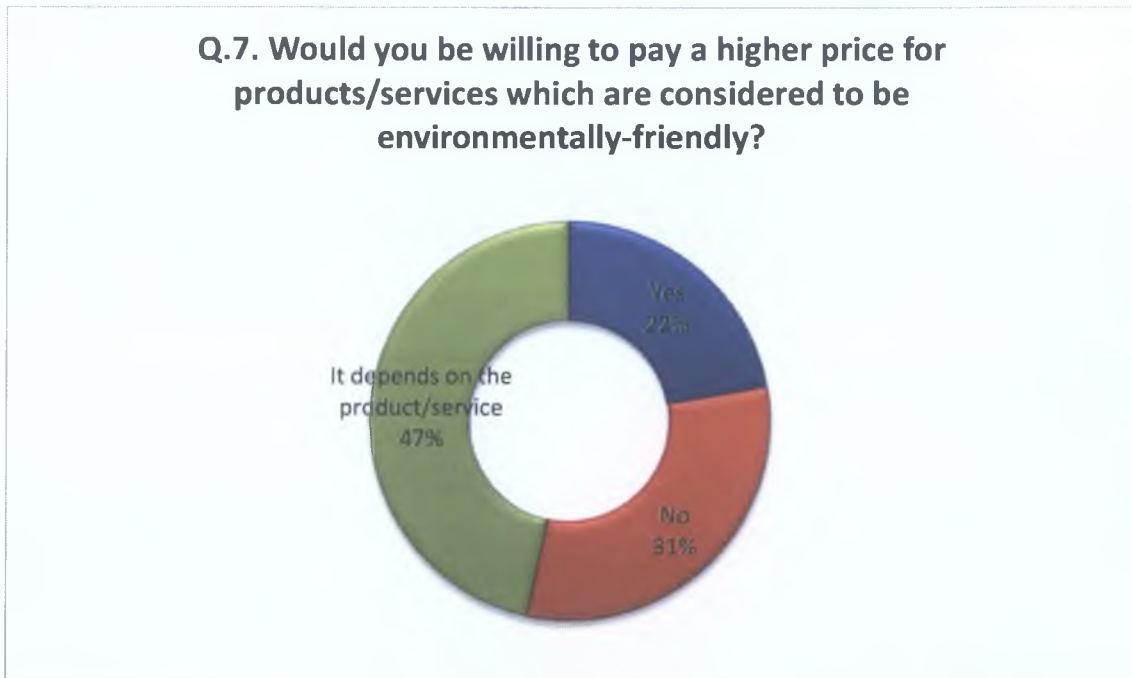
The results were further examined and cross-referenced in terms of respondents' employment status as well as their perceived environmental-friendliness. In terms of employment status, the majority of respondents in each employment category stated that their weekly spend on green products/services was between €0-10. This was highest

among the unemployed at 50%, closely followed by students and part-time employed at 48% and 47% respectively. Of those in full-time employment, 37% choose this option as their weekly spend. Results for respondents who stated that their weekly spend was between €11 and €25 each week was relatively similar among the full-time employed, part-time employed, and unemployed at 29%, 38% and 32% respectively. This was lowest among students at 9%. Of all employment statuses, students had the highest percentage of respondents who did not know what their weekly spend was at 43%. This was a relatively small percentage for all other statuses. The full-time employed and part-time employed were the only employment categories in which a percentage of respondents spent between €26-€50 per week on green products. A minuscule percentage of full-time employed and unemployed answered that their weekly spend was between €51 and €100 on green products, i.e. 2% and 3% respectively.

In terms of perceived environmental-friendliness, there is a strong link between those who class themselves as 'not at all environmentally-friendly' and the lowest weekly spend, with 100% choosing the €0-€10 option. The percentage of respondents who choose the €0-€10 option fell as the levels of environmental-friendliness increased, while the higher spend options increased in percentage as levels of environmental-friendliness increased.

In summary, the results show that employment status does not have a clear impact on weekly spend but respondent's environmental-friendliness does. Of those respondents who knew what their weekly spend was, the first two options (€0-€10 and €11-€25 per week) were the most popular choices, regardless of employment class. However, there was a notable correlation between higher spends and increased levels of environmental-friendliness. This finding may be considered a direct contrast to findings by D'Souza *et al.*, (2006) and Mandese (1991) who found consumers to be extremely price sensitive towards green products regardless of their expressed concern for the environment.

4.3.2.4 Willingness to pay a higher price for environmentally-friendly products/services



Graph 10: Response to Q.7 (Appendix III) ‘Would you be willing to pay a higher price for products/services which are considered to be environmentally-friendly?’

When asked if they would be willing to pay a higher price for environmentally-friendly products or services the majority of respondents (47%) stated that this would depend on the product or service in question. Comments were largely based around the price difference with respondents stating that they would only be willing to pay more if there was a marginal price difference. This price sensitivity among respondents is best articulated by this respondent’s comment:

“If there was a big price difference I would have to go with the cheaper option.”

This price difference was also an important factor for the 22% of respondents that answered yes to this question. Although they answered yes, they would be willing to pay a higher price for environmentally-friendly products, comments were similar to those who answered that this was dependent on price:

“In so far as the price is reasonable I do not mind paying a bit more for environmentally friendly products.”

“I have ticked yes but it really depends on how much dearer. I would be willing to pay slightly more but not excessively more.”

Of those respondents that answered no to this question (31%), reasons given were again based on price with respondents stating that they cannot afford to pay higher prices with many referring to their current financial situation as the basis for their refusal to pay more. Others thought that environmentally-friendly products required fairer pricing.

“Can't afford to as I am not working.”

“As a student lower priced items are bought.”

“It is hard enough to make ends meet with my current financial situation.”

“No, because they should cost less with them being environmentally-friendly it stops people from buying them as there is cheaper products.”

“These products should be competitively priced.”

Similarly, quality was an important issue here with consumers willing to pay more if it offered more quality or benefits to the consumer. The importance of a quality offering to the respondents is evident by the following statements:

“I would pay if I think the product is worth paying more for because of its quality.”

“It depends on the product; if the environmentally-friendly product is of good quality I would buy it.”

“Depends on how much of a difference it actually makes and whether there is any other convenience or cost benefit. E.g. would pay more for an environmentally friendly washing machine / car with high miles per gallon as it costs less long term. Would not pay more for an electric car as it is not convenient.”

“There is a balance between value for money and benefit, for example, with the cost of low energy lamps. It is still cost prohibitive when you weigh up the pros and cons.”

“I like to buy the best product possible within reasonable price ranges.”

“I would pay extra if I knew for sure it would make a difference.”

“It depends on the price differential and value.”

Responses to this question were also broken down based on respondents’ employment status and levels of environmental-friendliness as illustrated in Appendix VI. Percentages of respondents who answered that they would not be willing to pay a higher price for environmentally-friendly products were highest among the unemployed and students, while the majority of full-time employed and part-time employed noted that it would depend on the product or service.

In terms of levels of environmental-friendliness, as one might expect, 100% of respondents who classed themselves as being not at all environmentally-friendly answered that they would not be willing to pay a higher price. Percentages of respondents who answered no to this question decreased as the levels of environmental-friendliness increased. Similarly, the percentage of respondents who answered yes, that they would be willing to pay a higher price for environmentally-friendly products/services increased as levels of environmental –friendliness increased.

Overall, results from this question show respondents to be very price sensitive. This price sensitivity was evident in all employment statuses. Disposable income appears to play a role in willingness to pay more for environmentally-friendly products or services as those in employment were more willing than the unemployed and students. However price sensitivity was still very much evident among willing respondents as only marginal price differences would be accepted for the majority. Quality also has an important role to play in respondent’s willingness to pay more for green products/services with many engaging in a cost/benefit analysis in purchasing decisions. Respondent’s green values also impacts on willingness to pay a higher price for environmentally-friendly products or services as a direct correlation can be seen between willingness to pay more and increased levels of environmental friendliness as illustrated in Graph 11. The importance of price and quality supports previous findings which found them to be key motivators in consumer purchasing behaviour (Pickett-Baker & Ozaki, 2008; D’Souza *et al.*, 2006; Mandese, 1991; Mainieri *et al.*, 1997). These findings will be further explored in Section 4.4 which will discuss key themes emerging from the survey analysis.

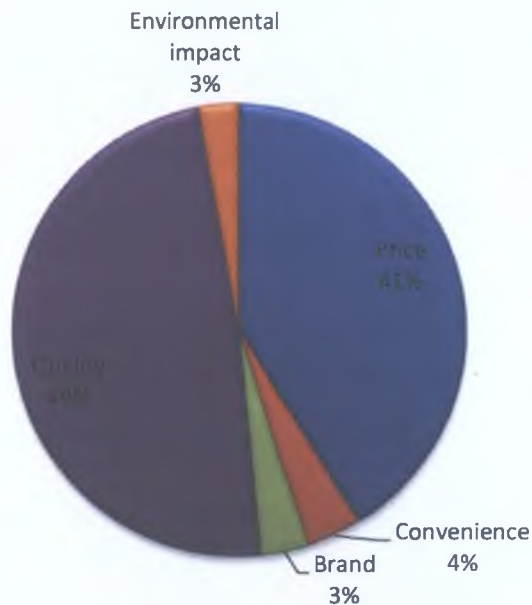


Graph 11: Percentage of respondents who answered yes to Q.7 (Appendix III) based on levels of environmental-friendliness (EF).



4.3.2.5 Purchase Motivators rated in order of Importance

Q.8. When purchasing products/services please rank the following in terms of importance with 1 being the most important and 5 being the least important.



Graph 12: Response to Q.8 (Appendix III) ‘When purchasing products/services please rank the following in terms of importance with 1 being the most important and 5 being the least important.’

	1 st	2 nd	3 rd	4 th	5 th
Price	167	156	50	19	7
Convenience	16	61	135	104	83
Brand	14	39	73	129	142
Quality	28	10	1	1	1
Environmental Impact	12	43	90	115	148

Table 7: Response to Q.8 (Appendix III) ‘When purchasing products/services please rank the following in terms of importance with 1 being the most important and 5 being the least important.’ (Based on number of respondents.)



On average, quality and price were the top motivators in the purchase of products and services. This was followed by convenience. Brand and environmental impact appeared to be relatively unimportant with the majority of respondents rating environmental impact as the least important factor in their purchase decision.

Appendix VI shows a breakdown of purchase motivators in order of importance based on age, employment status, and environmental-friendliness. Price and quality remain the top two motivators in each category. Price takes the number one position for unemployed and students with quality coming in second. This is also the case for respondents aged between 18 and 49 and those respondents that consider themselves to be either not at all or slightly environmentally friendly. Those in the categories of full-time employed, part-time employed, aged 50 or above and those respondents in the somewhat, very and extremely environmentally aware categories place quality in the number one position followed by price. Amongst respondents categorised by age and employment status, environmental awareness came bottom or second last in their lists of importance. It was only amongst respondents that categorised themselves as being very or extremely environmentally aware that environmental impact rose to third in the list of priorities when purchasing products or services.

These results further illustrate respondent's price sensitivity and the demand for quality, irrespective of age, employment status, or environmental values. Levels of disposable income appear to have an impact on price sensitivity as Appendix VI shows price sensitivity to be higher among unemployed and students who rated this as the most important purchase motivator followed by quality while those in employment rated quality as most important followed by price. Furthermore, environmental values appears to have an impact on purchase motivators as those who considered themselves to be very or extremely environmentally aware placed 'environmental impact' in third place followed by convenience and brand while less environmentally aware respondents ranked convenience and brand above environmental impact. These findings will be discussed further under key themes in Section 4.4.

The price sensitivity of respondents' supports previous research by D'Souza *et al.* (2006), which noted the importance of price and quality to consumers. Unlike previous results in this study which showed respondents' levels of weekly spend on green products to increase as environmental values increased - and were in contrast to findings by D'Souza

et al. (2006), Mandese (1991) and Mainieri *et al.*, (1997) which found that consumers were extremely price sensitive regardless of environmental values – these results would support previous findings regarding consumers’ price sensitivity, showing price to be a key motivator in purchasing decisions amongst all levels of environmental values.

4.3.2.6 Organic Food Considerations



Graph 13: Response to Q.9 (Appendix III) ‘When purchasing food do you consider whether it is organic?’

Respondents were asked whether they consider if food is organic when they are purchasing it. As is evident in the above graph, the majority of respondents answered sometimes to this question. Many respondents noted that they only look for organic options in certain foods such as eggs, meat, fruit, and vegetables. However, price was a dominant factor once again with many respondents say that their decision on whether or not to buy organic good was price dependent. Others noted that time and availability was a factor. These considerations are evident from the following respondent statements:

“Depends what kind of food.”

“Prefer organic eggs.”

“Specifically focus on organic in relation to fruit and vegetables and occasionally meat. Otherwise, it is immaterial.”

“No I just check the price. If organic good is available or good value then I prefer to buy organic.”

“I would purchase organic if it was not too much dearer.”

“Price would be an important factor in the purchase of organic items but if they were on special offer I do often purchase organic food.”

“In too much of a rush to stop and think about it sometimes.”

“Depending on availability obviously would like organic but its not always available in each product.”

Of those respondents who answered yes, additional comments indicated that just because they *considered* whether or not food was organic did not necessarily imply that they purchased organic food. Again, this seemed heavily dependent on price.

“Yes, I generally eat healthy organic food but it is hard as its more expensive and everything seems to go up in shops.”

“If organic and reasonably priced I will purchase it.”

“Like to buy organic but usually too costly but will do it when I can.”

Similarly, those respondents who answered no reported that this was because of price considerations:

“I specifically choose not to go organic as I see it as too expensive and I fail to see any quality or environmental benefit. (No regulation on what counts as organic. An “organic” sticker means nothing to me. I trust a brand ahead of the word organic. If I knew a reputable organic brand then maybe.”

Appendix VI includes a breakdown of how respondents answered this question based on how environmentally-friendly they classed themselves. Given that a number of the respondents referred to the price and expense of organic food, answers were also broken down based on respondents employment status. 100% of respondents who classed themselves as ‘not at all environmentally-friendly’ answered no, that they would not consider whether or not food is organic. The percentage of respondents who answered no continued to decrease as levels of environmental friendliness increased. Conversely, the

percentage of respondents who answered yes to the question increased as levels of environmental friendliness increased.

Students displayed the highest percentage of respondents that do not consider whether food is organic at 44% with just over 50% stating that this is something they sometimes consider. Additionally, 50% of those unemployed stated that they sometimes consider this with 32% stating they do not. Considerations were highest amongst those who were part-time and full-time employed with 38% and 29% respectively answering yes.

To summarise, the majority of survey respondents 'sometimes' consider whether or not food is organic. There is also a direct correlation between environmental values and organic food considerations as the percentage of respondents who answered yes to this question increase as levels of environmental-friendliness increases. Price sensitivity also plays a role in organic food considerations with many respondents commenting that their purchasing is price-dependent. Similarly, levels of disposable income appear to have an influence on organic food considerations as higher percentages of those in employment answered yes to the survey question than those who are unemployed or students

4.3.2.7 Food Sourcing Considerations

Q.10. When purchasing foods do you consider whether they are locally-sourced?



Graph 14: Response to Q.10 (Appendix III) 'When purchasing foods do you consider whether they are locally-sourced?'

When asked whether they considered if food was locally-sourced, this question received a much more positive response from survey participants than organic considerations regarding food with over 50% of respondents answering in the positive and over 30% of respondents stating that they sometimes consider this. Comments indicated that the motivation for such actions was less to do with air miles and carbon emissions associated with the transport of food but more to do with supporting local jobs and communities. Many noted however that support of local produce was also dependent on price.

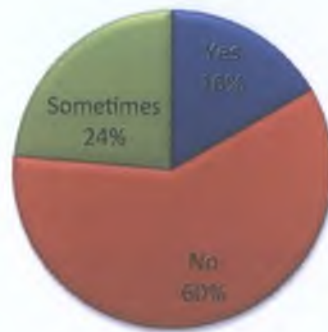
“Supporting national/local enterprises and jobs – but must be competitively priced and be of reasonable quality. There has been big improvement in recent years in these two areas.”

“Where available, there is a preference to buy Irish, but I would not pay extra if I suspected that I was paying a premium to support inefficient production.”

Of those respondents who indicated that they sometimes consider whether or not food is locally sourced, some respondents noted that preferences for locally-sourced food were limited to certain produce such as meat or vegetables or again was dependent on the price or quality. Of the almost 19% of respondents who answered in the negative, comments indicated that respondents simply never considered or thought about this as an influence in their purchasing decisions or else they considered price and quality only when purchasing.

4.3.2.8 Cosmetics Considerations

Q.11. When purchasing cosmetics do you consider how environmentally-friendly the product is?



Graph 15: Response to Q.11 (Appendix III) ‘When purchasing cosmetics do you consider how environmentally-friendly the product is?’

Turning to the cosmetics sector, when asked if they consider how environmentally-friendly cosmetics are when they are purchasing them, 60% of respondents stated that they do not consider this. Many respondents noted that they simply never thought about this while others commented that brand and price are their primary concern when purchasing cosmetics.

“I honestly never thought of the eco factor!”

“Don’t think of cosmetics under environmental category.”

“I only consider whether they do what they are supposed to do.”

“No I choose on brand and quality.”

Of the 24% of respondents who answered ‘sometimes’, additional comments indicated that this consideration was dependent on the product or considerations were limited to animal-testing.

“I do not buy aerosols or products in canisters.”

“I’d consider packaging and whether it is recyclable and animal testing; as for ingredients as said before, the product is not necessarily fully organic to be labelled organic so ‘no’.”

Of the relatively small 16% of respondents that answered yes to the above question, comments indicated that their considerations were mostly to do with animal testing although some respondents noted concern over ingredients contained in the cosmetics.

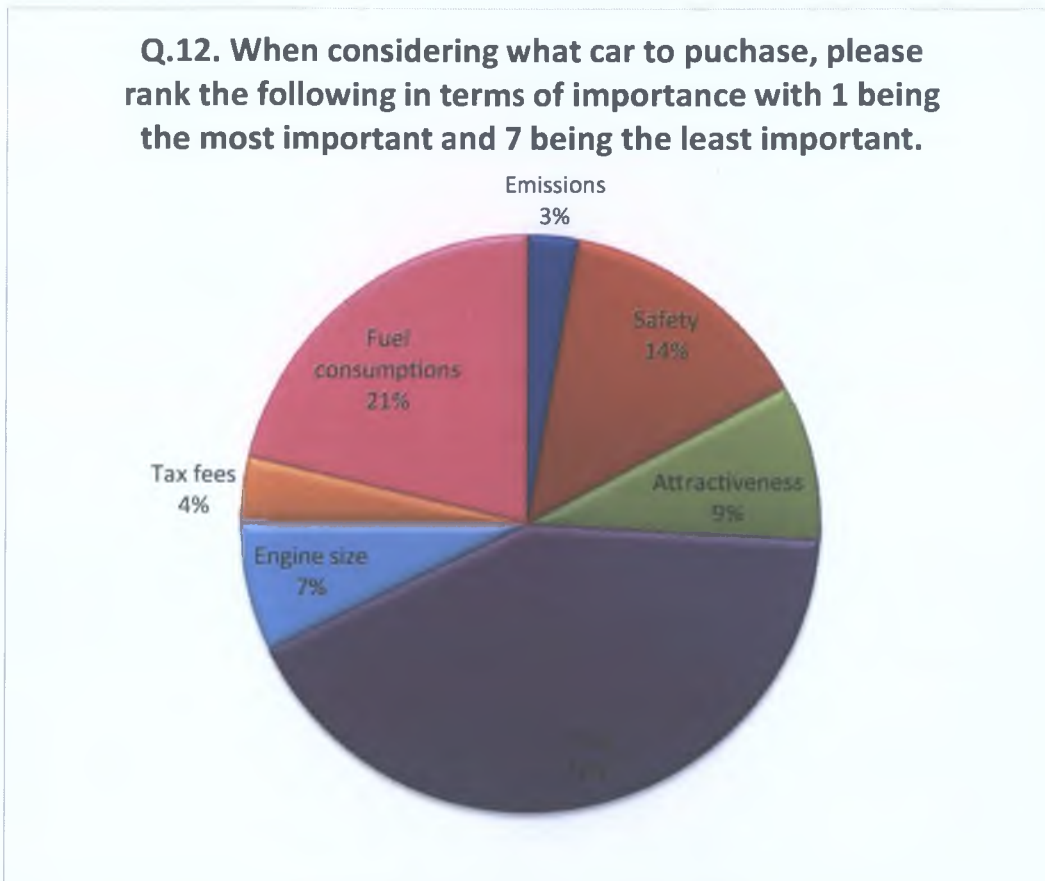
“Environmentally-friendly and not tested on animals is a must.”

“Look for the plant properties listed – e.g. some cosmetics contain fruit (e.g. grape or strawberry extract), which I consider to be environmentally-friendly. Also seaweed is organic and environmentally-friendly.”

Appendix VI shows a breakdown of how respondents answered the above question based on their levels of environmental friendliness. The highest percentages of respondents who answered no were those who classed themselves as not at all, slightly, and somewhat environmentally-friendly at 63% and above. Even those who classed themselves as very environmentally-friendly showed a high percentage answering no at 44%. Respondents who classed themselves as extremely environmentally-friendly still displayed 29% answering that they do not consider the environmental-friendliness of cosmetics.

There is a clear difference in respondent’s environmental considerations between the cosmetics and the food sector. The majority of respondents (60%) do not consider the environment when they are purchasing cosmetics and in a lot of cases, comments indicated that this was because they simply never thought about the eco-friendliness of cosmetics. In contrast to this, a much smaller 28% of respondents stated that they did not consider whether or not food was organic. Furthermore, respondent comments indicate that much more would be willing to purchase organic food if it were not for the price difference. There was not a clear price barrier when it came to the purchase of environmentally-friendly cosmetics. Instead the results and respondent comments indicated that, for the most part, there was a lack of environmental awareness when it came to the purchase of cosmetics or awareness was limited to animal testing in other cases.

4.3.2.9 Purchase considerations for cars ranked by importance



Graph 16: Respondent purchase considerations in buying a car (Q.12, Appendix III, percentage based)

	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th
Fuel Consumption	92	89	87	61	48	26	6
Tax Fees	16	63	69	77	74	60	50
Engine Size	31	54	78	67	70	61	48
Price	38	78	85	87	80	72	67
Attractiveness	38	48	48	45	62	76	92
Safety	62	59	48	60	69	87	24
Emissions	16	22	26	42	60	78	169

Table 8: Respondent purchase considerations in buying a car (Q.12, Appendix III, based on respondent numbers)



When asked to rank a number of factors in order of importance in considering what car to purchase, the primary motivations or considerations amongst respondents were (in order of average importance) price, fuel consumption, safety, engine size, tax fees, attractiveness, and emissions.

The breakdown in Appendix VI shows how respondent characteristics such as employment status, and perceived environmental-friendliness had a slight impact on how respondents rated these factors but price and fuel showed to be of the upmost importance no matter what the demographics. It is interesting to note that emissions averaged as the least or second least important factor across all formations of demographics, even among respondents who classed themselves as being very or extremely environmentally-friendly.

Once again, results indicate a trend of price sensitivity amongst respondents with price averaging as the most important consideration followed by fuel consumption which is also linked to cost. The previous questions and aforementioned results under this sub-section of environmental attitudes have all indicated trends towards price sensitivity and a demand for quality and benefits among consumers. Green values has had an impact on some of the previous results, in particular, in respondents' recycling habits, willingness to pay a higher price for green products/services, and organic food and cosmetics considerations. However, the importance of pricing has remained notable throughout and is particularly evident in questions which asked respondents to rank purchase motivators in order of importance. This will be discussed further in Section 4.4 of this study. The following question analysis under this sub-section of environmental attitudes (4.3.2) examines respondents' experience with false claims (both within and outside sectors) and how this impacts on consumer scepticism and brand loyalty among respondents.

4.3.2.10 Experience of False Claims

Q.13. Have you ever purchased a product/service which was advertised as environmentally-friendly and subsequently discovered that these claims were false?



Graph 17: Response to Q.13 (Appendix III) 'Have you ever purchased a product/service which was advertised as environmentally-friendly and subsequently discovered that these claims were false?'

When asked if they had ever purchased a product/service which was advertised as environmentally-friendly and subsequently discovered that these claims were false, almost half of all respondents answered that they were unaware of time when this had happened to them, although some respondents noted that they would not be surprised to learn that it had.. A significant percentage of respondents (45%) answered in the negative, stating that this had not happened to them. A small percentage, just over 6%, answered yes to this question with some of the respondents giving examples.

"I would have concerns over the use of Palm Oil in products and its impact on the survival of animals."

"Happens all the time with big brands. They slap a 'green' label on the box because the packaging is recyclable and people think it's already recycled. They reduce the perfume in the washing powder and call it environmental. Organic fruit that has been flown all the way from Kenya is not particularly organic. I try to watch out for it nowadays."

“Many food products now contain cheaper engineered refined Glucose Fructose Syrups in lieu of sugar e.g. cereals, biscuits, sweets, yoghurts. These cheap and unhealthy refined sugars (twice as difficult for the body to break down) are produced in the USA from corn/maize. Agricultural production in the US is largely GM and intensive. It is questionable how environmentally friendly these products/production systems are in actual fact.”

“I bought a bio-fuel Volvo in 2008 for green purposes and tax savings purposes. The junior sales rep misled me completely and I was left with a car that was neither bio compliant nor tax saving.”

“Bought an eco washing machine and the box and packaging it came in took me 3 weeks to get rid of in the recycling bin.”

Results from this question show there to be little evidence of greenwashing among respondents. However, where respondents have experienced this, examples cited have occurred across all the sectors included in this study. Furthermore, those respondents who answered yes to this question were also asked if this had changed their opinion of the product/service in question, to which 100% answered yes. These findings indicate that although experience or awareness of greenwashing is not high among respondents, when consumers are aware of it happening it has a significant impact on their opinion of the product/service in question. This highlights the need for greater awareness among consumers regarding environmental claims and education into how to recognise greenwashing when it occurs. It also highlights how important it is for organisations to make truthful claims that they can back up, given the potential negative impact it could have on consumer opinions of their products/services should it be discovered that their claims are false.

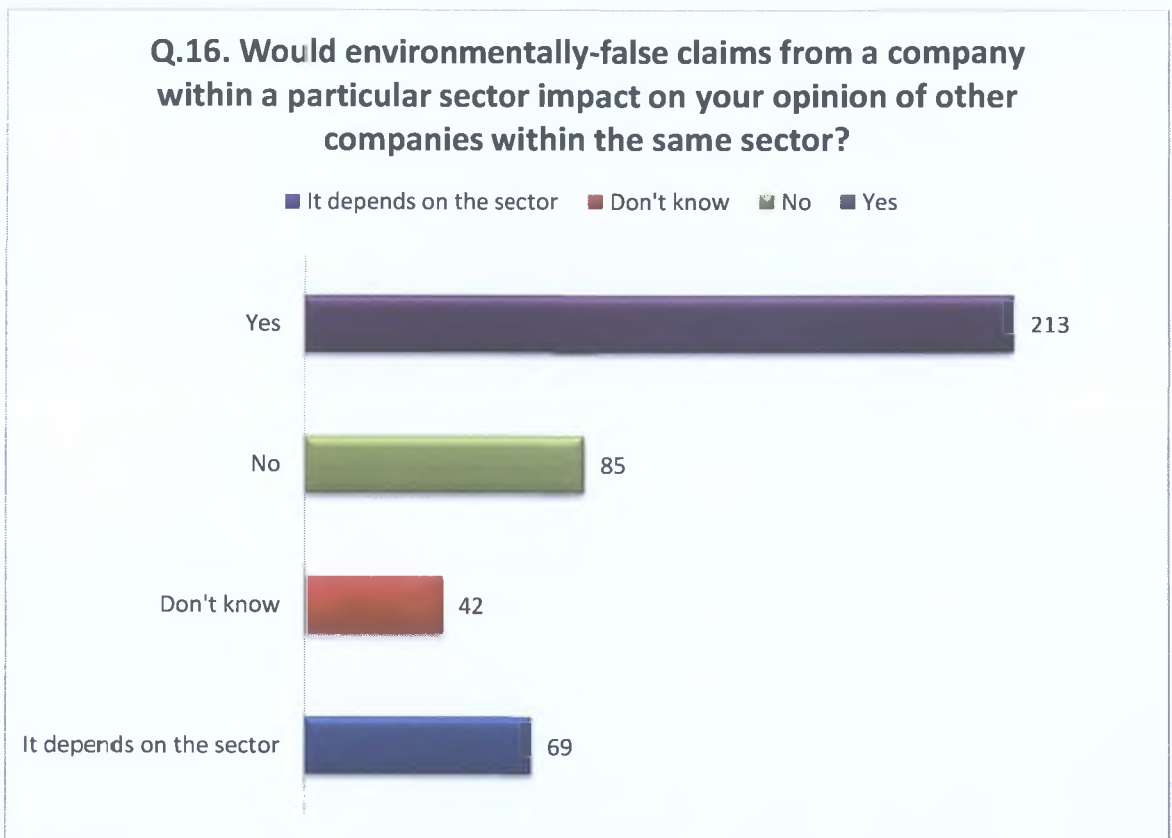
4.3.2.11 Impact of environmentally-false environmental claims on brand loyalty



Graph 18: Response to Q.15 (Appendix III) 'Would you remain loyal to a brand if you found out they had falsified or exaggerated claims regarding their negative/positive environmental impact?'

As the above graph illustrates, when asked if they would remain loyal to a brand that was found to have made false claims regarding their environmental impact, over 76% of respondents answered that they would not remain loyal. Just under 20% answered that they did not know while the minority of respondents (4.40%) stated that they would still remain loyal to the brand. This accentuates how important it is for organisations to be careful about the environmental claims they make and to avoid greenwashing as it can have a serious negative impact on brand loyalty and thus, negatively impact on financial performance.

4.3.2.12 Impact of environmentally-false claims within a sector



Graph 19: Response to Q.16 (Appendix III) ‘Would environmentally-false claims from a company within a particular sector impact on your opinion of other companies within the same sector?’

When asked if environmentally-false claims from a company within a particular sector would impact on their opinion of other companies within the same sector, just over half (52%) of all survey respondents answered yes with many stating that if one company were found to be making false claims, they would be suspicious that others in the same sector would be doing the same.

“I would assume that the other companies are probably making false claims as well.”

“I would feel if one company within a sector is doing it others probably are too.”

“Obviously. If one company lies to gain advantage in a specific market, who’s to say the others haven’t too.”

“Because these companies compete with each other it is likely they employ the same.”

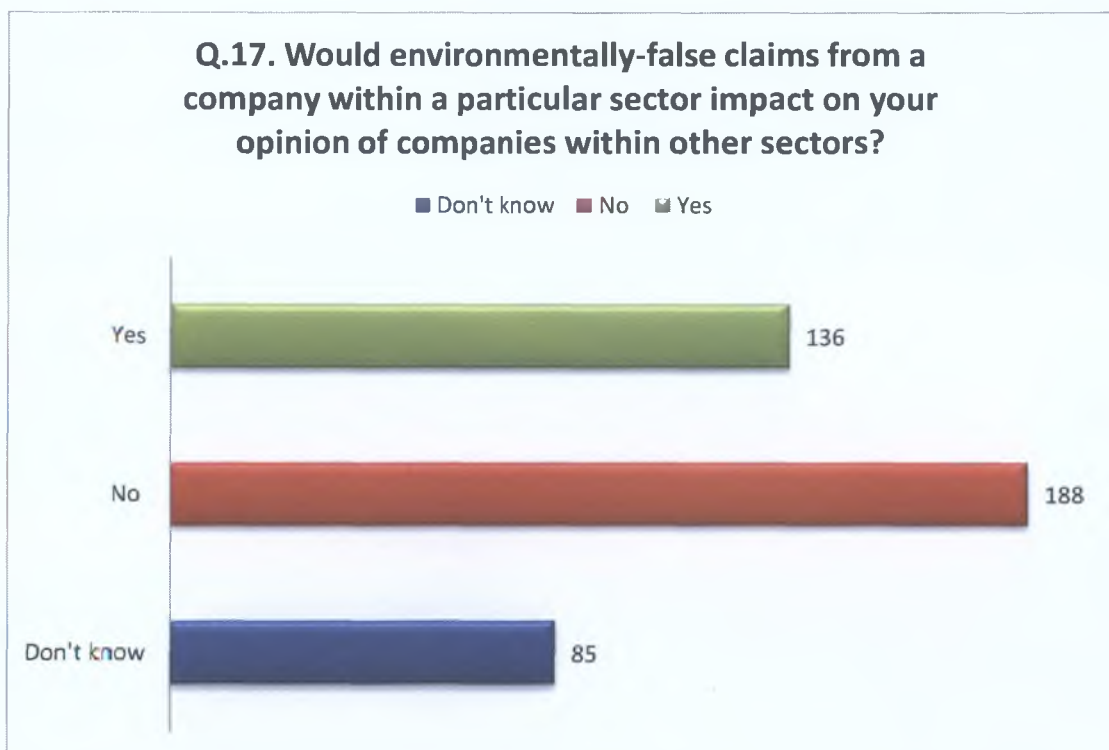
In contrast, almost 21% of respondents felt that it would not have any impact on their opinion of other companies within the same sector with most feeling that each company should be judged on their own merits.

“It does not necessarily follow that all companies would behave in the same way.”

A further 16.87% of respondents answered that this would depend on the sector with many noting the food sector in particular. Just over 10% of respondents stated that they didn’t know if this would impact on their opinion.

These results highlight the potential negative impact that companies can have on each other by increasing overall consumer scepticism. It also accentuates the need for companies to provide proof of their claims so that they can disassociate themselves from those companies that have been found guilty of making environmentally-false claims.

4.3.2.13 Impact of environmentally-false claims across sectors



Graph 20: Response to Q.17 (Appendix III) ‘Would environmentally-false claims from a company within a particular sector impact on your opinion of companies within other sectors?’

When asked if environmentally-false claims from a company within a particular sector would impact on their opinion of companies within other sectors, the majority of respondents (almost 46%) were of the opinion that this would not impact on their opinions with many respondents noting that each company or indeed sector should be addressed separately.

“Look at each company on its own merits.”

“No reason to doubt any other sectors.”

Those who answered yes to the above question were of the opinion that general scepticism would increase as a result of false claims from a company.

“It would probably increase my overall scepticism of all companies.”

“This has already happened I think. I generally am sceptical of any claims of environmental friendliness regardless of sector.”

“It would make me think twice about trusting what all organisations say about their products and services.”

As for those respondents who answered that they did not know if their opinion would be impacted many felt that it would depend on the product, sector, or ties that companies may or may not have to each other.

While the majority of respondents answered no to this question, it should be noted that the combination of respondents who answered yes or that they did not know would result in a potential negative impact. The results show that environmentally-false claims have the potential to effect companies on a cross-sectoral basis by increasing overall consumer scepticism. Once again, this highlights the requirements for companies to provide proof behind their environmental claims and avoid greenwashing practices.

4.3.2.14 Likert Scale Statements

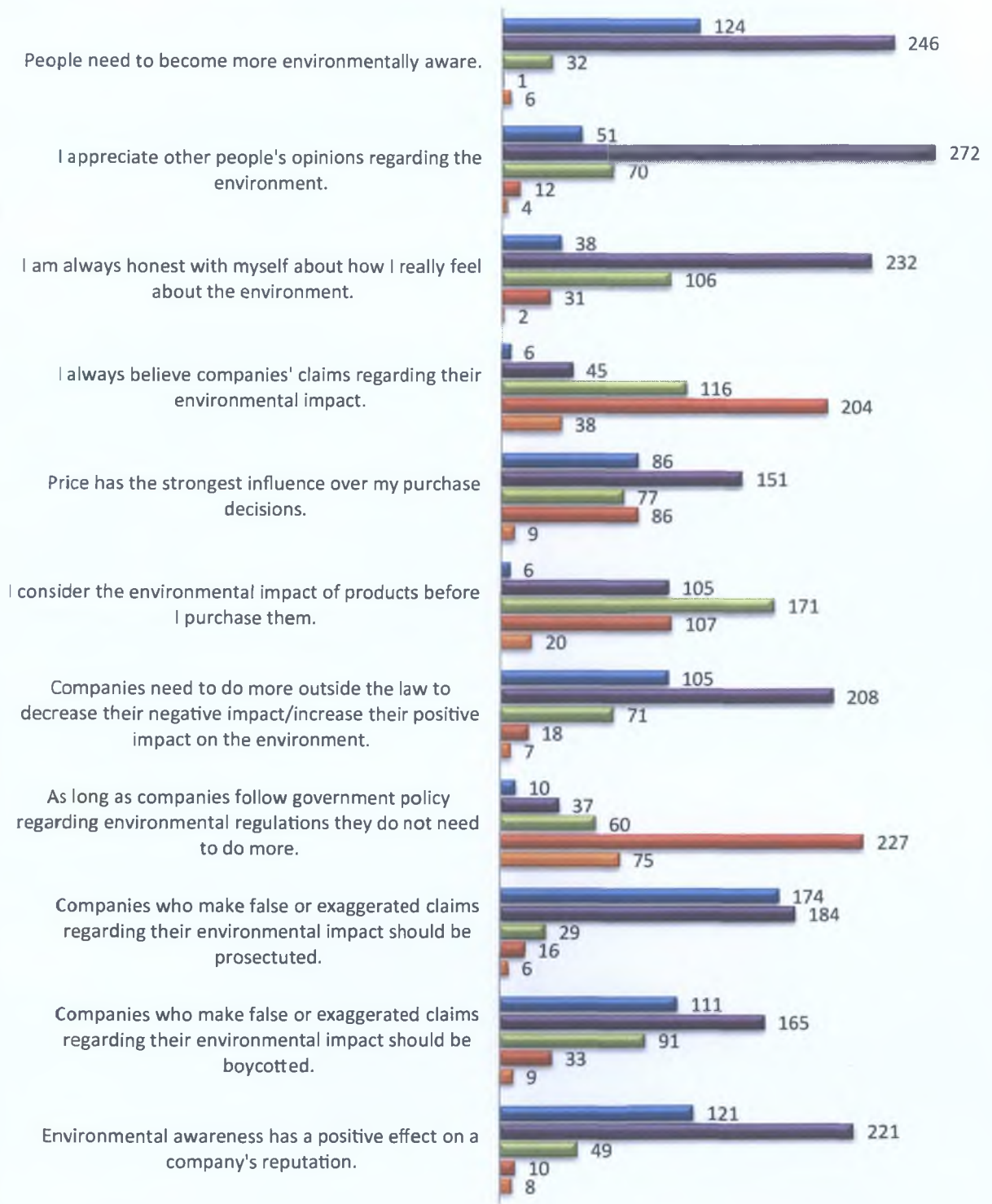
The survey offered respondents a number of statements and asked them to state whether they agreed, disagreed, or were of a neutral opinion with regards to these statements. In almost all statements there was a clear majority of respondents which either agreed or disagreed as illustrated by Graph 21.





Q.18. Please indicate whether you agree or disagree with the following statements.

■ Strongly agree ■ Agree ■ Neutral ■ Disagree ■ Strongly disagree



Graph 21: Response to Q 18 (Appendix III) 'Please indicate whether you agree or disagree with the following statements.'

Given the statements put forward in Q.18 (Appendix III), the following responses can be surmised. As previously stated, in most cases, there is a clear majority of respondents who either agreed or disagreed with the statements given. The percentages below are derived from a combination of respondents who either 'agreed or strongly agreed with statements', respondents who 'disagreed or strongly disagreed with the statements' or a majority where respondents remained neutral.

- Over 90% of survey respondents agree that people need to become more environmentally aware.
- Just under 79% of respondents felt that they can appreciate other people's opinions regarding the environment.
- 66% of respondents felt that they were always honest with themselves regarding their feelings towards the environment.
- Almost 60% of the survey respondents do not always believe companies' claims regarding their environmental impact.
- Almost 58% respondents felt that price had the strongest influence over their purchase decisions.
- Most respondents (42%) neither agreed nor disagreed as to whether they consider the environmental impact of products before purchasing them.
- Over 76% of respondents feel that companies need to do more outside the law regarding their environmental impact.
- 74% of respondents disagreed that it is enough for companies to just follow government policy regarding environmental regulations.
- Over 87% of respondents were of the opinion that companies who make false or exaggerated claims regarding their environmental impact should be prosecuted.
- Just over 67% of respondents felt that companies should be boycotted for making false or exaggerated claims regarding their environmental impact.
- Almost 84% of respondents felt that environmental awareness has a positive effect on a company's reputation.

It is clear that respondents feel a need for environmental-awareness to increase. This highlights the need for further education with regards to the environment. Given that the majority of respondents felt that they can appreciate other people's opinions regarding the environment this may indicate that there is potential for consumers to educate each other regarding the environment and the impact that 'word-of-mouth' may have on green

purchase behaviour. The majority of respondents (66%) agreed that they were always honest with themselves regarding their feelings towards the environment. Almost 26% of respondents remained neutral with regards to this statement. This majority results adds further depth to respondent's opinions offered throughout the survey regarding their environmental attitudes.

The results also show high levels of scepticism among respondents with just under 60% of respondents noting that they do not always believe companies' claims regarding their environmental impact. A further 28% of respondents remained neutral on topic while just over 12% of respondents agreed that they do always believe companies' claims regarding their environmental impact. These results highlight the need for companies to validate their environmental claims to decrease consumer scepticism.

As was evident with previous results, price sensitivity is high among respondents with almost 58% agreeing that price has the strongest influence over their purchase decisions. 23% of respondents disagreed with this while almost 19% of respondents remained neutral. These results are in line with previous results which indicated that price and quality were key purchase motivators for respondents, the order of which was influenced by employment status.

The majority of respondents (42%) remained neutral regarding whether or not they consider the environmental impact of products before purchasing them. 31% disagreed with the statement while 27% agreed that they do consider the environmental impact of products before purchasing. Similarly to previous results, these results indicate that environmental impact is not a primary concern for consumers in purchasing. It is possible that greater education regarding their environmental impact could increase concern among consumers and influence them to consider the environment more in their purchasing decisions.

The results indicate a clear call for greater onus on organisations regarding their environmental practices. Over 76% of respondents felt that companies need to do more beyond what is required by law regarding their environmental impact while just over 6% disagreed with this. The remaining respondents (almost 18%) remained neutral. Similarly, 74% disagreed that it is enough for companies to follow government policy regarding environmental regulations. Just over 11% of respondents agreed that it is enough for companies to follow government policy while almost 15% remained neutral. These

results indicate that organisations should consider going above and beyond what is required by law when it comes to their environmentally-friendly practices to promote positive consumer intentions towards them.

Similarly the results indicate that organisations need to be held accountable for greenwashing practices with just over 87% of respondents of the opinion that they should be prosecuted. 7% of respondents remained neutral while just over 5% disagreed. Interestingly, respondents are more of the opinion that companies should be prosecuted rather than boycotted, although quite a high majority (just over 67%) of respondents did agree that companies should be boycotted for their acts of greenwashing. 22% of respondents remained neutral while 10% disagreed with this. These results should be seen as a clear warning for organisations that consumers require accountability for greenwashing practices and may engage in acts of boycotting to do so.

Finally, almost 84% of respondents agree that environmental awareness has a positive effect on a company's reputation. 12% of respondents remained neutral while just over 4% disagreed with this. This highlights the importance of promoting positive environmental behaviour in increasing favourability towards organisations and enhancing brand loyalty. Organisations can also use environmentally-friendly practices to help differentiate themselves from their competitors.

Overall, the above results indicate the evidence of consumer scepticism regarding organisation's environmental claims and the call for accountability regarding greenwashing practices. While price remains a primary motivator, positive environmental actions can help to enhance an organisation's reputation, in particular, when these actions are beyond those required by law. This will be further discussed in Section 4.4. The next area of this survey analysis (4.3.3) will focus on respondents' recommendations.

4.3.3 Respondents' Recommendations

The study will now focus on recommendations given by respondents as to both how their environmental awareness might be increased in their purchasing decisions and recommendations for marketers in Ireland engaging in green marketing.

4.3.3.1 Increasing environmental awareness in purchasing decisions

Respondents were asked (Q.19, Appendix III) as to what would influence them to become more environmentally aware in making purchasing decisions. The top response involved the pricing and quality of green products with many calling for cheaper prices. Other respondents noted that their income level influenced their purchase decisions.

"Prices and quality. I often find that environmentally friendly items aren't as appealing as the 'normal' ones. Perhaps that's just my perception though!"

"Wider availability of high quality, price competitive environmentally friendly products."

"If environmentally friendly products/services became the norm instead of the exception, and this might influence cost. While I do care about the environment I am driven by how much a product/service will cost me."

"Cheaper products or when I have a stable job and can afford it."

A large number of respondents also noted that they would be influenced by more information and knowledge with many linking this to the need for better labelling and increased advertising.

"More informative posters on products and their impact on the environment."

"If I was aware of the effects on the environment that the product or service that I was purchasing has at the time of the purchase, I would then think twice about my purchase."

"More information about the environmental impact of the specific product."

"Clear honest labelling."

"More information being available about the impact of product manufacture etc. on the environment and improvements in the marketing of products that are more environmentally friendly than others."

“More transparency in labelling of products – with tough enforcement of the laws as a prod to standards.”

“Better fact based advertising.”

“More information on the impact of the product, manufacturing process involved and safe disposal where relevant.”

“Knowing how a product was made. Know more about how the environment is protected by companies that proclaim to think of the environment when they make their product.”

“Appropriate labelling of products. Public information from regulatory orgs concerning checks good and bad carried out.”

“Clear marketing of product. General awareness & education on green/environmentally friendly products and services.”

“Easy to understand information on the product. Many products themselves may be environmentally friendly but the full impact on the environment is not included e.g. organic food products that are transported in a non-environmentally friendly fashion.”

“A brief explanation of what was involved in the making of the product and what steps were taken to ensure it was done without any harm to the environment.”

Finally, less frequent responses referred to the introduction of stricter regulations from the government, an increase in the ease of recycling and rewards or incentives for purchasing green products.

“Maybe a loyalty card type system between electrical suppliers so that if you bought eco friendly equipment you would be rewarded.”

“An incentive for buying more ‘green’ products, like extra points on your card or % off next purchase maybe.”

“1. Structured easily comprehensible standardised product information. 2. Industry average comparative information. 3. Financial incentives and a defined portion of the tax diverted to investment in the green economy.”

In summary, if consumers are to engage more in green purchasing, organisations need to draw attention to the price and quality of green products. Price differences should be kept

as reasonable as possible given additional costs that may be incurred. It may also be useful for organisations to highlight why these price differences exist in order to help the consumer understand. The quality of the products/services should also be emphasized in addition to any extra benefits that consumers may gain from using green products/services. This somewhat supports findings by Ginsberg & Bloom (2004) who noted that the direct benefits of products should be highlighted and attributes such as price, quality, and convenience should be emphasised with environmental attributes used as a secondary appeal. However, given that a price difference exists between many green and regular products, the environmental attributes of the product/service in question may need to be highlighted more in order to explain this price difference.

Consumers should also be made aware of how their purchasing decisions can impact on the environment via clear information and labelling from organisations. This is supported by findings by Carlson *et al.*, (1993) as cited by D'Souza *et al.*, (2006) which states that environmental labels can potentially provoke and modify consumer behaviour by helping them to make better informed decisions. Ying-Ching & Chang (2012) are also in support of clear labelling on green products which promotes the product's effectiveness. Standardised green labelling schemes regulated by law may also be of use in helping consumers to recognise green products or services. It may also be useful for organisations to provide incentives for consumers to 'go green' through the likes loyalty card schemes. This will be further discussed in Section 4.4 of this study.

4.3.3.2 Recommendations for organisations engaging in green marketing

Respondents were asked (Q.20, Appendix III) what recommendations they would make to organisations to use green marketing more effectively. The majority of recommendations involved the need for organisations to increase awareness among consumers of their environmental impact and the benefits of environmental friendliness. It was recommended that this take place through increased advertising and PR and also the use of social media. Respondents also suggested that closer attention be paid to the packaging and labelling of products, ensuring minimal and recyclable packaging with clear and easily recognisable labelling that stresses the benefits of the green product. In addition, many respondents felt that organisations need to target the younger generation with their marketing. Having the ability to back up their claims and provide proof that

their environmental assertions are true was also recommended. Yet again, price was also an important factor for respondents and many felt that organisations need to concentrate on cost efficiency and emphasize competitive pricing.

“Packaging needs to be cut to a minimum.”

“Live up to claims. Consider price as much as possible.”

“Target a young generation.”

“Market their green initiatives via social media, sponsorship of local popular sports events, music events etc.”

“Advertise every aspect of their green marketing, in all campaigns, posters, advertisements etc. Engage with customers when purchasing the product and tell them the facts about how green products can help the environment.”

“Provide strong proof behind their actions.”

“More information on their products and how it helps. Try bring down prices. Use less packaging.”

“Make it more effective, cost efficient, and not as expensive to working class people.”

“Younger people should be targeted. If habits can be made at a young age they will last a lifetime.”

“Think of the customers they are trying to target to keep price as low as possible and if the goods are a little more costly highlight to them why this is and the benefits to them.”

“Organisations should contribute to activities which would offset their carbon emissions such as tree planting. They can then market their products as having minimum impact on the environment. Organisations should also look at resourcing recycled materials and ensuring that all their by-products are 100% recycled.”

“Be brave and upfront about what your company’s policy is – ‘shout and let it out’. Consciously decide to focus on one primary ‘green goal’ and integrate it into the company’s philosophy and ethos.”

“Provide evidence of contributions made to the environment – not enough just to say this package is recycled or we have planted x number of trees – show consumers what the company has done, where it is and its impact on the local environment there.”

“Seek independent validation of claims; open and transparent labelling; value for money; operate to the ethos of being environmentally friendly; invest a percentage of profits back into the environment, e.g. appropriate tree planting, funding treatment plants, supporting environmentally friendly R&D developments; avoid non-biodegradable plastic packaging; engage in clever marketing practices; avoid the guilt approach.”

“Green marketing needs to push quality and the value of their products’ value in terms of saving the planet AND saving your purse.”

“1. Sell the benefits in a clear, coherent and constructive manner. 2. Use the most eco-friendly sales and communication channels to market and promote. 3. Ensure your own organisation has the green philosophy embedded in it, and that staff are knowledgeable and committed in terms of environmental awareness, realistic ecology and recycling and sharing that energy and enthusiasm with others (‘Green Champions).”

“Clear labelling of product container and green contents. Print ideas label on how to re-use the product container if applicable. Inform consumers on how to dispose of product in a safe effective manner i.e. bleach bottles. Create incentives for consumers to return the container to the manufacturer i.e. have an upfront charge on a glass bottle which can be recouped when the empty clean bottle is returned.”

In summary, key recommendations for organisations engaging in green marketing involves increasing consumer awareness through various promotional channels including increased advertising and the use of social media; paying particular attention to product packaging and labelling and; ensuring that consumers are made aware of the benefits of green products/services and how their purchasing decisions can impact the environment. Engaging in activities which offset carbon emissions and invests profits back into the environment, such as tree planting, was another popular recommendation. Furthermore, many respondents felt that organisations should target the younger generation and have the ability to validate their environmental claims. Cost efficiency was another area that organisations need to look at in attempting to reduce the price difference between green products and regular products. Where price differences do exist, organisations need to

highlight why this is the case and the added benefits of the product/service in question. These recommendations will be discussed further in Section 4.4 of this study.



4.4 Key Themes Emerging from the Surveys

Having analysed the responses to the above survey questions, a number of themes have been identified based on respondent's answers.

4.4.1 Key Motivators in Purchase Behaviour: Price and Quality as Primary Drivers

Throughout all responses it became clear that price and quality are the primary motivators in consumer purchase behaviour. This was irrespective of age, employment status, or perceived environmental friendliness. Even among those respondents who considered themselves to be very or extremely environmentally-friendly, this had its limits. While some respondents noted that they would be willing to pay a higher price for green products or services this was restricted to a narrow price difference – respondents were only willing to pay extra provided that it was not too much over the price of regular products/services. Quality was another important factor for respondents with many stating that they would only be willing to pay extra provided that products/services were of the same or superior quality to regular products/services.

This finding was in line with much of the previous research conducted into green purchase behaviour. Many previous studies also concluded that price and quality were key motivators in purchasing, regardless of expressed concern for the environment, with many authors offering this as a possible reason for the attitude-behaviour gap evident in green purchasing (Pickett-Baker & Ozaki, 2008; D'Souza *et al.*, 2006; Mandese, 1991; Peattie, 2001; Mainieri *et al.*, 1997; Gingsberg & Bloom, 2004; Ottman, 1992).

4.4.2 The impact of age and employment status on attitudes and behaviours

Respondent's perceptions of their environmental friendliness were broken down based on age and employment status in order to establish whether these variables had any impact on levels of environmental friendliness. From this, a number of the average findings from the survey analysis were broken down based on respondent's perceived environmental friendliness and employment status in order to establish whether or not these two variables had a notable impact on attitudes and behaviours of respondents. A number of responses were examined based on age and employment status to in order to answer the research objective of whether or not green attitudes and behaviours were affected by age and income levels. Additionally, responses were examined based on perceived environmental friendliness in order to assess whether or not respondents appeared to be as environmentally friendly as they considered themselves to be.

Both age and employment status did appear to be a key factor on respondents' reported level of environmental friendliness. This supports previous research by Carrete *et al.*, (2012) which states that traditional research on profiling green consumerism indicates that age and income is generally thought to relate to environmental sensitivity. However, it is contrast to findings by Luzio & Lemke (2013) and Akehurst *et al.*, (2012) who note that socio-demographic variables are considered to be of finite use in characterising the green consumer.

In this study, it appeared that the younger age group (18-24) and students did not class themselves to be as environmentally-friendly compared with older age groups and employment statuses. This was also evident in terms of weekly spending which was broken down based on employment status. It was evident that the vast majority of students either ticked the lowest weekly spend or were unaware of their weekly spend on green products. That said, the majority of part-time employed and unemployed also ticked the lowest weekly spend in this case. This indicated that respondent's levels of income may impact on their price sensitivity. Those in full time employment had a greater variation of spending than unemployed and part-time employed although the reported differences in level of spend was minimal based on employment status.

Employment status also had an impact on willingness to pay a higher price for green products and service, with the majority of students and unemployed respondents (52% and 47% respectively) reporting their unwillingness to pay a price premium. In contrast,

part-time employed and full-time employed respondents were more willing to consider paying a higher price, albeit, the majority of these respondents stated that their willingness to pay a higher price would depend on the product/service in question and the price difference. When looking at the food sector respondents commented that organic food was more expensive. Employment status was also used to identify if a correlation exists between employment levels and organic food spend. Both full and part-time employed reported greater percentages of respondents considering organic-sourced food as compared to students and unemployed. However this latter cohort did show high numbers of respondents that 'sometimes' consider this.

Employment status also had an impact on key purchase motivators. Students and unemployed considered price to be the most important factor followed by quality. This was the reverse for full and part-time employed respondents who noted that quality was most important followed by price. Convenience was the third most important factor for all parties. Brand was considered next in all employment classes except the full-time employment. In all categories environmental impact was the least or second least important factor. Similarly, each employment status showed price to be the most important consideration in purchasing a car and emissions to be the least important.

Are responses in line with perceptions of environmental friendliness?

In addition to the impact of income levels, the breakdown analysis also allowed the researcher to establish whether respondents perceived environmental friendliness was in line with their eco-friendly actions. There was a significant correlation between perceived environmental values and eco-friendly actions. Levels of reported recycling increased in line with increased levels of environmental-friendliness. This was also true of the weekly spend on environmentally-friendly products/services, willingness to pay a higher price for green products/services, organic food considerations, and cosmetics considerations. This suggests that the higher the consumer's environmental values, the more likely they are to reflect these values in their actions and green purchase behaviours.

Interestingly, when it came to purchase motivations, environmental impact of products/services was the least important until it came to those who considered themselves very or extremely environmentally-friendly. Even then, quality and price were top priorities with environmental impact coming in third place. This was also the case

with factors of importance in purchasing a car. In all levels of environmental friendliness, emissions was rated the least important or second least important.

In terms of brand loyalty, the higher the perception of environmental friendliness, the higher the percentages were of respondents stating that they would not remain loyal to a brand that made false or exaggerated claims regarding their environmental impact. There was not a significant correlation between increased levels of environmental friendliness and the impact of false claims within sectors. When asked if environmentally-false claims from one company within a sector would influence respondents' opinions of other companies within the same sector, the percentage of respondents answering yes to this did not increase in line with higher environmental values. 52%, 55%, and 48% of those respondents who perceived themselves as slightly, somewhat or very environmentally-friendly respectively, answered yes, that false claims would have an impact on their opinions of companies within the same sector. However, of those respondents who considered themselves to be extremely environmentally-friendly, a much smaller 28% answered yes. 25% of respondents who considered themselves to be not at all environmentally-friendly answered also felt that false claims within a sector would have an influence on their opinions of companies within that sector.

Similarly, no direct correlation was evident between levels of environmental values and the impact that false claims in other sectors would have on respondent's opinions of companies. 64%, 31% and 42% of those respondents who perceived themselves as slightly, somewhat, or very environmentally friendly respectively, felt that environmentally-false claims from a company would impact on their opinions of companies in other sectors. Of those respondents who considered themselves to be not at all environmentally-friendly or extremely environmentally-friendly, 0% felt that this would be the case.

4.4.3 Differing Attitudes towards Sectors

Awareness of the environment and displays of environmental-friendliness amongst respondents appeared to be more evident in the food sector than the cosmetics or motor sector. A higher number of respondents considered whether or not food was organic or locally sourced as opposed to whether or not cosmetics were environmentally-friendly.

Similarly, car emissions were not seen as important to the majority of respondents when compared to other factors to be considered in the purchase of cars such as price, fuel consumption, and attractiveness. Possible reasons for this were examined later in the study through the use of focus groups and in-depth interviews. However, this finding supports findings from previous studies conducted. Caulfield *et al.*, (2010) conducted a study which examined individuals' preferences for hybrid electric and alternatively fuelled vehicles in Ireland and found that CO2 emissions were not considered to be an important attribute. Furthermore, in their study of consumer purchase intentions for organic personal care, Kim & Chung (2011) noted a difference in consumer purchase behaviour regarding organic foods and organic personal care products, given that eating food and using personal care products are distinct consumption behaviours.

4.4.4 The Experience and Impact of False Claims on levels of Consumer Scepticism

A variety of authors have referred to increased consumer scepticism and false claims by companies and how this impacts on green purchase behaviour (Martin & Simintiras, 1995; Bonini & Oppenheim, 2008; Parguel *et al.*, 2011; Delmas & Burbano, 2011; Raska & Shaw, 2012; Forehand & Grier, 2003; Becker-Olsen *et al.*, 2006).

Interestingly, a very small percentage of survey respondents were aware of a time when they had been the victim of false claims regarding a product/services' environmental friendliness, indicating a lack of experience with greenwashing among survey respondents. That said, of the 6.11% of respondents who experienced greenwashing, 100% said that it changed their opinion of the product/service in question. This finding would indicate that caution is needed by organisations as greenwashing practices will have a direct influence on consumer opinion.

Additionally, over 76% of respondents stated that they would not remain loyal to a brand if they found out that it had falsified or exaggerated claims made regarding its environmental impact. This supports findings from previous authors on the topic which state that false claims will have a negative impact on consumer perceptions of green products and increase levels of consumer scepticism.

It is worth noting that just over half of the survey respondents felt that false claims from a company within a particular sector would have an impact on their opinion of other companies within the same sector, with many stating that they would become more sceptical of other companies. This highlights the impact that false claims within a sector can have on a company, regardless of whether or not the false claims originated from them. This was not as prevalent across sectors, with just over 33% of respondents stating that false claims from a particular company within a sector would impact on their opinion of companies within other sectors. However, almost 21% of respondents answered that they did not know of false claims from a company would have an influence their opinions across sectors. This indicates that caution is needed as a potentially high percentage of consumer opinions could be impacted on. Overall, these findings draw attention to the fact that false claims have a significant impact on overall consumer scepticism.

4.4.5 Consumer Expectations: Lower Prices, More Information, Transparency, and Proof

A central theme developing from the survey analysis was a demand for greater information by consumers. Many consumers felt that they would be more motivated to purchase green products/services if they were aware of how their purchase would impact on the environment and the benefits associated with purchasing a green product/service. This is consistent with findings from D'Souza *et al.*, (2006), Ying-Ching & Chang (2012), and Raska & Shaw (2012) who all highlight the need for clear labelling and effective promotion of green products. It is also consistent with findings by Carrigan & Attalla (2001), Ottman (1992) and Kim & Choi (2003) who found that consumers have a desire to understand how their purchase of green products/services helps the environment and the impact and difference that they are making through their purchasing.

Survey respondents felt that companies needed to communicate this information through increased advertising and promotion in a way that educates the consumer regarding the environment and the difference they can make. They also felt it was necessary for companies to be more transparent with their production and validate their claims regarding their environmental initiatives.

Furthermore, although many respondents felt that pricing was still a big issue in the purchase of green products/service. Many respondents state that they thought companies needed to lower the prices of their green products while ensuring that it was still of the same quality as regular products. Other consumers felt that if companies could not lower their price then there was a need for companies to explain why the price difference exists and emphasize the benefits attached. Yet more respondents thought that companies should provide financial incentives.

In terms of transparency there was also a call for accountability for false claims. The survey revealed that over 75% of respondents felt that companies need to do more outside the law regarding their environmental impact and over 70% of respondents felt that it was not enough for companies to just follow government policy regarding environmental regulations.

The next section of research analysis for this study (4.5) will focus on research conducted with focus groups.



4.5 Focus Group Analysis

Following the survey analysis and the identification of key themes, two focus groups were conducted to probe these findings further and uncover greater insights into the key themes. As previously stated, each focus group contained a mix of respondents with different demographic and socio-economic backgrounds in order to gain a well rounded view. The focus groups were based on a semi-structured set of questions which are included in the appendices. This section of data analysis will discuss the key themes that emerged from the surveys from the perspective of focus group participants.

4.5.1 Key Motivators in Purchase Behaviour: Price & Quality as Primary Drivers

Participants of the focus group were not surprised by the survey finding that price and quality were key motivators in purchase behaviour and the stated relative unimportance of environmental impact. In fact, these factors would also be paramount in their purchasing behaviours also. Participants were then asked as to the benefit of green marketing. Responses varied among participants, with two respondents of the opinion that green marketing initiatives would not affect their purchasing behaviour.

“Well I think today, with the way things are, that people are looking to buy their products due to the price and quality. I think that the green marketing side of things kind of gets pushed to the side over the quality and the price.”

“Yes I would definitely put price and quality on the same level and the environment or the whole green aspect of it would come very last. Wasn't it [.....] that sold to [.....] so they completely gave up on their green side of things and so if the company can't be bothered why should we?”

However, all other respondents felt that green marketing was still a valuable strategy for organisations to undertake and that it should not be disregarded.

“I would disagree. I wouldn't throw green marketing out at all. I think it is very important from a number of aspects – firstly, we can't keep going the way we are going so we have to be responsible in our manufacturing and we have to be responsible in our consumption. Second of all, green marketing is going to be something that differentiates

you for your competitor. I think it's down to a company to be as efficient as they can, to get their costs down so that they can compete with everybody else and have the same level of quality but if they keep going with the green marketing it will definitely differentiate them from competitors and set them aside from everybody else because there is only so far down that price can go before quality is compromised and people will know that benchmark. So if something is really cheap people will say they are not going to get the cheapest one, they will get the middle of the road one. So if you have five items in the middle of the road and one of them is very green and ethically aware, that's what will make themselves stand out on a pedestal so I think that's what is very important."

"No I do not think green marketing is a waste of time. I think repeating the message does have an impact on overall purchases."

No I think green marketing helps to raise awareness about the options available and as green products become more common hopefully price should go down."

4.5.2 The impact of age and employment status on attitudes and behaviours

Participants were asked whether they believed age, generation, and employment status have an impact on environmental awareness and behaviours. Out of the 12 participants, 10 felt that age and generation had a significant impact on environmental awareness with the younger generation being more aware and involved than older generations. The remaining 2 respondents felt that environmental awareness depended on the type of person themselves and that this was not influenced by age.

"I don't think older generations would be as environmentally-aware because it wasn't such a big thing when they were growing up [.....] whereas nowadays we know about recycling and buying things that are environmentally responsible."

"I think with schools and with smaller kids where they are being thought all this stuff about the environment in school that they are going to go home and apply it."

"Yes, the current generation are more aware as we have been raised with the sustainable ideas in media and products. The previous generation had more of a focus on financials and cost, there was no concept of sustainable thinking."

“I don't think age, or any age really has an impact on it, I just don't think it is the case with the older generation and definitely not the younger generation because I think the last thing they are looking at is the environment. I think it just depends on the type of person themselves, if they are into that stuff they will buy it but I don't think age influences this.”

In terms of employment status, respondents believed that this would not have an impact on certain environmental behaviours such as recycling or water conservation but it may have an impact on other behaviours such as increased expenditure on green products/services. Most respondents noted that those in full or part time employment with higher income levels would be more able and willing to spend additional money on green products/services. However, respondents also felt that those with lower income levels may behave in a more environmentally-friendly manner as a form of cost saving rather than any real concern for the environment.

“I can't see how employment status would have any impact on whether or not people recycle for example, I think this is down to their own values and beliefs. However, green products are more expensive and so people who aren't working or have a lower income may have to go with the cheapest option, even if it is not the most environmentally-friendly option.”

“I think some people might wish to adopt eco-friendly measures as a form of cost saving. For example, switching off lights, conserving water, even re-using your plastic bags when you go shopping, while these are all eco-friendly they are also forms of cost saving. It might be difficult to establish whether or not people are adopting these measures to save money or out of genuine environmental concern.”

“As someone who is unemployed myself, I can honestly say that I do not consider the environment in my shopping, I simply go for the highest quality option that is the best value or whatever special offer if on that week. It is too hard to buy green products on such a low income.”

4.5.3 Differing Attitudes towards Sectors

Participants were also questioned about the finding that people considered the environmental-friendliness of food more than cosmetics or cars. Participants believed that this was because food has a direct impact on one's physical state in terms of health and weight. Many felt that the idea of food providence was also a central issue that had been given much attention in recent times due to the infamous 'horse meat scandal' that Ireland faced at the beginning of 2013. The recent timing of this food scare may have had an influence on how survey participants responded. Additionally, cars and cosmetics were thought of as a commodity and even a luxury and so the level of environmental-friendliness would not be given as much thought.

"I think people are concerned about what they put into their bodies, no one wants to be eating apples covered in pesticide."

"Food has an immediate impact on your physical state. Organic food is marketed as healthier and therefore often related to things like weight loss. Food is usually the most accessible of those industries."

"I think the horse meat incident is what has brought people more now to actually look at what they are eating more, due to that....because it's your health at the end of the day."

"It was like people had given up. They had got really aware of what was in their food and what was good for you. Then the recession hit and everything kind of lapsed a bit and then a scandal like that comes out and everyone starts wondering again and getting more worried about it."

4.5.4 The Experience and Impact of False Claims on levels of Consumer Scepticism

In light of the survey finding that almost 49% of survey respondents stated that they were unaware if they had ever been victim of false claims regarding the environment in the purchase of foods/services, participants were asked if they thought that consumers had become oblivious to environmental claims. Opinions on this topic were varied. Some participants felt that the results spoke for themselves believing that the fact that respondents 'don't know' indicated that they simply 'don't care'. Others disagreed

believing that this was a result of bigger companies having the budgets to cover up their false claims. Yet more participants felt that people simply are not questioning environmental claims or that they are unaware of the true meaning behind claims.

“I think people have been taking the manufacturers’ word on this. Fortunately now with social media there are many organisations which are acting as watchdogs and will call out a company that is making false claims.”

“The results clearly state that they don’t care. As in they don’t know whether this has happened or not, so if they did hear about it they would know about it.”

“I don’t think people know what the difference between “organic”, “all natural”, etc. is”

Participants were also asked whether or not they would remain loyal to a brand if they found out that it had falsified or exaggerated claims regarding their environmental impact. Participant responses differed here. Three participants simply stated that they would not and cited examples such as Nike and how they avoid that brand given its poor record regarding the use of sweatshops and poor working conditions. Among other participants, they all felt that it would depend on the brand, what the product/service is, and the severity of wrong-doing by the company. One particular respondent spoke of this in relation to Primark and its recent scandal regarding the collapse of a building in Bangladesh in April 2013 which was used by one of its suppliers and resulted in the death of over 300 people. Another respondent linked this back to the whole idea of trust noting that if you find out something negative about a brand then you lose trust in the brand and in these circumstances, companies need to engage in damage limitation or recovery by admitting that they have done something wrong and stating what they will do to fix it.

“I think for me personally, that it would have to be a very severe case of wrong-doing for me to move away from the brand, taking the Primark example noted earlier, yes we all heard about that but I would still shop there so it wouldn’t impact me in any way at all.”

Participants were also asked to comment on the findings regarding the impact of environmentally-false claims within a sector and how one company’s false claims might negatively impact on the entire sector and how this did not appear to translate across sectors. Again responses and opinions were varied. Some participants stated that they could easily see why this might increase scepticism and make one question claims from other companies, in particular when it comes to the food sector. Others felt that it was an

unfair assumption to make a sweeping comparison and that each company must be taken on its own merits.

"I think for the most part we trust what we are told unless we are given a reason not to."

"It depends on the relevance. I mean we have to take things at face value, we have to believe that people aren't out to lie to you, they aren't out to misrepresent themselves. [.....] I think it comes back to each individual's perceptions and how they would look at a situation."

"It depends on the product though, like if you hear one car is doing something wrong it's different. When it's food everything will suffer but different products may be different."

"Yes, I think it would make me feel less confident about all brands claiming environmental friendliness."

"Yes, they do impact other sectors, but sometimes it's all hearsay. These false claims do as much damage as if it were true. People repeat the falsity and it becomes fact. Perception is reality, unfortunately."

Conversely, when asked if they believed environmental awareness has a positive effect on a company's reputation, all participants agreed that it does. One participant noted that this is a new standard for consumers to look for in addition to the price and quality of products/services.

"I think it definitely has a more positive effect. [.....] if I seen a company that were 'up-ing' their environmental friendliness I think I would have a more positive opinion of them."

"You can't go wrong with being environmentally-friendly so I mean the more EF you are I don't think this can affect you negatively."

"Since people have become more knowledgeable about the environment it's a new standard now whereas before you might have just looked at price or who's making it etc. Even if you are not mad about the environment, it is kind of in the back of your mind."

4.5.5 Consumer Expectations: Lower Prices, More Information, Transparency, and Proof

Opinions differed regarding consumer recommendations for organisations engaging in green marketing. Firstly, focus group participants were asked if they felt that better labelling and more information on the benefits of green products would make a difference to green purchase behaviour. All respondents agreed that companies should report the necessary information and statistics available to back up their claims. However, while some felt that greater knowledge and increased information could certainly make a difference, others questioned whether or not consumers would actually go to the hassle of reading this information and taking it on board. Furthermore, some participants felt that while packaging is an important part of the marketing mix, better labelling would only be successful when backed by proper legislation.

“Knowledge is power. Consumers would not be as desensitised about all of the labelling if they knew why it was important.”

“I think that labelling is only meaningful when everyone is following a common standard/guideline. For example, what is organic to one company may be different for another. If the EU legislates that you can only use the word organic when you meet a certain criteria I think this would be the most helpful.”

“As long as its not fine print like the ingredients. I think it’s down to their marketing strategy, packaging is part of their marketing mix. If they don’t get that right then they are doing something wrong. They have to communicate and if they are very ethical and very green that’s one of the differentiations for their brand and allows them to differentiate themselves from their competitors so it could be a unique selling point. They have to communicate all of that to the consumer.”

“What a lot of companies do or what you see on a lot of products now is where they will give you the link to the website to show what they are doing, where they source from and everything like that but I have never logged on. I have seen the website or the link but I have never gone to the trouble of logging on. Because once I have bought the product and brought it home, I have bought it, I am going to use it, so I am never going to view the website.”

Regarding the survey respondents' demand for lower prices, all participants were of the opinion that ideally, environmentally-friendly products/services would cost the same as regular products/services but they believed that in reality this would be an unrealistic expectation. Participants noted that while large price differences were not acceptable, a small price difference was a reasonable expectation.

"It's not possible. It's not a level playing field if you take the simple thing of battery eggs versus organic eggs. To me, I don't mind paying 50c or a euro extra for it because it's not that much. Do you want the image of the chicken cooped up in a shoebox or do you want them roaming free and on the land and not as cruel. I think it goes back to the product as well, so going back to the example of the eggs and 50c extra, it's not a luxury, it's not a big indulgence, it's doable. However, if you were buying organic face cream for €30 a tube versus Nivea for a fiver, you're going to go with Nivea. But say the crowd that are very ethical and they are getting all these nice ingredients local, in Ireland and manufacturing them. Like the cost basis of getting something manufactured in Ireland is much higher than getting them manufactured abroad, therefore they are not on a level playing field, their cost basis are not the same as the company that are selling it for a fiver so they cant be the same and i think people, anybody that has a clue, they do know that it costs more to manufacture in Ireland or to buy local."

"I think there is this idea that if it's organic or if it's free range that its massively more expensive and fair enough in some cases it is, depending on the process. I think rather than saying everything should be the same price, I'd say the ratio of their input to output should be much the same. I mean the percentage mark-up considering the cost of making the product should be the same."

"I would have the expectation that over the long run that prices should be the same but I believe in the short term it is reasonable that we pay a little extra for the sustainable product."

In addition, focus group participants disagreed on the proposal to incentivise the purchasing of green products/services. Many believed that the decision to purchase green products/services should be based on personal choice and that the purchase of eco-friendly products/services should be a sufficient incentive in itself. Other participants conceded that incentives would have a positive impact and agreed that tax incentives were helpful.

"I think that if the company is marketing itself properly and telling the consumer the benefits of this product as opposed to any other product then I think that should be incentive enough. At the end of the day it's a market and they are there to make money, its not 'we are so lovely, let's give you free stuff'."

"There should be absolutely no incentive. The incentive is that it is environmentally friendly or green, that is the incentive. Should companies give coupons/vouchers? Absolutely no way. Should the government subsidise it? No we don't have the money to do it. The way the government do all their environmentally stuff is by giving grants to companies etc for solar panels and the likes. That's the right way to go around it. The EU would probably give out because it's very anti-competitive to give one green company money for helping them to manufacture versus somebody else that's giving local employment. It would be a very unfair advantage and it's not the governments job."

"It would be kind of unethical in a way because you are bribing them to go and buy the product if you are giving them freebies and incentives."

"Isn't saving the planet incentive enough?"

"Yes but many do need these incentives and convenience."

"Tax incentives help as can be seen with hybrid cars but ultimately you cannot incentivise everything. I think the more people start to think this way we will see a building momentum. E.g. if you purchase your Prius you are probably going to be thinking about other green options aswell."

Finally, participants' opinions differed regarding the recommendation that companies do more than just follow government policy regarding environmental regulations. While many agreed, others felt that this was an unfair expectation given that companies were compliant with the relevant legislation.

"I would like them to be the same but I understand why they are."

"In an ideal world they would cost the same, it would motivate more people to go with the environmentally-friendly choice."

"I agree if it's possible for companies to do that. It would certainly encourage people to be more environmentally conscious."

“I would disagree to a certain extent I mean obviously there has to be some kind of a baseline there that people have to adhere to and some kind of standard in place.”

“They need to adhere to minimum standards but everyone would hope that they go a little bit above it or they are doing a little bit better than just the minimum but that’s not something I have ever thought about really before. I am shocked that its 74% of people.”

“At the end of the day you have your minimum standards and if companies are meeting them then it’s up to them if they are in a position to do better that’s great but you can’t turn your back on companies that aren’t in that position.”

“That’s a very high percentage to me. Maybe the people that answered it don’t realise how far companies actually go with their ethical standards, like maybe they don’t realise how much the government actually do regulate businesses. Maybe that’s why they thought there is nothing being done so more needs to be.”

“I would agree that 74% is quite high. I suppose if people were to realise that if you expect companies to go to the ends of the earth and have the upmost standards then it will have a knock-on effect on price.”

4.6 In-Depth Interview Analysis

As previously stated, three interviews were conducted with marketing executives from the three industries that this study is based on – the food, motor, and cosmetics industry. Of these interviewees, the food and cosmetics companies who participated are avid practitioners of green marketing and promote organic and natural products. The car company who agreed to participate did not rely on green marketing to the same extent, given that their vehicles varied from environmentally-friendly to non-environmentally-friendly. However, they have recently released an eco-friendly electric car on the market. As with the focus groups, the interview findings have been analysed based on the themes emerging from the survey analysis conducted. Complete transcripts of each interview are included in Appendix V. It should be noted that participants from the cosmetics and motor industry prefer to remain anonymous to this study. The participant from the food sector will be referred to by its company name forthwith, Glenisk.

4.6.1 Key Motivators in Purchase Behaviour

As the surveys and focus groups showed, price and quality are consumer's main motivators in purchase behaviour with environmental friendliness of products/services emerging as a relatively unimportant factor. Each interviewee was firstly asked what they believe to be their consumer's main motivators in the purchase of their products. In each case, all respondents acknowledged the importance of price as a key purchase motivator.

For the car company, this was noted as the primary motivator with the interviewee noting that *"Everything comes down to cost and running cost."* Brand reliability, warranty and various needs such as the size of the car were also noted but it was acknowledged that price and running cost was paramount here. Their opinion was sought on the survey finding that emissions was rated as the lowest priority for the majority of survey respondents. The respondent did find this surprising but believed the reason for this was due to survey respondents' lack of correlation between emissions and tax fees. However, when it was noted that tax fees were listed as a separate purchase factor in the questionnaire, the rationale for this finding became more evident to the interviewee who believes the importance of emissions to be linked to cost for the consumer rather than a concern for the environment. In terms of value, the interviewee noted that consumers would believe environmentally-friendly cars to be better value than regular cars. The interviewee cited customers of their electric car were real environmental activists and brand ambassadors for how much money they save as a result of purchasing the electric car. In this way, the interviewee also believed that the recession had actually had a positive effect on trends towards the purchase of hybrid or electric cars given the cost savings associated with the purchase of this car.

Glenisk regarded both price and taste to be the main motivators for consumers in purchasing their products, and indeed for any food, but believed that it was the added benefits associated with their products that encouraged people to purchase. However, the interviewee also noted that there was a segment of consumers that would solely be motivated by the fact that products are organic and others that would purchase organic food products for the quality and health attributes associated with it. When asked to comment on the finding that survey respondents find organic food too expensive, the interviewee was not surprised but believed there to be a stereotype of organic food being seen as 'too expensive'. It was acknowledged that there had to be a difference in price

due to the premiums paid for ingredients but the company are also keenly aware of the need to be price competitive. In countering the 'organic food is too expensive' stereotype the interviewee noted that it was also important not to cheapen the products and end up in a race to the bottom. Overall, the interviewee believed that it was important to strike a balance in terms of the pricing of organic food products. While the interviewee believed that consumers do perceive organic to be better value they also believe it to be more expensive. The need for improved consumer education on what it means to be organic as a means of understanding the price difference was suggested. The recession did not impact on Glenisk with the interviewee accrediting this to both a constant in consumer values in still wishing to offer their families healthy food and also an increase in people's awareness of the importance of buying Irish.

Finally, the organic cosmetics company noted a number of different motivators in the purchase of their products, recognising that some consumers would see cosmetics as a luxury, others may consider it a necessity and an essential part of their skin care routine. Motivations included price, ingredients, packaging, certifications & standards, and recommendations from friends and family. Furthermore the interviewee believed that the trend towards their organic cosmetics had not been affected by the recession due to the fact that many of their consumers view organic skincare products as a necessity. In terms of the environmentally-friendly cosmetics being better value, the interviewee thought that consumers would believe them to be better value due to the health benefits associated with them and suitability for skin conditions. However the interviewee was not surprised to learn of the survey finding that the majority of respondents would not consider how environmentally-friendly cosmetics are when purchasing them. This finding was attributed to confusing labels, a lack of labelling laws in the beauty industry, and cosmetics companies choosing to gloss over disturbing facts.

4.6.2 Consumer Profile

Given that the surveys showed age and income levels to have an impact on attitudes and behaviours, interviewees were asked whether they could identify a notable customer segment or consumer profile for the products. Profiles differed with both the cosmetics and organic food company leaning more towards the female market. The cosmetics company stated their main customer base as females in the 20s to mid-40s although it was

also noted that males were very open to change in this sector. In terms of how purchasing might be affected by income levels, as mentioned by Glenisk, it was also noted that there appears to be a misconception that organic is always more expensive. The organic food company noted that while a lot of different people buy organic, their target consumer would typically be 'the mom with the shopping trolley' wanting to give her family nutritious food. The car company noted that consumers purchasing their electric car would tend to be educated, technology focused, pragmatic and in their 40s or 50s with the disposable income to purchase a car. However, the interviewee did note that this profile is changing to a younger, smart-car demographic.

4.6.3 Differing Attitudes towards Sectors

Given that the research findings indicated a more positive attitude towards environmental-friendliness in the food sector, interviewees were asked if they believed consumers to be more or less willing to adopt environmentally-friendly alternatives in their sector as opposed to other sectors. While they did not want to speculate on other sectors they each addressed their opinions on attitudes towards their own sectors. The organic food company noted that there certainly seemed to be a trend towards taking an interest in food and where it is coming from and how it is produced. The cosmetics company pointed out that there still appears to be scepticism towards the effectiveness of organic cosmetics versus regular cosmetics. Similarly, the car company felt that while there seems to be a push towards organic products and healthy products, it would take a number of years for this trend towards environmentally-friendly options to become evident in the motor industry. Although each interviewee did not speculate on other industries and spoke of their own sector only, the organic food company was the only one of the three that identified a definite and positive attitude towards organic food presently. This supports the findings from the surveys and focus groups conducted which showed a more positive attitude towards environmentally-friendly options within the food sector as opposed to the cosmetics and motor sector.

4.6.4 The Experience and Impact of False Claims on Levels of Consumer Scepticism

Interviewees were also asked a number of questions relating to the topic of greenwashing and its impact on brand loyalty. Similarly, they were asked for their opinions on greenwashing by other companies and the impact it could have on consumer scepticism within their sectors.

Firstly, each interviewee was asked how their company avoids being accused of greenwashing. Regulation was reported as the key motivator. The car company stated that they operated in a highly regulated industry and tests are done on a global scale, and the findings simply could not be inflated. Furthermore, the interviewee believed that it was important to make the public aware of what capabilities the car has without making them believe that it is better than it already is, noting that even with an electric car, there is still a carbon footprint, albeit a much smaller one. The cosmetics company relied on third party regulators such as the Organic Soil Association and The Irish Medical Board to certify their claims and ensure certain standards. Glenisk also stated that they rely on third parties and regulations noting that they are certified by IOSCA which ensures that they cannot claim something as 'organic' without meeting legal terms. The importance of reports and data was also noted here together with joining initiatives to promote sustainability. The interviewee felt that it was important for Glenisk to highlight things that they do well but equally acknowledging that they are still working on solutions for other problems.

Interviewees were also asked if they had noticed consumer scepticism in response to their green marketing initiatives and if so, what practices would they employ to combat this. The interviewee from the car company noted that green marketing was not at the core of the company's marketing strategy, as they focused more on brand and personal taste as the key influencers to purchase a car. It was noted that there were still facilities for consumers to go online and look at the technical specifications of the cars and establish if it matches up to what they are producing. The interviewee also pointed out that the company believed in transparency and felt it was very important to tell people that performance of their electric car is dependent on how they drive – *".....I think that's a huge thing when you are putting anything out there with green is to put that asterisks there to point out that this can change and you are a huge influencer of the numbers."*

The cosmetics company again cited the importance of regulation and how greenwashing can be avoided thanks to certifications of organic standards within the beauty industry. Glenisk said that they have not been challenged on any of their claims to date but credits this to an honest and upfront policy and the ability to answer any questions a consumer might have.

In terms of how false claims from other companies within their sectors might impact on them, each company had different experiences with this. Glenisk did not believe they had been impacted as of yet although the interviewee recognised the impact that a scare in the dairy or organic food sector could have. It was acknowledged that they have not been grouped in with companies who have suffered from previous scares such as the horse meat scandal. Furthermore, the interviewee from Glenisk believed that when other companies come under pressure it can sometimes be an opportunity for their company to remind customers of the things they are doing well. The car company representative stated that they had not experienced this and the push for electric and hybrid cars from other companies was benefiting everyone in the sector in helping to make green more mainstream. However, the interviewee did note that if one of the companies within the motor sector were to ‘mess up’ that it would indeed have a huge impact all around. The cosmetics company was the only company that felt they had been negatively affected by false claims from other companies noting an example of another cosmetics brand that had created a “natural” logo out of thin air which was not third party certified. The interviewee believed that this was bound to cause scepticism among consumers and has the potential to negatively impact on truly organic companies.

4.6.5 Consumer Expectations: Lower Prices, More Information, Transparency, and Proof

When presented with the survey findings that consumers believed more information and proof of claims needed to be made available, all interviewees believed that it was important for information to be made available in addition to data which supports their green claims. The car company felt that the information is there for consumers and if they are actively green they will search for this information and as advertisers, it would be impossible to give this information to consumers all in one go. Similarly, Glenisk noted that it is important to strike a balance between putting out large reports that the average

consumer is not going to take the time to read, and not giving any information at all, believing that a few highlighted points should be made available whether on the packaging or in a customer-friendly way, along with having the reports and information to back these claims up should the consumer wish to find out more. The cosmetics company referred to the need for stricter labelling regulations for the cosmetics sector as a whole and also the need for information to be highlighted so that consumers can distinguish between those companies that are truly green and those that are not.

In terms of the consumer demand for lower prices, both Glenisk and the organic cosmetics company noted that the reality is that there are higher costs associated with producing organic products such as the cost of sourcing of ingredients and so it is a fair expectation that people pay a bit more for organic produce in the same way that there are extra charges in place for any kind of added-value products. The car company was not affected by this demand as they had already lowered the price of their electric car and the car itself served as more of a cost-saving than a regular car would.

4.7 Conclusion

This chapter has presented the research findings from all primary research methods used and based findings on a number of key themes which emerged from the initial survey research conducted. Among the key findings is the limited experience of greenwashing among respondents. Central to this finding was the discovery that if these consumers were made aware of greenwashing by organisations it would have a significant negative impact on brand loyalty. Interestingly, this negative impact was not limited to the company found guilty of making environmentally-false claims. Results from both the surveys and focus groups conducted showed that environmentally-false claims from a company would negatively impact on consumer opinions of other companies within the same sector and also have the potential to negatively impact on companies in other sectors (albeit to a lesser degree). Interviews conducted with marketers in industry showed that while not all had been affected in this way, they recognised that greenwashing in industry had the potential to negatively impact on their business by increasing consumer scepticism.

Other key findings include consumers' price sensitivity with price remaining a key motivator in their purchasing decisions. This remains a key motivator regardless of

employment status although levels price sensitivity and willingness to pay premiums for green products/service is impacted by levels of disposable income. Interviewees with companies in the sectors examined in this study show that there is an awareness of price sensitivity among consumers in addition to demands for high quality products/services. Environmental values is also shown to impact on respondents' attitudes and behaviours. There is also a demand for more information from consumers regarding how they can impact on the environment by purchasing green products/services and what the added benefits are. The purpose of this chapter has been to analyse findings and discuss the key themes discovered in-depth from the view of both the customer and the marketer in the sectors at the centre of this study.



Chapter 5: Conclusion and Recommendations

5.1 Introduction

Polonsky & Mintu-Wimsatt (1995) note that the preservation, conservation, and protection of the environment pose a crucial challenge to businesses. Consumers today are becoming increasingly aware of environmental issues facing our planet due to our current consumption levels and in addition to making conscious choices to adopt environmentally sound behaviour such as recycling, many wish to purchase in a more ethical and eco-friendly way, challenging companies on not just the products/services they offer but the manner in which they do business, manufacture, and produce these consumer offerings. Companies have responded to this through the introduction of green marketing, conducting business with minimal detrimental impact to the environment. However, the increase in green marketing has also led to many companies misleading consumers regarding their environmentally-friendly activities in an effort to gain market share, an act known as greenwashing.

This study set out to establish the prevalence of greenwashing across a range of selected industries and evaluate what impact, if any, the experience of greenwashing has on specific consumer buyer behaviour and on attitudes towards green marketing in general based on a study of consumers resident in Ireland. A combination of research methods were employed including a questionnaire-based survey, focus groups, and in-depth interviews with marketers from the sectors at the centre of this study. Results of the primary research have been analysed and key themes drawn in a discussion of the study's main findings. This chapter aims to re-address the research objectives noted in the first chapter of this study and draw final conclusions and recommendations.

5.2 Review of Research Objectives

In achieving the overall aim of the study, a number of objectives were established for this research. The initial objective was to conduct a comprehensive literature review of the

relevant literature related to the dissertation topic. Having completed this review, it was evident that green marketing has received much attention over the years from a variety of researchers and continues to do so. Much of this research has examined green marketing in relation to consumers' attitude and behaviours and in particular, purchase behaviour. Key findings include the presence of an attitude-behaviour gap which shows there to be a gap in consumers' positive attitudes towards the environment and their behaviour, in particular, their green purchase behaviour. Researchers have attributed this value-action gap to various reasons including external, internal and situational factors (Carrete *et al.*, 2012); the impact of attitudes on the cognitive and affective functions and thus, behaviours (Hoyer and MacInnis, 2001); individual characteristics such as trust and perceived efficacy (Gupta & Ogden, 2009); and the role of self-interest and non-environmental motives such as comfort or pleasure in consumer behaviour (Yam-Tang and Chan, 1998). Previous empirical research has also shown consumers to be price sensitive in green purchasing (D'Souza *et al.*, 2006; Mainieri *et al.*, 1997; Mandese, 1991) and also sensitive to the quality of green products/services and the benefits gained from their purchase (Gingsberg & Bloom, 2004; Durif *et al.*, 2012; Ottman, 1992; Chen & Chai, 2011; Ying-Ching & Chang, 2012).

Other key findings in previous empirical research include the use of socio-demographic variables and psychographic variables in green consumer profiling. Psychographic variables such as environmental values have shown to have greater success in explaining consumption behaviour (Luzio & Lemke, 2013; Akehurst *et al.*, 2012). Opinions differ on the use of socioeconomic variables such as income with some stating that it has been thought to relate to environmental sensitivity (Carrete *et al.*, 2012) and others finding that it is not relevant in explaining ecologically conscious consumer behaviour (Akehurst *et al.*, 2012). Greenwashing has also been the topic of previous research and has been found to have a negative effect on consumer confidence in environmentally-friendly organisations and products/services (Delmas & Burbano, 2011; Dahl, 2010; Bonini & Oppenheim, 2008; Peattie & Crane, 2005). Previous research has also offered various green marketing strategies for organisations to engage in (Grant, 2008; Gingsberg & Bloom, 2004; Unruh & Ettenson, 2010; Kronrod *et al.*, 2012; Cherian and Jacob, 2012).

The remaining objectives of this research aimed to add to this existing body of research, with a particular focus on how the practice of greenwashing may have influenced consumer perceptions of green marketing in Ireland and make recommendations to

marketers engaging in green marketing in Ireland. These objectives will now be analysed in relation to the study conducted in order to assess whether or not they have been met.

Objective One: To investigate whether the Irish consumer has experienced greenwashing across a selected range of products/services.

Primary research conducted indicated two clear responses for the vast majority of those who participated in this study: the Irish consumer had either not experienced greenwashing (45.23%) or were unaware of any experience that they may have had with greenwashing (48.66%). A very small proportion of participants (6.11%) stated that they had experienced greenwashing. Although research by other authors has indicated that there is a significant prevalence of greenwashing taking place in industry today, this research indicates that consumers have not been able to identify a time when they have been a victim of this practice. It was interesting to note that while consumers were for the most part unable to pinpoint a time when they may have been subjected to greenwashing, some commented that they would not be surprised to learn that they had, indicating that these results may be caused by consumers choosing to take companies claims at face value and not question them. Participants of the focus groups indicated that these findings may be attributable to a number of reasons: that consumers simply 'don't care'; the ability of companies with large budgets to cover up their false claims; or a lack of awareness of the true meaning behind claims. In contrast, the companies interviewed indicated that regulation helps to prevent greenwashing practices.

Objective Two: To identify if a reported experience of greenwashing in one industry leads to negative attitudes of green marketing in other industries.

While the previous finding points to a low level of reported cases of greenwashing among respondents, the research findings show that were consumers made aware of false or exaggerated claims regarding companies' environmental impacts, it would significantly impact on their attitudes to these companies in a negative manner leading to a damaging effect on brand loyalty with 76.28% of respondents stating that they would not remain loyal to a brand that made false environmental claims. The majority of focus group participants reported that their decision to remain brand loyal would depend on the brand itself, what the product/service is, and the severity of wrong-doing by the company.



In addition a significant number of survey respondents (52.08%) reported that environmentally-false claims from a company within a sector would negatively impact on consumers' opinions of other companies within this sector. Focus group participants noted that they could see how consumer scepticism could easily increase as a result of false claims from other companies and in particular when it came to the food sector. However, many others were of the opinion that each company should be judged on its own merits. The interviewees within the three chosen sectors agreed that it could have a negative effect with only one of the companies believing that this had already happened to them. Interestingly, some of the interviewees believed that environmentally-false claims from another company could act as an opportunity for their own company to stand up and differentiate themselves by demonstrating to consumers their ability to back up claims.

Notably less survey respondents felt the same way regarding how environmentally-false claims within one sector could impact on their opinions and attitudes towards green marketing in other sectors with 45.97% reporting that their opinions would not be impacted. However, 33.25% reported in the positive and there was also a significant number of respondents who did not know (20.87%). The research showed that the majority of consumers here believed that each sector should be judged on its own merits. However, there is the potential for a high negative impact through the combination of respondents who answered in the positive and those who stated that they do not know. Opinions varied among focus group participants. The majority agreed that companies must be judged on their own merits but others felt that environmentally-false claims from one company would diminish their confidence in all brands claiming environmental-friendliness.

Overall, consumer scepticism remains high among survey respondents with over 60% agreeing that they do not always believe companies' claims regarding their environmental impact. Despite this high level of scepticism the majority of consumers still believed that they had not experienced or did not know if they had experienced some form of greenwashing. This would indicate that although scepticism is high, the consumer is not taking the time to actively question claims and look for proof. While many consumers believed that there was a need for companies to provide more information, research conducted with the companies suggested that this information is there and widely available through their websites but that it would not be possible to convey all of this

information and proof of claims through advertising and packaging. As one interviewee noted, companies need to strike a balance in the levels of information that is being actively promoted through advertising, and the large amounts of data that is there to back up their claims. The results show that reported levels of scepticism is high and greenwashing has a negative impact on consumer attitudes towards green marketing. This negative impact is particularly prevalent within sectors but does not carry across sectors to the same extent. However, the findings from interviews with companies would suggest that consumers appear to be unaware of the information out there that can answer their questions regarding companies' claims.

Objective Three: To establish if consumer attitudes and behaviours towards 'green' are influenced by age, income levels, and susceptibility.

In developing a profile of respondents, age and employment status were compared against how environmentally-friendly consumers considered themselves to be. Consumer responses were broken down based on perceived environmental friendliness in order to assess whether or not a value-action gap was present between stated environmental values and subsequent environmental behaviours and attitudes. In addition, a number of responses were broken down based on employment status to establish whether or not income levels may have an impact on purchase motivators and considerations when purchasing certain products.

Overall results indicated that a correlation exists between environmental values and consumer attitudes and behaviours which would contradict previous findings relating to the existence of a value-action gap. As consumers' levels of environmental friendliness increased, so too did their actions and considerations in environmental behaviours such as the purchasing of green products. However, this gap became evident when respondents were asked to rank their purchase motivators. Where eco-friendly behaviours involved the purchasing of green products or purchase motivators, regardless of environmental friendliness, the research showed that price and quality of the products and services were paramount. This would indicate that consumers' inherent environmental friendliness and susceptibility to green claims could only go so far in encouraging consumers to purchase green products or services, as price and quality would remain at the forefront in purchasing decisions. These results suggest that price sensitivity of consumers and

product/service quality can go a long way in explaining the gap, in agreement with much of the previous empirical research findings mentioned. However, the interviews point to the 'greenness' of a product/service as an added benefit that will help to differentiate companies from competitors and may encourage eco-friendly consumers to purchase their product/service over non-green alternatives where there is little difference in the price.

Furthermore, consumers' environmental friendliness had a powerful effect on their willingness to remain loyal to a brand engaging in greenwashing. The more environmentally friendly the consumer, the less willing they were to remain loyal to the brand engaged in greenwashing. However, in terms of the impact that a company engaging in greenwashing might have on other companies within or across sectors, there was not a significant level of correlation present between respondents' environmental values and how their opinions would be impacted. When the response to this question was broken down based on environmental values (Appendix VI) opinions were split indicating that this was down to a consumer's personal level of scepticism or beliefs regarding company practices, irrespective of environmental values. The importance of environmental impact was also a higher motivator in the purchasing decision for those that considered themselves to be very or extremely environmentally-friendly. However, price and quality were the predominant purchase motivators in all categories of environmental friendliness.

Employment status was shown to have an impact on consumers' willingness to pay a higher price for environmentally-friendly products. Greater numbers of students and unemployed respondents were unwilling to pay a higher price demonstrating a high level of price sensitivity among this cohort. However employment status did not have a significant impact on how important consumers considered the environment to be in their purchase motivations. Regardless of employment status and income level, environmental impact was the least or second least important consideration in purchasing products and services with price and quality considered the top motivators for purchasing.

Overall, the results indicate that the environmental values or income of respondents will have an impact on green attitudes and behaviours such as recycling, organic considerations in purchasing, and a willingness to pay more for green products/services. Despite this, it is evident that in all purchasing decisions, regardless of income or

environmental values, price and quality will remain the crucial factors for all consumers across all profiles. However, willingness to buy green products/services increases in correlation with environmental values and while income level does have an impact on the purchasing decision, it appears that consumers in general would hold positive attitudes and behaviours towards green products/services provided there is not significant differences in prices between them and non-green alternatives. This was also evident in focus group findings where the majority of participants noted that they would be willing to pay a higher price as long as it was not considerably higher. Interviews conducted suggest that companies are aware of this price sensitivity among consumers and recognise price as a primary motivator in purchasing decisions.

Objective Four: To make recommendations for marketers in Ireland in their use of green marketing.

Given the growing concern over the environment and tighter government regulation regarding practices that effect the environment, more and more marketers are engaging in green marketing in an effort to promote their positive initiatives and gain market share. Yam-Tang & Chan (1998) note that green marketing strategies that are based on the assumption that consumers are deeply concerned about environmental issues and will act accordingly may not be effective. Similarly, Polonsky (2012) cites a number of barriers to transformational green marketing among which are the fact that consumers may not perceive their individual choices as being able to make a difference to environmental problems and the continuance of individuals to make consumption decisions based on benefits to their own welfare. Having conducted both secondary and primary research, the author has identified a number of recommendations for marketers in Ireland when using green marketing tools to target consumers in Ireland. These recommendations have been summarised in Graph 22.



Graph 22: Recommendations for marketers in Ireland engaging in green marketing

In general, marketers as a whole need to work to increase awareness of what is involved in the presentation of truly green products/services to the consumers. The research has shown that while consumers may have positive attitudes towards the environment and wish to reflect this in their behaviours, they are unaware if they have fallen victim to greenwashing. Marketers operating in Ireland need to work towards educating the consumer as to what is legitimately environmentally-friendly and what is not. Taking the example given in the in-depth interviews, many consumers are unaware of what exactly it means to be organic and may conceive words like 'natural' and 'organic' to mean the

same thing when the environmental initiatives behind each word can be completely different. If the marketer in Ireland wants to promote greener products and services then it is down to them to educate the consumer and give them the ability to distinguish between real and false environmental claims. This will benefit green companies as the research shows that were consumers aware of false claims, they would not remain loyal to the brand making those claims. This provides genuine green companies with an opportunity to hook these consumers.

Secondly, the consumer needs to be informed. Research shows that consumers are calling for more information from companies and there is a requirement for companies to provide proof of their claims. Findings from the in-depth interviews indicate that, for some companies at least, the information is out there if consumers wish to find it. However, marketers need to do more to show their consumers where to look and what to look for. It appears that many consumers are unaware of the additional information such as sustainability reports that may be available on companies' websites. While it is understandable that marketing tools such as advertisements can only highlight a few facts and cannot tell the consumer everything they may want to know about a company and their environmental initiatives it is vital that they direct consumers as to how they can find out more information if required. As findings from the focus group indicated, often just knowing that the information is out there and that companies have backed up their claims via their websites, third party certifications, or the availability of reports is enough for consumers. For those consumers that do wish to find out more however, it is essential that the information is available and that consumers are aware of its availability and can easily access it. It is also important that companies can legitimately back up the claims they are making. Third party certification is recommended here together with partnerships or getting involved with environmental initiatives that are closely aligned with the company's core values. This will serve as proof to consumers that green claims are true.

Marketers also need to consider the area of pricing in their green marketing initiatives. The research has indicated that price and quality are paramount for consumers and they will not be persuaded to buy based on green attributes alone. It is clear that quality must match up to or exceed that offered by regular products/services. Furthermore, while many consumers have called for prices of green products/services to be lowered, the research shows that a large majority of consumers would be willing to pay a higher price *within reason*. While it is understandable that the production of environmentally friendly goods

and services is associated with higher costs which must be passed on through pricing, consumers are unwilling to accept exorbitant price differences. In addition, consumers should be made aware of *why* there is a discrepancy in price and the extra care and initiatives used by companies in production and manufacturing that cause this price difference. 'Green' needs to be used as an added-value initiative in marketing. It is not enough to just advertise how environmentally-friendly a product is; the benefits to the consumer must also be emphasized. The emphasis of these benefits should also help to counteract negative perceptions towards price discrepancies.

Green marketing also needs to emphasize to the customer the influence that they as an individual can have and how their purchase of green products or services impacts on and helps the environment. This was clear from consumer responses with many stating that they wanted to know exactly what impact their purchases would make. Therefore it is important for marketers to emphasize to individuals the impact of their choices and invoke a positive emotional response so that consumers feel their decisions matter and can help the collective good. Furthermore, marketers can empower their customers and encourage the consumer role of watchdogs through social media. By engaging with consumers via blogs, the company facebook page and twitter for example, marketers are giving consumers the opportunity to present any concerns they may have regarding the organisation's environmental practices and gives the organisation the opportunity to dispel any accusations of greenwashing in a public forum. Furthermore, social media offers marketers a unique way to promote their green marketing initiatives to a wide variety of consumer demographics but in particular, the younger generation.

5.3 Conclusion

Raska and Shaw (2012) note that marketing managers today have recognised the need to embrace 'green' ways of conducting business and are currently embracing environmental initiatives at an increasing rate. Green marketing can be an invaluable form of promotion for a business, appealing to an increasing number of consumers that are concerned with the environment and helping businesses to differentiate themselves from their competitors

by adding value to the product or service. This added value may however be compromised if consumers become sceptical of a company's green claims.

This study set out to examine whether consumers in Ireland had experienced greenwashing by companies and if so how this impacted on their perceptions of green marketing. While the results clearly showed a low level of experience, (or awareness of experience), of greenwashing among consumers (45.23% and 48.66% respectively), it also brought to light the potential detrimental impact that greenwashing *could* have were the consumer to discover that they had fallen victim to companies' false environmental claims with 76.28% of respondents stating that they would not remain loyal to a brand who engaged in greenwashing. Consumers overall felt that there is a shortage of information given regarding 'greenness' and this may be one possible explanation as to why there was so little experience with greenwashing evidenced. It is possible that the consumer does not know that they have actively experienced greenwashing because they are unable to distinguish between various companies' green claims, whether true or false.

Findings showed that greenwashing could also have an impact on consumer scepticism of other companies, not just the company engaging in the practice. This was more prevalent within sectors with 52.08% of respondents reporting that environmentally-false claims from one company with a sector would negatively impact on their opinion of other companies within the same sector. This percentage was lower in terms of cross-sectoral impact with 33.25% of consumers reporting that their opinion of companies within other sectors would be impacted on. Overall, these results emphasized the potentially damaging impact of greenwashing in terms of increasing consumer scepticism and highlights the need for organisations to combat this by validating their claims and differentiating themselves from those companies engaged in greenwashing.

The study also revealed price sensitivity among consumers across all income levels and environmental values although price sensitivity was higher in both students and the unemployed. In terms of environmental values, willingness to pay more for green products/services increased in correlation with environmental values, albeit many respondents noted that they would only be willing to accept a marginal price increase. Furthermore, respondents' key purchase motivators were price and quality regardless of age, income, or employment status, highlighting the prevalence of price sensitivity. This

may help to explain the value-action gap referred to in much of the previous empirical research noted in this study.

This has led to a number of recommendations for marketers in Ireland wishing to engage effectively in green marketing and make practical use of green marketing as a tool in their marketing strategies. These recommendations include increasing environmental awareness through education and promotion; providing improved information and emphasising both the benefits of going green and how the individual can impact on the environment; addressing pricing differences in green versus regular products; and encouraging the consumer role of watchdog through social media as well as targeting the younger generation.

There are a number of avenues to be considered for future research. Among these would be the study of additional sectors to establish if there was a difference in the percentage of consumers that experienced greenwashing. Additionally, a similar study could be replicated in other countries to establish if there are differences based on culture and geographical demographics. Given the results obtained and the consumer's demand for more information, additional studies could also look at what is the best method for companies to get green marketing information out there to consumers. Furthermore, given the lack of identified experience with greenwashing, future studies might examine why this is the case and ask is this because of a lack of information, understanding, or disregard for the environmental claims.

If green marketing is to be used effectively by marketers in Ireland, consumer requirements must be acknowledged. Among these are the appeal for more information and the consumer's need for organisations to acknowledge price sensitivity and quality appeals. If green marketing is to effectively alter green purchase behaviour then consumers need to become better informed. It is down to organisations to make this information available, promote its availability, and provide the validation of environmental claims required to quash consumer scepticism and reduce the potential negative impacts of greenwashing in industry. Furthermore, green marketing should inform consumers of their impact on the environment as an individual and the added benefits of purchasing green products/services.

Bibliography

Anderson, T. & Cunningham, W. (1972), 'The Socially Conscious Consumer', *Journal of Marketing*, 36 (3): 23-31, Business Source Complete, EBSCOhost, viewed 20 July 2013

Apaiwongse, T. (1994), 'The Influence of Green Policies on a Dual Marketing Center: An Ecological Marketing Approach', *Journal of Business & Industrial Marketing*, 9 (2): 41-50, Emerald, viewed 12 May 2013

Arnold, C. (2009), *Ethical Marketing and the New Consumer*, United Kingdom: John Wiley & Sons Ltd.

Banerjee, B. & McKeage, K. (1994), 'How Green is My Value: Exploring the Relationship Between Environmentalism and Materialism', *Advances in Consumer Research*, 21 (1): 147-152, Business Source Complete, EBSCOhost, viewed 20 July 2013

Becker-Olsen, K., Cudmore, B. & Hill, R. (2006), 'The impact of perceived corporate social responsibility on consumer behavior', *Journal of Business Research*, 59 (1): 46-53, Business Source Complete, EBSCOhost, viewed 12 May 2013

Belz, F-M. & Peattie, K. (2009), *Sustainability Marketing: a global perspective*, 1st edn, Glasgow: John Wiley & Sons, Ltd.

Bloom, M., Fisher, J. & Orme, J.G. (2009), *Evaluating Practice: Guidelines for the Accountable Professional*, Sixth Edition, Boston: Allyn & Bacon

Bonini, S. & Oppenheim, J. (2008), 'Cultivating the green consumer', *Stanford Social Innovation Review*, Vol. 6: 56-61, Google Scholar, viewed 12 May 2013

Boulstridge, E. & Carrigan, M. (2000), 'Do consumers really care about corporate responsibility? Highlighting the attitude-behaviour gap', *Journal of Communication Management*, 4 (4): 355-368, Google Scholar, viewed 23 July 2013

Bryman, A. & Bell, E. (2007), *Business Research Methods*, Oxford: Oxford University Press

Carrete, L., Castaño, R., Felix, R., Centeno, E. & González, E. (2012), 'Green consumer behaviour in an emerging economy: confusion, credibility, and compatibility', *Journal of Consumer Marketing*, 29 (7): 470-481, Emerald, viewed 2 July 2013

Carrigan, M. & Attalla, A. (2001), 'The myth of the ethical consumer – do ethics matter in purchase behaviour?', *Journal of Consumer Marketing*, 18 (7): 560-578, Emerald, viewed 20 July 2013

Carrigan, M., Szmigin, I., & Wright, J. (2004), 'Shopping for a better world? An interpretive study of the potential for ethical consumption within the older market', *Journal of Consumer Marketing*, 21 (6): 401-417, Emerald, viewed 2 August 2013

Carson, D., Gilmore, A., Perry, C., & Gronhaug, K. (2001), *Qualitative Marketing Research*, London: Sage

Caulfield, B., Farrell, S. & McMahon, B. (2010), 'Examining individuals preferences for hybrid electric and alternatively fuelled vehicles', *Transport Policy*, 17 (6): 381-387, Science Direct, viewed 23 July 2013

Chan, H., Hongwei, H. & Wang, W. (2012), 'Green marketing and its impact on supply chain management in industrial markets', *Industrial Marketing Management*, 41 (4): 557-562, Science Direct, viewed 2 August 2013

Charter, M. & Polonsky, M.J. (1999) '*Greener Marketing: A Global Perspective on Greening Marketing Practice*, Second Edition, Sheffield: Greenleaf

Chen, T. & Chai, L. (2010). 'Attitude towards the environment and green products: consumers' perspective', *Management Science and Engineering*, 4(2): 27-39, Academic Search Complete, EBSCOhost, viewed 2 July 2013

Chen, T. & Chai, L. (2011), 'Green Purchase Behaviour: Examining the Influence of Green Environmental Attitude, Perceived Consumer Effectiveness and Specific Green Purchase Attitude', *Australian Journal of Basic and Applied Sciences*, 5 (8): 559-567, Academic Search Complete, EBSCOhost, viewed 16 October 2012

Chen, Y. & Chang, C. (2012), 'Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk', *Journal of Business Ethics*, 114 (3): 489-500, Business Source Complete, EBSCOhost, 23 July 2013

Cherian, J. & Jacob, J. (2012), 'Green Marketing: A Study of Consumers' Attitude towards Environment Friendly Products', 8 (12): 117-126, Academic Search Complete, EBSCOhost, 2 July 2013

Clark, D. & Lindegaard, K. (2006), *The rough guide to ethical living*, Rough Guides, London.

Cohen, J. (2001), 'Appreciating, understanding and applying universal moral principles', *Journal of Consumer Marketing*, 18 (7): 578-595, Emerald, viewed 2 August 2013

Collis, J. & Hussey, R. (2009), *Business Research – A Practical Guide for Undergraduate and Postgraduate Students: Third Edition*, Basingstoke: Palgrave Macmillan

Crane, D. (2010), 'Environmental Change and the Future of Consumption: Implications for Consumer Identity', *Anuario Filosófico*, 43 (2): 353-379, Academic Search Complete, EBSCOhost, viewed 2 July 2013

Crowther, D. & Lancaster, G. (2005), *Research Methods: A concise introduction to research in management and business consultancy*, Oxford: Elsevier Butterworth-Heinemann

D'Souza, C., Taghian, M., Lamb, P. & Peretiatkos, R. (2006), 'Green products and corporate strategy: an empirical investigation', *Society and Business Review*, 1 (2): 144-157, Emerald, viewed 16 October 2012

Dahl, R. (2010), 'Green Washing: Do You Know What You're Buying?', *Environmental Health Perspective*, 118 (6): A246-A252, Academic Search Complete, EBSCOhost, viewed 16 October 2012

Delmas, M. & Burbano, V. (2011), 'The Drivers of Greenwashing', *California Management Review*, 54 (1): 64-87, Business Source Complete, EBSCOhost, viewed 23 July 2013

Domegan, C. & Fleming, D. (2003) *Marketing Research in Ireland: Theory and Practice*, Dublin: Gill & Macmillan

Drozdenko, R., Jensen, M. & Coelho, D. (2011), 'Pricing of Green Products: Premiums Paid, Consumer Characteristics and Incentives', *International Journal of Business, Marketing, & Decision Science*, 4 (1): 106-116, Business Source Complete, EBSCOhost, viewed 12 May 2013

Durif, F., Roy, J., & Boivin, C. (2012), 'Could perceived risks explain the 'green gap' in green product consumption?', *Electronic Green Journal*, 1 (33): 1-15, Academic Search Complete, EBSCOhost, viewed 23 July 2013

Eaton, M. & Stark, T. (1999), 'Northern Ireland's Environmental Industry: An Examination of the Eco-Capital Equipment Producing Sector', *Business Strategy and the Environment*, 8 (2): 108-119, Business Source Complete, EBSCOhost, viewed 23 July 2013

Easterby-Smith, M., Thorpe, R. & Lowe, A. (1991) *Management Research: An Introduction*, London: Sage

Ewert & Galloway (2006), 'Environmental Desirability Responding: One Possibility in Addressing the Attitude-Behaviour Gap', *Research in Outdoor Education*, 8: 63-74, Academic Source Complete, EBSCOhost, viewed 15 April 2013

Feinstein, N. (2013), 'Learning From Past Mistakes: Future Regulation to Prevent Greenwashing', *Boston College Environmental Affairs Law Review*, 40 (1): 229-257, Academic Source Complete, EBSCOhost, viewed 20 July 2013

Forehand, M. & Grier, S. (2003), 'When is honesty the best policy? The effect of stated intent on consumer skepticism', *Journal of Consumer Psychology*, 13 (3): 349-356, Business Source Complete, EBSCOhost, viewed 12 May 2013

Fray, A. (2007), 'Ethical behaviour and social responsibility in organisations: process and evaluation', *Management Decision*, 45 (1): 76-88, Emerald, viewed 2 August 2013

Gallicano, T.D. (2011), 'A Critical Analysis of Greenwashing Claims', *Public Relations Journal*, 5 (3): 1-21, Google Scholar, viewed 2 August 2013

Gelb, B.D. (1995), 'More boycotts ahead? Some implications', *Business Horizons*, 38 (2): 70-76, Business Source Complete, EBSCOhost, viewed 23 July 2013

Giblin, S. & McNabola, A. (2009), 'Modelling the impacts of a carbon emission-differentiated vehicle tax system on CO2 emissions intensity from new vehicle purchases in Ireland', *Energy Policy*, 37 (4): 1404-1411, Science Direct, viewed 2 August 2013

Ginsberg, J.M. & Bloom, P.N. (2004), 'Choosing the Right Green Marketing Strategy', *MIT Sloan Management Review*, 46 (1): 79-84, Business Source Complete, EBSCOhost, viewed 16 October 2012

Ghosh, B., & Chopra, P.A. (2003), *A Dictionary of Research Methods*, United Kingdom: Wisdom House.

Grant, J. (2008), 'Green Marketing', *Strategic Direction*, 24 (6): 25-27, Emerald, viewed 16 October 2012

Graziano, A.M. & Raulin, M. L. (2010) *Research Methods A Process of Inquiry*, Seventh Edition, Boston MA: Pearson

Greenfield, T. (1996) *Research Methods: Guidance for Postgraduates*, London: Arnold

Griskevicius, V., Cant, S. & Vugt, M. (2012), 'The Evolutionary Bases for Sustainable Behavior: Implications for Marketing, Policy, and Social Entrepreneurship', *Journal of Public Policy & Marketing*, 31 (1): 115-128, Business Source Complete, EBSCOhost, viewed 12 May 2013

Gupta, S. & Ogden, D.T. (2009), 'To buy or not to buy? A social dilemma perspective on green buying', *Journal of Consumer Marketing*, 26 (6): 376-391, Emerald, viewed 2 July 2013

Hailes, J. (2007), *The New Green Consumer Guide*, Simon and Schuster, London

Hankel, M.D., Sorcher, M., Beer, M., & Moses, J.L. (1982), *Making it happen. Designing research with implementation in mind*, Beverly Hills, CA: Sage

Harrison, R.L., & Reilly, T.M. (2011), 'Mixed methods designs in marketing research', *Qualitative Market Research: An International Journal*, 14 (1): 7-26, Emerald, viewed 12 March 2013

Hartmann, P. & Ibáñez, V. A. (2006), 'Green value added', *Marketing Intelligence & Planning*, 24 (7): 673-680, Emerald, viewed 16 October 2012

Hoyer, W.D. & MacInnis, D.J. (2001), *Consumer Behavior*, Boston, MA: Houghton Mifflin Company

Hunt, S. (2011), 'Sustainable marketing, equity, and economic growth: a resource-advantage, economic freedom approach', *Journal of the Academy of Marketing Science*, 39 (1): 7-20, Business Source Complete, EBSCOhost, viewed 12 May 2013

Hussein, A. (2009), 'The use of Triangulation in Social Sciences Research: Can qualitative and quantitative methods be combined?', *Journal of Comparative Social Work*, 1: 1-12, Google Scholar, viewed 12 March 2013

Johnson, R.B., Onwuegbuzie, A.J., & Turner, L.A. (2007), 'Towards a Definition of Mixed Methods Research', *Journal of Mixed Methods Research*, 1 (2): 112-133, Google Scholar, viewed 12 March 2013

Kalafatis, S., Pollard, M., East, R. & Tsogas, M. (1999), 'Green marketing and Ajzen's theory of planned behaviour: a cross-market examination', *Journal of Consumer Marketing*, 16 (5): 441-460, Emerald, EBSCOhost, viewed 20 July 2013

Kangun, N., Carlson, L., Grove, S.J. (1991), 'Environmental advertising claims: a preliminary investigation', *Journal of Public Policy & Marketing*, 10 (2): 47-58, Business Source Complete, EBSCOhost, viewed 20 July 2013

Kim, H.Y. & Chung, J. (2011), 'Consumer purchase intention for organic personal care products', *Journal of Consumer Marketing*, 28(1): 40-47, Emerald, viewed 23 July 2013

Kollmuss, A. & Agyeman, J. (2002), 'Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour?', *Environmental Education Research*, 8 (3): 239-260, Google Scholar, viewed 12 May 2013

Kronrod, A., Grinstein, A. & Wathieu, L. (2012), 'Go Green! Should Environmental Message Be So Assertive?', *Journal of Marketing*, 76 (1): 95-102, Business Source Complete, EBSCOhost, viewed 12 May 2013

Lee, K. (2008), 'Opportunities for green marketing: young consumers', *Marketing Intelligence & Planning*, 26 (6): 573-586, Emerald, viewed 16 October 2012.

Lin, Y. & Chang, C.A. (2012), 'Double Standard: The Role of Environmental Consciousness in Green Product Usage', *Journal of Marketing*, 76 (5): 125-134, Business Source Complete, EBSCOhost, viewed 2 July 2013

Link, T. (1999), 'Knowledge for What', *Electronic Green Journal*, p. N.PAG, Academic Source Complete, EBSCOhost, viewed 2 July 2013

Macionis, J.J., & Plummer, K. (2002), *Sociology: a global introduction*, Harlow: Prentice Hall

Mainieri, T., Barnett, E.G., Valdero, T.R., Unipan, J.B. & Oskamp, S. (1997), 'Green Buying: The Influence of Environmental Concern on Consumer Behavior', *The Journal of Social Psychology*, 137 (2): 189-204, Academic Search Complete, EBSCOhost, viewed 16 October 2012

Marshall, M.N. (1996), 'Sampling for Qualitative Research', *Family Practice*, 13 (6): 522-525, Google Scholar, viewed 2 March 2013

Martin, B. & Simintiras, A.C. (1995), 'The impact of green product lines on the environment: does what they know affect how they feel?', *Marketing Intelligence and Planning*, 13 (4): 16-23, Emerald, viewed 23 July 2013

Mathur, L.K. & Mathur, I. (2000), 'An Analysis of the Wealth Effects of Green Marketing Strategies', *Journal of Business Research*, (50) 2: 193-200, Business Source Complete, EBSCOhost, viewed 2 July 2013

Minteer, B., Collins, J. & Bird, S. (2008), 'Editors' Overview: The Emergence of Ecological Ethics', *Science & Engineering Ethics*, 14 (4): 473-481, Academic Search Complete, EBSCOhost, viewed 12 May 2013

Mishra, P. & Sharma, P. (2012), 'Green Marketing: Challenges and Opportunities for Business', *Journal of Marketing & Communication*, 8 (1): 35-41, Business Source Complete, EBSCOhost, viewed 2 July 2013

Moisander, J. (2007), 'Motivational complexity of green consumerism', *International Journal of Consumer Studies*, 31 (4): 404-409, Business Source Complete, EBSCOhost, viewed 12 May 2013

Muldoon, A. (2006), 'Where the Green Is: Examining the Paradox of Environmentally Conscious Consumption', *Electronic Green Journal*, 23 (3): 3, Academic Search Complete, EBSCOhost, viewed 12 May 2013

Nantel, J. & Weeks, W. (1996), 'Marketing ethics: is there more to it than the utilitarian approach?', *European Journal of Marketing*, 30 (5): 9-19, Emerald, viewed 23 July 2013

Neuman, W.L. (2011) *Social Research Methods Qualitative and Quantitative Approaches*, Seventh Edition, Harlow: Pearson Education

Nicholls, A.J. (2002), 'Strategic options in fair trade retailing', *International Journal of Retail & Distribution Management*, 30 (1): 6-17, Emerald, viewed 23 July 2013

Ottman, J. (1992), 'Sometimes consumers will pay more to go green', *Marketing News*, 6 July, 26 (14): 16, Business Source Complete, EBSCOhost, viewed 12 May 2013

Ottman, J. (1998), *Green Marketing: Opportunity for Innovation*. New York: NTC-McGraw Hill

Ottman, J. (2011) *The New Rules of Green Marketing*, San Francisco, CA: Berrett-Koehler Publishers

Parguel, B., Benoît-Moreau, F., & Larceneux, F. (2011), 'How Sustainability Ratings Might Deter 'Greenwashing': A Closer Look at Ethical Corporate Communication', *Journal of Business Ethics*, 102 (1): 15-28, Business Source Complete, EBSCOhost, viewed 20 June 2013

Patil, V. (2012), 'Green Marketing: Myths & Facts', *Golden Research Thoughts*, 1 (7): 1-8, Academic Search Complete, EBSCOhost, viewed 12 May 2013

Peattie, K. & Crane, A. (2005), 'Green marketing: legend, myth, farce or prophesy?', *Qualitative Market Research: An International Journal*, 8 (4): 357-370, Emerald, viewed 27 October 2012

Pickett-Baker, J. & Ozaki, R. (2008), 'Pro-environmental products: marketing influence on consumer purchase decision', *Journal of Consumer Marketing*, 25 (5): 281-293, Emerald, viewed 01 December 2012

Plumb, I. & Zamfir, A. (2009), 'A comparative analysis of green certificates markets in the European Union', *Management of Environmental Quality: An International Journal*, 20 (6): 684-695, Emerald, viewed 16 October 2012

Polonsky, M.J. (1994), 'An Introduction to Green Marketing', *Electronic Green Journal*, p. N. PAG, Academic Search Complete, EBSCOhost, viewed 16 October 2012

Polonsky, M.J. (2011), 'Transformative Green Marketing: Impediments and Opportunities', *Journal of Business Research*, 64 (12): 1311-1319, Science Direct, viewed 27 October 2012

Prothero, A. (1990), 'Green Consumerism and the Societal Marketing Concept: Marketing Strategies for the 1990's', *Journal of Marketing Management*, 6 (2): 87-103, Business Source Complete, EBSCOhost, viewed 2 July 2013

Prothero, A. (1998), 'Green Marketing: The 'Fad' That Won't Slip Slide Away', *Journal of Marketing Management*, 14 (6): 507-512, Business Source Complete, EBSCOhost, viewed 20 July 2013

Prothero, A. & McDonagh, P. (1992), 'Producing Environmentally Acceptable Cosmetics? The Impact of Environmentalism on the United Kingdom Cosmetics and Toiletries Industry', *Journal of Marketing Management*, 8 (2): 147-166, Business Source Complete, EBSCOhost, viewed 12 May 2013

Prothero, A., Dobscha, S., Freund, J., Kilbourne, W., Luchs, M., Ozanne, L. & Thøgersen, J. (2011), 'Sustainable Consumption: Opportunities for Consumer Research and Public Policy', *Journal of Public Policy & Marketing*, 30 (1): 31-38, Business Source Complete, EBSCOhost, viewed 2 August 2013

Rahbar, E. & Wahid, N.A. (2011), 'Investigation of green marketing tools' effect on consumers' purchase behavior', *Business Strategy Series*, 12 (2): 73-83, Emerald, viewed 2 July 2013

Raska, D. & Shaw, D. (2012), 'When is going green good for company image?', *Management Research Review*, 35 (3): 326-347, Emerald, viewed 16 October 2012

Rivera-Camino, J. (2007), 'Re-evaluating green marketing strategy: a stakeholder perspective', *European Journal of Marketing*, 41 (11): 1328-1358, Emerald, viewed 16 February 2013

Saunders, M., Lewis, P. & Thornhill, A. (2000) *Research Methods for Business Students*, Second Edition, Great Britain: Prentice Hall

Shaw, D., Newholm, T. & Dickinson, R. (2006), 'Consumption as voting: an exploration of consumer empowerment', *European Journal of Marketing*, 40 (9/10): 1049-1067, Emerald, viewed 20 March 2013

Singhapakdi, A., Karande, K., Rao, C.P. & Vitell, S.J. (2001), 'How important are ethics and social responsibility? – A multinational study of marketing professionals', *European Journal of Marketing*, 35 (1/2): 133-153, Emerald, viewed 2 August 2013

Strong, C. (1996), 'Features contributing to the growth of ethical consumerism: a preliminary investigation', *Marketing Intelligence & Planning*, 14 (5): 5-13, Emerald, viewed 12 May 2013

Subhani, M.I., Hasan, S.A., Osman, A. & Rudhani, S.W.A. (2012), 'The Crux of Green Marketing: An Empirical Effusive Study', *European Journal of Social Sciences*, 27 (3): 425-435, Google Scholar, viewed 2 July 2013

Teddlie, Ch., & Tashakkori, A. (2009) *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences*. Thousand Oaks, CA: Sage.

Tran, M., Banister, D., Bishop, J. & McCulloch, M. (2012), 'Simulating early adoption of alternative fuel vehicles for sustainability', *Technological Forecasting & Social Change*, 80 (5): 865-875, Science Direct, viewed 23 July 2013

Unruh, G. & Ettenson, R. (2010), 'Growing Green', *Harvard Business Review*, 88 (6): 94-100, Business Source Complete, EBSCOhost, viewed 28 June 2013

Wong, V., Turner, W. & Stoneman, P. (1996), 'Marketing Strategies and Market Prospects for Environmentally-Friendly Consumer Products', *British Journal of Management*, 7 (3): 263-281, Business Source Complete, EBSCOhost, viewed 27 October 2012

Yam-Tang, E.P.Y. & Chan, R.Y.K. (1998), 'Purchasing behaviours and perceptions of environmentally harmful products', *Marketing Intelligence & Planning*, 16 (6): 356-362, Emerald, viewed 2 July 2013

Young, W., Hwang, K., McDonald, S. & Oates, C. (2010), 'Sustainable consumption: green consumer behaviour when purchasing products', *Sustainable Development*, 18 (1): 20-31, Business Source Complete, EBSCOhost, viewed 20 July 2013

Websites

'About Greenwashing' [Internet]. In: *Greenwashing Index*. Available from <http://www.greenwashingindex.com/about-greenwashing/> [Accessed 4 August 2013]

Adam, D. (2009) 'Global warming 'will be worse' warns Stern' [Internet]. Available from <http://www.theguardian.com/environment/2009/mar/12/climate-change-scienceofclimatechange> [Accessed 10 September 2013]

Bruno, K. (2012) 'Greenwash +20: How some powerful corporations are standing in the way of sustainable development' [Internet]. In: *Greenpeace*. Available from <http://www.greenpeace.org/international/Global/international/publications/RioPlus20/GreenwashPlus20.pdf> [Accessed 23 July 2013]

Burt's Bees (2013) [Internet]. In: *Burt's Bees*. Available from <http://www.burtsbees.co.uk/w/about-us/sustainability/> [Accessed 23 July 2013]

Candice, M. (2013) 'Misleading Marketing: Beware the Greenwash!' [Internet]. In: *Eluxe Magazine*. Available from: <http://eluxemagazine.com/magazine/green-or-greenwashed-how-to-tell-the-difference-2/#sthash.9gaX0im2.dpuf> [Accessed 4 August 2013]

Duggan, S. (2009) 'Greenwashing So Absurd, It's Almost Funny' [Internet]. In: *Eco Green Travel*. Available from <http://ecogreentravel.wordpress.com/2009/12/29/greenwashing-so-absurd-its-almost-funny/> [23 July 2013]

Evans, M. (2011) 'Environmental Business' [Internet]. In: *Earth Times*. Available from <http://www.earthtimes.org/encyclopaedia/environmental-issues/environmental-business/> [Accessed 2 August 2013]

Europa (2013) 'Ireland Environmental Rules' [Internet]. In: *Europa*. Available from http://europa.eu/youreurope/business/product/chemicals-packaging-labelling-classification/index_en.htm#ireland_en_keeping-to-environmental-rules [Accessed 10 September 2013]

Fairtrade Foundation (2013) '2012 Annual Report and Financial Statements' [Internet]. In: *Fairtrade Foundation*. Available from http://www.fairtrade.org.uk/includes/documents/cm_docs/2013/2/2012%20Annual%20Report%20and%20Financial%20Statements%20FINAL.pdf [Accessed 10 September 2013]

Gang, J. (2012) 'DON'T BE FOOLED 2012' [Internet]. In: *The Green Life Online*. Available from <http://site.thegreenlifeonline.org/2012/04/02/dont-be-fooled/> [Accessed 23 July 2013]

Government of Ireland (2012) 'Delivering Our Green Potential: Government Policy Statement on Growth and Employment in the Green Economy' [Internet]. In: *Department of Jobs, Enterprise, and Innovation*. Available from http://www.enterprise.gov.ie/publications/djei-publications/delivering_our_green_potential_pdf_589kb_.pdf [Accessed 12 May 2013]

Hower, M. (2013) 'Toyota, Ford and Tech Companies Top List of Best Global Green Brands' [Internet]. In: *Sustainable Brands*. Available from http://www.sustainablebrands.com/news_and_views/articles/toyota-ford-and-tech-companies-top-list-%E2%80%98best-global-green-brands%E2%80%99 [Accessed 23 July 2013]

Innocent (2013), 'Being Sustainable' [Internet]. In: *Innocent Drinks*. Available from <http://www.innocentdrinks.ie/us/being-sustainable> [Accessed 23 July 2013]

Kingsmith, A. (2012) 'Greenwashing: The Corporate Exaggeration of Environmental Consciousness' [Internet]. In: *The International*. Available from <http://www.theinternational.org/articles/275-greenwashing-the-corporate-exaggeration> [Accessed 20 July 2013]

Lodhi, A. (2013) '5 Brands You Think Are Eco....But Really Aren't' [Internet]. In: *Eluxe Magazine*. Available from <http://eluxemagazine.com/magazine/5-brands-you-think-are-eco-but-really-arent/> [Accessed 4 August 2013]

Makower, J. (2013) 'Why are Toyota, Ford and Honda the 'best green global brands''? [Internet]. In *Green Biz*. Available from <http://www.greenbiz.com/blog/2013/06/12/why-are-toyota-ford-and-honda-best-green-global-brands> [Accessed 23 July 2013]

MacPhearson Lane, M. (2009) 'McDonald's Logo To Go "Green" in Europe' [Internet]. In: *Huffington Post*. Available from http://www.huffingtonpost.com/2009/11/23/mcdonalds-logo-to-go-green_n_368169.html [Accessed 23 July 2013]

McIntyre, D. A. (2009) 'The "Green" Hypocrisy: America's Corporate Environment Champions Pollute The World' [Internet]. In: *24/7 Wall St*. Available from <http://247wallst.com/energy-business/2009/04/02/the-%E2%80%9Cgreen%E2%80%9D-hypocrisy-america%E2%80%99s-corporate-environment-champions-pollute-the-world/> [Accessed 23 July 2013]

Oxford Dictionaries (2013) 'Definition of Greenwash' [Internet]. In: *Oxford Dictionaries*. Available from <http://oxforddictionaries.com/definition/english/greenwash?q=greenwash> [Accessed 12 March 2013]

Rotkamp, R. (2010) 'Examples of Companies that Practice Eco Marketing' [Internet]. In: *Live Strong*. Available from <http://www.livestrong.com/article/252851-examples-of-companies-that-practice-eco-marketing/> [Accessed 23 July 2013]

Stern, N. (2006) 'STERN REVIEW: The economics of climate change' [Internet]. In: *The National Archives*. Available from http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/d/Executive_Summary.pdf [Accessed 10 September 2013]

Terra Choice (2010) 'The Sins of Greenwashing Home and Family Edition 2010' [Internet]. In: *Terra Choice*. Available from <http://sinsofgreenwashing.org/index35c6.pdf> [Accessed 2 July 2013]

Toyota Ireland (2013) 'Toyota European Sustainability Report 2011' [Internet]. In: *Toyota Ireland*. Available from <http://www.toyota.ie/environment/downloads/2011%20Toyota%20Sustainability%20Report.pdf> [Accessed 23 July 2013]

Werbach, A. (2011) 'The false gospel of green marketing' [Internet]. In: *The Guardian*. Available from <http://www.theguardian.com/sustainable-business/green-wash-marketing-sustainable-products> [Accessed 2 August 2013]

Appendices

Appendix I: Email sent to the Director of FAS

Dear Director,

My name is Aisling Branley and I am currently completing my Master of Science in Marketing at the Institute of Technology, Sligo. As part of this programme, I am undertaking a dissertation. My dissertation centres on green marketing (i.e. the marketing of environmentally-friendly products and services) and I am hoping to gather information on public perceptions of this act. As I am hoping to gain a survey sample from various counties throughout Ireland I would be most grateful if my survey could be distributed throughout the FAS email network. The survey itself should take no more than ten minutes to complete and asks respondents to answer a number of questions regarding their opinion of green marketing and their purchasing habits when it comes to environmentally-friendly products. All respondents shall remain anonymous and responses will not be used for any other purpose than the completion of this dissertation. If it is permissible to send this survey throughout the FAS network, I would greatly appreciate your consent to do so.

Thank you for taking the time to read this.

Regards,

Aisling Branley

Appendix II: Email sent to companies requesting an interview

To whom it may concern,

My name is Aisling Branley and I am a student at IT Sligo currently completing my Masters in Marketing. As part of this I am writing a dissertation which centres on the area of green marketing in various sectors including the [chosen] sector. I am inquiring as to whether or not it would be possible to conduct a short interview next month with the marketing executive regarding [the company name] current marketing practices and opinions on the topic of green marketing.

Many thanks for your time and I look forward to your response.

Kind Regards,

Aisling Branley



Appendix III: Survey Questionnaire

1. In which county do you currently reside?

2. What is your age range?

- a. 18-24
- b. 25-29
- c. 30-39
- d. 40-49
- e. 50-59
- f. 60 or older

3. Which of the following best describes your employment status?

- a. Full-time employed
- b. Part-time employed
- c. Unemployed
- d. Self-employed
- e. Student
- f. Working Student
- g. Other (please specify in the box below)

4. How environmentally-friendly would you consider yourself to be?

- a. Not at all environmentally-friendly
- b. Slightly environmentally-friendly
- c. Somewhat environmentally-friendly
- d. Very environmentally-friendly
- e. Extremely environmentally-friendly

5. Do you recycle?
- a. Always
 - b. Sometimes
 - c. Never
 - d. It depends on the product/service

Please explain

6. On average, what do you think you spend on green products on a weekly basis (e.g. organic food, natural cosmetics)
- a. €0 - €10
 - b. €11 - €25
 - c. €26 - €50
 - d. €51 - €100
 - e. €101 +
 - f. Don't know

7. Would you be willing to pay a higher price for products/services which are considered to be environmentally-friendly?
- a. Yes
 - b. No
 - c. It depends on the product

Please explain your answer

8. When purchasing products/services please rate the following in terms of importance with 1 being the most important and 5 being the least. **(Please note that only one item can be awarded 1st place, one item awarded 2nd place etc)**

- a. Price
- b. Convenience
- c. Brand
- d. Quality
- e. Environmental impact

9. When purchasing foods do you consider whether it is organic?

- a. Yes
- b. No
- c. Sometimes

Please explain your answer

10. When purchasing foods do you consider whether they are locally sourced?

- a. Yes
- b. No
- c. Sometimes

Please explain your answer

11. When purchasing cosmetics do you consider how environmentally-friendly the product is?

- a. Yes
 b. No
 c. Sometimes

Please explain your answer

12. When considering what car to purchase please rank the following in terms of importance with 1 being the most important and 7 being the least important.

(Please note only one item can be awarded 1st place, one item in 2nd place etc.)

- a. Fuel consumption
 b. Tax fees
 c. Engine size
 d. Price
 e. Attractiveness
 f. Safety
 g. Emissions

13. Have you ever purchased a product/service which was advertised as environmentally-friendly and subsequently discovered that these claims were false?

- a. Yes
 b. No
 c. Don't know

If the answer is yes, please provide a brief summary of your experience.



14. If you answered yes to question 13, has this changed your opinion of the product/service in question?

- a. Yes
 b. No
 c. Don't Know

15. Would you remain loyal to a brand if you found out they had falsified or exaggerated claims regarding their negative/positive environmental impact?

- a. Yes
 b. No
 c. Don't know

16. Would environmentally-false claims from a company within a particular sector (e.g. the food sector) impact on your opinion of other companies within the same sector?

- a. Yes
 b. No
 c. Don't know
 d. It depends on the sector

Please explain your answer

(e.g. the food sector) impact on your opinion of companies within other sectors (e.g. the cosmetics sector)?

- a. Yes
 b. No
 c. Don't know

Please explain your answer

18. Please indicate whether you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
People need to become more environmentally aware.					
I appreciate other people's opinions regarding the environment.					
I am always honest with myself about how I really feel about the environment.					
I always believe companies' claims regarding their environmental impact.					
Price has the strongest influence over my purchase decisions.					
I consider the environmental impact of products before I purchase them.					
Companies need to do more outside the law to decrease their negative impact/increase their positive impact on the environment.					
As long as companies follow government policy regarding environmental regulations they do not need to do more.					
Companies who make false or exaggerated claims regarding their environmental impact should be prosecuted.					
Companies who make false or exaggerated claims regarding their environmental impact should be boycotted.					
Environmental awareness has a positive effect on a company's reputation.					

19. What would influence you to become more environmentally aware?

20. What recommendations would you make to organisations to use green marketing more effectively?



Appendix IV: Focus Group Questions

1. Would you class yourselves as being environmentally-aware?
2. Do you think that age and generation has an impact on environmental awareness in today's society?
3. Do you think that there is any particular sector in which consumers are more environmentally-aware? E.g. food, cosmetics, motor.
4. Would you be willing to pay a higher price for products/services which are considered to be environmentally-friendly or would this hold any impact on your purchase decision?
5. The survey conducted showed that on average, respondents rated quality, price and the convenience of products/services as more important than the environmental impact. Would you agree that this is the case for the average consumer?
 - a. Do you think that green marketing is a waste of time?
6. Why do you think that the survey showed people to consider the environmental-friendliness of food more than they would cosmetics or cars?
7. When asked if they had ever purchased a product/service that was falsely advertised as being environmentally-friendly over 47% of respondents said that they didn't know. Do you think that consumers have become oblivious to environmental claims?
8. Would you remain loyal to a brand if you found out they had falsified or exaggerated claims regarding their environmental impact?
9. Almost 52% of survey respondents said that that environmentally-false claims from one company within a sector would impact on their opinion of other companies within the same sector. Would you agree with this?

10. Do you think that the actions of one sector could impact on consumer opinions of a different sector? Could it increase overall consumer scepticism?
11. Almost 74% of respondents thought that it was not enough for companies to just follow government policy regarding environmental regulations. Why do you think this is and would you agree or disagree?
12. The majority of respondents agreed that companies who make false or exaggerated claims regarding their environmental impact should be prosecuted. However less respondents thought that they should be boycotted. Why do you think respondents did not respond so positively to the idea of boycotting?
13. Do you think that environmental awareness has a positive effect on a company's reputation?
14. Many respondents stated that environmentally-friendly products should be the same price as regular products. Would you agree with this or do you think it is fair for prices of green products to be higher?
15. Many respondents felt that companies needed to provide better labelling and more information about the benefits of green products. Do you think this is where companies are going wrong or would it make a difference in reality?
16. Would you agree that consumers need a reward/incentive to purchase green products? If so, should this responsibility be down to the consumer or the government? E.g. tax incentives/loyalty schemes/ease of recycling.
17. What would persuade you to buy green products?
18. Is there any company that you feel uses green marketing effectively?

Appendix V: Interview Transcripts

Motor Industry

1. **Is the promotion of positive environmental initiatives an important aspect of your business?**

It's an important consideration, it's not the core message that we use but it is an added benefit that we can say as opposed to putting our whole marketing on that message. Some companies will go after the green market and that is what it is but for us it's an added benefit that we can have cars that allow us to go after the green market.

2. **What green marketing initiatives have your company used? How effective are they and how is this effectiveness tested?**

Car Sales. If we are looking at the market on the whole obviously it's shrinking but I think with the new [electric car] we just launched it there and we sold our first batch straight away because of the increased mileage so I think it is effective but it would be car sales, I just don't have the numbers in front of me.

3. **The term 'greenwashing' refers to the practice of making unwarranted and inflated claims of environmental friendliness and sustainability in order to gain market share. How do you ensure that your company avoids being accused of this practice?**

I think we are very lucky in the sense that when you are dealing with something so technical and in as regulated an industry as the car industry that you can't inflate any figures by a decimal point. Even if you look at the normal car industry away from electric, the CO2 affects your tax so it's all very highly regulated. So for us, all the research is done, all the tests are done on such a global scale, you just don't inflate them at all. I suppose, it's making the public aware of what capabilities the car has so that they don't think it is too restricted or that they don't see it as being better than it already is, like you are still using electricity, that still leaves a footprint but it's a lot less than fossil fuels obviously.

4. Do you see any evidence of green fatigue among consumers or do you believe that environmental-friendliness is still an important factor to them?

No, I think that's an added benefit for anyone that does. I think there is a very small market that actually consciously goes and picks a car because it's better for the environment I think a lot of them would weigh up the cost-benefits of it before they think 'is this the best thing I can do for the environment?' As I said there's a small percentage but a large percentage of the market that are green friendly but not green activists. They may look and say well this will save me money because it's not using as much fuel, it's better for the economy, it's better for my pocket but a lot of it will come down to cost if you're not paying for your fuel every week.

Researcher: So price is a big factor?

Yes I think the running cost of the car is the biggest factor as opposed to just the initial purchasing.

5. The company offers the zero-emissions and 100% [electric car]. Is there any notable customer segment or consumer profile for this environmentally-friendly car?

I wouldn't want to speculate without having the research but just from experience it would be more educated, more technology focused people that have liked to research, a pragmatic type of mind-frame, usually the other side of 40 or 50 but that's partly, you could say that for all car purchasers because they have the disposable income to purchase cars so it's an interesting time to be *looking* at it. I would say if you got figures from 2007 when we had the highest record of sales, you would see a different profile as to now but there was no real electric cars back then or there wasn't a focus on green to see. But I would say it is an older, more educated person that goes for it. But that being said it's changing to a younger, smart-car demographic.

6. Would you say that your consumers believe environmentally-friendly cars to be better value than others?

I would definitely agree that they think that it's better value and a better investment. You have to look at your car as an investment, for many it's the biggest purchase you'll make apart from your house and your mortgage. It's a small market here I deal with because it's

only customers of the [electric car] but they would always be real activists and brand ambassadors for how much money they save and if you go onto the [electric car] facebook page you'll see posts such as 'I only spent this much on running my car' or 'I can plug it in at public points.'

7. What do you believe to be consumer's main motivators in purchasing a car?

Cost, cost, cost. Everything comes down to cost and running costs. It's base. Depending on if you have a family, is it going to be a family car, can you fit the children in it. If not, if it is just for yourself, it is based on cost usually and brand reliability. Some people put emphasis on warranty but I think there is more solid research you could look into for actual figures on that.

8. The majority of respondents to the surveys conducted rated 'emissions' as their lowest priority in deciding what car to purchase. Would this finding surprise you?

I would be surprised by emissions but I think this was probably the way it was asked. I know that people think of emissions as just the environment side but with new cars, their emissions is in direct correlation to their tax, so I know people would take a smaller engine or a smaller car so they pay less tax but people don't always think of emissions when they think of the tax they pay on a car.

Researcher: But when they link it to cost it becomes a different priority?

Yes if you ask them about emissions they might say they don't care, but if you ask them about car A and it has tax of €170 versus a car with a tax of €270 and there is very little between the two cars other than the engine size, and they don't need the bigger engine, I think they would go for the smaller car with the less tax but some people don't realise that their tax is directly related to their emissions.

9. Would you say that any noticeable trends towards hybrid or electric cars has been effected by the recession?

Yes but I think nearly in a positive way. I think people have been forced to look at cheaper cars to run and it's cheaper to run an electric car than a traditional petrol or

diesel. If you're in the market, if you're able to buy a new car it is very feasible to look at an electric car now and just have your one payment, it's a lot less, it's a lower tax you can pay, insurance can be a lot less depending on the type of car or family obviously, so I think it's had a positive effect in a way. I think its forced the industry to move faster, to adapt to what people with need with this recession and electric cars that are not going to run out on you but really it's a 199km range depending on how you drive which is a huge factor with electric cars but really most people wouldn't do that in a single journey or in a whole day so it fits into most lifestyles and I think being in a recession has helped push that message forward to most people.

10. Over 60% of respondents stated that they do not always believe companies' claims regarding their environmental impact. Have you noticed consumer scepticism in response to your green marketing and if so how do you combat this?

Even though green marketing is a huge issue I think probably more brand loyalty is what you are looking for in a car. It's very personal taste and choice for people so if they are looking at a brand or type of car, green mightn't have anything to do with it. For every car, people can go online and look at the technical specs of the cars, so if you're really into it you can go online and look at the weights of the car, their ergonomics of it, fuel consumption per mile, for urban, for rural, even look at everything and see does that match up to what we are putting out there. And I suppose another green thing for us is that we are very very conscious in telling people that the [electric car] is 100% electric, it has a range of nearly 200km, but that is totally dependent on how you drive. So if you drive in an aggressive manner or if it's constant motorway you obviously aren't going to have the same range, it will eat into your battery a lot faster than if it is stopping and starting in a town. So it's about being very transparent and putting those asterisks in there, explaining that this is dependent on the situation, and I think that's a huge thing when you are putting anything out there with green is to put that asterisks there to point out that this can change and you are a huge influencer of the numbers.

11. In your opinion, would you say consumers are more or less willing to adopt environmentally-friendly alternatives in the motor sector as opposed to other sectors such as food or cosmetics?

I think with a car it would be a much slower process. I think I would definitely notice a push for organic and health but you would have to add a couple of years on to see the same effect in the motor industry.

12. Over 50% of survey respondents stated that environmentally-false claims from a company within a sector would impact on their opinions of other companies within the same sector. Have you seen evidence of this behaviour and if so how has it manifested itself?

At the moment it is almost the opposite, the more people that are trying to become environmentally friendly and are trying to push electric cars or hybrids out there is actually benefiting everyone in it as it is making it more mainstream and is getting the message out there that green is the way to go and green is a very good way to go for motor. So it's actually doing the opposite at the moment, it's getting that attention to green cars and electric cars and benefit to the environment as well as your pocket so the more cars coming in its a good effect so I could imagine that if one of them messed up (which none of them have) that it would have a huge impact all around.

13. (a) When asked what would influence them to become more environmentally-aware in their purchasing decisions many consumers stated that they felt there was a need for more information and greater fact-based advertising, informing them of exactly how products impact on the environment. Do you feel there is a deficiency in information given to consumers about green products?

I think it is not shouted in their faces like other messages would be and maybe they expect that but I think that all the information is there for them and if people are really actively green and want that having decided that they are going to be greener, they will find that information, they are natural researchers because you will always naturally look for information that interests you or you will find out more if that is a consideration for you. As advertisers, you can't give out all the information in one go or your ad would be 20 minutes long.

Researcher: Yes and I suppose it could overwhelm people also?

Yes so it's a fine balance. I understand where that response is coming from but I think when you have that moment (where they decide they want to be greener) you will find out and I think most people do try and get one or two of their key facts in there.

13 (b) Similarly, consumers also felt that the price of green products need to be reduced or brought down to the same level as ordinary products coupled with the same quality. Do you feel as a company that this is a fair expectation?

Yes we just launched the second generation [electric car] and its price has gone down and its' grades has changed. So I think the last one people might have perceived as a bit awkward because you could only get one grade and there was only one price and there wasn't much options from which you could choose but now it is becoming more like a regular car, you can choose your different grades, your colours, your trims and everything so I think it has made it fall more in line with the rest of the industry so it wouldn't be as much of an issue if you were just a general person on the car market.

It's also more of a cost saving.

14. What recommendations would you make to other companies wishing to engage in green marketing?

I think it's a balance of whatever achievements you've achieved in your particular industry, whether it's making something greener, healthier.....it shouldn't be about patting yourself on the back, it should be about how it's going to benefit the customer. You see some of them messages that say 'look how great we are, we managed to do this, that, and the other' but I don't know if that always resonates. I think that's the million dollar question for marketing in general...how are you going to get through, how is it going to work. But I think the more people that have experienced it the better so I think for us it isn't always about trying to sell the car, it's about getting people *into* the car so they realise that electric is a reality. So anything that you could make greener so that people realise 'this isn't a big change to their lifestyle' that's the biggest endorsement for your product you can get because people think that going greener or going healthier is going to be a lifestyle change so if it's not and you can show them that it's not a huge lifestyle they're more willing to adapt it.

Cosmetics Industry

1. Is the promotion of positive environmental initiatives an important aspect of your business?

Yes, it is a highly important aspect of the business. Not only does it make us stand out from other cosmetic brands who use traditional chemically based cosmetics, but it is a brilliant marketing tool and something we as a team are very proud of.

2. What green marketing initiatives have [company name] used? How effective are they and how is this effectiveness tested?

We have undertaken a number of green marketing initiatives here at [company name]. Currently we are partaking in a campaign initiated by 'The Soil Association' (who organically certify [company name] products). Organic September intends to highlight the use of organic ingredients in the beauty industry and also highlight the difference between products that claim to be organic compared to products that are Certified Organic. There is a huge difference. In the beauty industry it is relatively easy to claim to be organic. However, passing standards set by the Soil Association is much more difficult. Organic Beauty weekend takes place on the 7th & 8th of September and we are encouraging our partnering spa accounts to get involved in whatever way they can. A number of them are offering a discount on all organic products for the weekend and offering our free samples of [company name]'s organic products. We also try to use recycled and biodegradable material and packaging wherever we can. For example, our [...] Lip Balm is actually made out of Corn Starch which will completely biodegrade in your compost.

3. The term 'greenwashing' refers to the practice of making unwarranted and inflated claims of environmental friendliness and sustainability in order to gain market share. How do you ensure that your company avoids being accused of this practice?

We avoid this by ensuring our products meet the highest standards set by the Organic Soil Association and The Irish Medical Board. These third party regulators regularly visit our premises and check our products against their standards and regulations. In

order to be certified by the Soil Association a minimum of 70% of the entire product must contain organically derived ingredients. To find out more visit <http://www.soilassociation.org/>

4. Do you see any evidence of green fatigue among consumers or do you believe that environmental-friendliness is still an important factor to them?

I think environmental-friendliness is more important now than ever, especially among the 20 – 40s age groups. Previously consumers only associated the term organic with food products, now consumers are starting to realise that buying organic textiles and health and beauty products can also help the environment and not only that they are much healthier and safer for us to use long term. Our organic muslin facial cloths are also certified by The Soil Association as these are made from Organic Cotton.

5. Is there any notable customer segment or consumer profile for [company name]'s organic cosmetics?

20s – mid 40's. Females are obviously more knowledgeable on the organic health and beauty market, but males are very open to change. There is a misconception that organic is always more expensive. However, this is not always the case.

6. Would you say that your consumers believe environmentally-friendly cosmetics to be better value than others?

Yes I would. A lot of our consumers suffer from sensitive skin, psoriasis, acnes & eczema and have found that our products are literally the only ones they can use. Because our products are totally natural and avoid the use of harsh chemicals such as sodium lauryl sulphate and other detergents found in many beauty products they have found them to be much more suitable and better value. (There is a great article on the Daily Mail about this: <http://www.dailymail.co.uk/news/article-2334921/The-organic-beauty-products-laced-chemicals-anti-freeze-floor-cleaner.html>) Vogue Online have also written about it: <http://www.vogue.co.uk/beauty/2013/06/03/soil-association-organic-hair-beauty-products-labelling>

7. What do you believe to be consumer's main motivators in purchasing cosmetics?

Some purchase because they want something a little bit special or because they feel in the need of some pampering! However, I would not necessarily bracket [company name]'s cosmetics into a luxury only item. For some of our loyal consumers they would classify them as a necessity and something that is an essential part of their skin care routine. We often have Mum's telling us they use [company name] products on their baby's skin (again it's safe because it's so natural). A lot of things contribute then to the type of cosmetic they buy: packaging, price, ingredients, certifications & standards (logos), recommendations from friends & family

8. The majority of respondents to the surveys conducted (almost 60%) stated that they would not consider how environmentally-friendly cosmetics are when purchasing them. Would this finding surprise you?

Not really. Consumers have been hidden away from disturbing facts, such as those found in the Mail Online feature, up till now. Many cosmetics gloss over the real facts. Consumers are confused by long lists of confusing ingredients listed in products and so choose to only read the front label which is often glorified due to a lack of labelling laws in the beauty industry.

9. Would you say that any noticeable trends towards organic cosmetics has been effected by the recession?

Surprising not, those consumers who do prioritise buying organic beauty products have continued to do so since the recession hit. As I mentioned for many consumers skincare products are not a luxury item, but a necessity.

10. Over 60% of respondents stated that they do not always believe companies' claims regarding their environmental impact. Have you noticed consumer scepticism in response to your green marketing and if so how do you combat this?

People who have any idea about organic standards in the beauty industry are familiar with The Soil Association and IOFGA (Irish Organic Farmers and Growers Association),

so once they see we have those certifications on our products they can see that we are not greenwashing, but genuinely organic with the certs to back it up.

11. In your opinion, would you say consumers are more or less willing to adopt environmentally-friendly alternatives in the cosmetics sector as opposed to other sectors such as food or motor?

There is still some scepticism that organic products won't be as effective as chemically based or surgically based treatments. However, the long term effects of naturally derived products is much safer, healthier and more beneficial in the long run. Chemically based products may give faster more instant results, but the longer term effects can be quite disturbing.

12. Over 50% of survey respondents stated that environmentally-false claims from a company within a sector would impact on their opinions of other companies within the same sector. Have you seen evidence of this behaviour and if so how has it manifested itself?

Yes, it is unfortunate that the lies told by some companies often reflects badly on other genuinely organic companies. For example, Nivea created a "natural" logo/stamp out of thin air basically which wasn't actually a genuine third party certifier at all. This is bound to cause scepticism among consumers, which is why it is important to education consumers on third party accreditation. We try to do this via our website & social media as much as we can. Testimonials from other customers have worked great for us in the past as these reassure customers that we mean what we say on our packaging.

13. (a) When asked what would influence them to become more environmentally-aware in their purchasing decisions many consumers stated that they felt there was a need for more information and greater fact-based advertising, informing them of exactly how products impact on the environment. Do you feel there is a deficiency in information given to consumers about green products?

Yes, as mentioned above this area needs to be highlighted more and stricter rules need to be put in place in the beauty industry so that consumer can no longer be tricked into believing products are greener than they really are. Labelling needs to be simplified and written in plain English.

13 (b) Similarly, consumers also felt that the price of green products need to be reduced or brought down to the same level as ordinary products coupled with the same quality. Do you feel as a company that this is a fair expectation?

The problem here is that the cost of producing organic products is often more costly than producing non-organic products, whether in the food or beauty industry. Chemically based slug repellents, growth hormones and fertilisers are not used to grow cotton, fruits and other crops on organic farms and so they must suffer the loss that other non-organic farms don't experience. Organic fruit and veg can often be smaller or less 'perfect' looking because they are grown naturally. Crops mightn't grow on such a large scale and so they do not benefit from the same economies of scale that other non-organic farmers benefit from. For [company name], we also may have to source some of our ingredients from farther afield because a lot of the organic ingredients we use, do not exist in some countries.



Food Industry - Glenisk

1. Is the promotion of positive environmental initiatives an important aspect of your business?

Absolutely. I think our environmental pertinence has always been at the heart of the brand, of our business especially since going organic in 1997, because the organic philosophy is all about having land to give to your children and looking after it responsibly. And we certainly believe in that in terms of our milk supply and the products we produce and then that also goes hand in hand with our own initiatives to reduce the impact of our manufacturing process. And in addition, in any of our branding, we have windmills on our trucks, and we added to our consumer communications aswell.

2. What green marketing initiatives have Glenisk used? How effective are they and how is this effectiveness tested?

I'm not sure if we have ever set out to create a green marketing initiative, it's more about effectively communicating things that we might do anyways. We tend to partner with like-minded organisations like the organic centre or we worked with the children's movie, The Lorax last year as it has a really strong environmental message. It's really trying to link up things that represent our values but its not necessarily a green marketing initiative. But whether it's seed planting with kids or things like that that reinforce our environmental values but I guess they aren't strictly I suppose green marketing.

Researcher: Would you say its important to target the younger generation there in that case when you speak about the Lorax and seed-planting with children?

Yes I mean we offer a range of products for babies to kids to adults but especially in our organics, mum's will buy organic food for their kids and health is really important and things like that so that's certainly a big aspect of our business but yes the Lorax is one example of marketing which is great with the characters and its bright colours and its attraction for kids but also we chose to work with them because of the environmental message in the movie and it sat really well with what we like to stand for.



- 3. The term ‘greenwashing’ refers to the practice of making unwarranted and inflated claims of environmental friendliness and sustainability in order to gain market share. How do you ensure that your company avoids being accused of this practice?**

Yes well that’s really important to us and my role is actually as sustainability officer which is a new role created about a year ago and what I love about being in this role is, we started measuring carbon footprint back in 2008, but it was always sort off a project being worked on whereas now my role is now completely dedicated to making sure we do walk our talk, not that we weren’t before, but now I have the time to put out our carbon footprint report or especially in business to business communications, retailers are starting to ask more, ‘show me the data’ and asking what are you doing to help major retailers reach their sustainability goals and also I think in the past year we have been a part of Origin Green, a Bord Bia initiative to promote the sustainability of Irish food in general and their main focus is two fold, it’s making sure that you communicate the inherent sustainability of Irish food and also have the data to back it up and ambitious goals but being honest about when you meet them and when you don’t. So I think for us its about highlighting things that we have been able to do well, whether its a wind turbine or being able to reduce our oil or fuel usage but then not making claims where we cant make them but saying we are still working on oil or fuel usage or we’re still working to find a solution for whatever it is.

- 4. Do you see any evidence of green fatigue among consumers or do you believe that environmental-friendliness is still an important factor to them?**

I think it is, I mean, from the research we have done, price and taste are still paramount as they would be for any food company but I think it’s sort of, the extras whether it’s being an Irish company, organic, or using renewable energy, or seen as green, I think any of those would contribute to reasons to buy. But I think in terms of our retail customers, like the big supermarkets, there’s definitely a demand for environmental friendliness, like I said, it’s starting to become a question you get asked in meeting suppliers and in terms of the export markets, initiatives like Origin Green are a response to a growing awareness in terms of green. But the consumer I suppose, or the end-consumer, would be driving that but all the major supermarkets have sustainability goals that they can’t meet unless their



suppliers are working to meet them. So there's definitely pressure from that end as well which I think is a good thing.

5. Is there any notable customer segment or consumer profile for Glenisk's organic foods?

I mean there is a lot of different people that buy organic, and we are lucky enough to still see people buy organic through the recession but sort of classically, our target consumer would be a mom, doing the shopping for her family, wanting to give her family nutritious food, buy Irish food. Certainly there is others but the mom with the shopping trolley is I suppose, the heartland for us.

6. Would you say that your consumers believe environmentally-friendly and organic food to be of better value than non-organic options?

I think people do perceive organic as better value and they also perceive it as more expensive whether it is or not. I think we work really hard to make our yoghurt really competitively priced in terms of offers and things like that but definitely it carries a stereotype of being more expensive but I think there is also a lot of room for more education on organic food. I think a lot of consumers still don't quite understand what it means. And there is certainly other brands that use terms like 'natural' or sort of condition themselves as green or sustainable whereas organic is actually a term that's backed up by legislation. We are certified by IOSCA, which is a certification body, and we can't claim organic without meeting these legal terms, so I think people don't understand that it's a very strong term, it really represents high qualities of animal welfare, there's no pesticides, no artificial ingredients, no chemical inputs at all, all those kind of things and I suppose the average consumer wouldn't be able to tell you all the actual attributes of organic but I suppose that's also one of our jobs, to be an ambassador for organic culture, and help educate people. So yes, I think they would perceive it as better value but also there's a negative perception about price which again isn't always true.

7. What do you believe to be consumer's main motivators in purchasing organic foods?

I think price and taste would be the main motivators for purchasing any food. If we didn't make a good product that tasted good and priced it competitively, very few people would pick it up off the shelf. I think it's the extra things we can offer whether it's being organic, or being Irish, or having different flavours or fat content or a low sugar range that meet different consumers' needs or even you know, on-pack offers or there's lots of little extra bits that we do to try and get people to purchase. But there's also a really strong segment of our consumer base that do believe in organic and purchase organic products across the board and they do that because they believe in organic agriculture in term of protecting the land and also in terms of their health, I think most people purchase organic, especially for their children, because there won't be any pesticides, there won't be hormones used, and it's deemed as really high quality healthy food.

8. When asked if they considered whether or not foods are organic when purchasing, just under 27% answered yes. Of those who said no, many respondents stated that they purchase based on price and find organic food too expensive. Given that you mentioned earlier the common stereotype would this finding surprise you?

No, unfortunately it doesn't surprise me. When we do consumer research, we are always surprised to find that organic often comes lower in the list than we would have thought in terms of reasons to purchase, but like I said, first and foremost, you are creating a food product so it needs to taste good and it needs to be of good value or priced appropriately, but I think we are still battling against that 'organic food is too expensive' stereotype and certainly you don't want to cheapen it, I mean certainly, we pay much more for our raw ingredients, to purchase organic fruit and organic milk, and so we have to live with our cost and as well support organic farmers, like we would pay a premium for our milk in Ireland because we are only purchasing local organic milk and so I think those costs certainly get passed on but like I said, we work hard to make our yoghurt competitively priced because we want it to be accessible to people who want to purchase organic food. And also supermarkets nowadays, its just so price competitive on the shelf in terms of,



you walk down any shelf and so many things are on offer but we don't want to be in a race to the bottom at the same time, so it's kind of striking that balance I guess.

9. Would you say that any noticeable trends towards organic food have been affected by the recession?

Well we have actually been very lucky, we have actually continued to grow year on year through the recession, that's been very encouraging, and I think, I guess it sort of goes back to people's values, especially when they're buying food for their families, so throughout a recession they still want to offer their families healthy food, and also I think, personally I notice an increase in people's awareness of the importance of buying Irish and supporting Irish jobs, and because it's a family Irish owned company I think that was another great reason to purchase throughout the recession. But certainly, the recession would have hurt everyone, hurt all companies, but we were lucky enough to survive and to keep growing throughout.

10. Over 60% of respondents stated that they do not always believe companies' claims regarding their environmental impact. Have you noticed consumer scepticism in response to your green marketing and if so how do you combat this?

We do our best to be honest and upfront so we haven't had anyone challenging claims we make because we are careful to be honest and open about it and not over-extend claims we're making but I think we are careful about that and obviously, if a consumer had a question I'd be happy to speak with them and I suppose as a consumer myself I can't blame people for questioning companies but I suppose all you can do is continue to be as transparent as you can and also continue to just do things for yourself because a lot of the environmental saving initiatives we would be working on it's great to get a consumer market benefit out of it but also one of the main motivators is we are reducing our energy costs, we are reducing the amount of fuel we buy, so they would be our internal motivators where we get that done first and then we can go about communicating.

11. In your opinion, would you say consumers are more or less willing to adopt environmentally-friendly alternatives in the food sector as opposed to other sectors such as cosmetics or motor?

I am not sure if they would be more or less willing but I think there's certainly a trend towards foodiness or people who are interested in food and I think those time of people would also be interested in where their food is coming from, how its produced so I think there would be a link there but I guess I wouldn't be familiar enough with other sectors to know in terms of willingness.

12. Over 50% of survey respondents stated that environmentally-false claims from a company within a sector would impact on their opinions of other companies within the same sector. Have you seen evidence of this behaviour and if so how has it manifested itself?

We haven't been impacted as of yet. I mean people look at certain things like the horse meat scandal or certain quality issues, I mean that would definitely effect a sector occasionally if there's a food safety scare somewhere whether it be dairy or if its organic food that could potentially have an impact on us but we have been lucky enough not to be lumped in with other companies who have suffered from this. It hasn't been an issue for us yet.

Yes we can differentiate ourselves based on our organic-ness and sometimes when other companies come under pressure for some practice it would be an opportunity for us to remind customers of things that we do well and things they consider price differentiation whether it be organic or be environmental practice so personally we would be able to use it to our advantage but like I said I can't think of a situation where we have been impacted by other companies within a sector in that type of way.

13. (a) When asked what would influence them to become more environmentally-aware in their purchasing decisions many consumers stated that they felt there was a need for more information and greater fact-based advertising, informing them of exactly how products impact on the environment. Do you feel there is a deficiency in information given to consumers about green products?

I think you have to strike a balance because sometimes companies can put out a 40 page CSR company sustainability report that the average consumer is not going to take the time to read, so I think its striking a balance between having a few highlighted points, whether you put them on packaging or someplace consumer-facing and then also having a really detailed report to back it up for the particularly interested customer. I suppose its about having your environmental information accessible on a number of levels and with the likes of the 'organic' thing there is certainly more room for consumer education, absolutely, and green things aswell I think there's room for education to prevent greenwashing, education in terms of 'what are companies saying'? So if they are claiming a reduction of 10% is that relative to an increase in production or is that absolute reduction? Just little things like that where working in sector I would be able to make those distinctions whereas the average consumer might not.

13 (b) Similarly, consumers also felt that the price of green products need to be reduced or brought down to the same level as ordinary products coupled with the same quality. Do you feel as a company that this is a fair expectation? Or do you think consumers need more education on *why* there is a price difference and how costs impact on price?

Yes I think it's abit of both I think that every company across the board should be trying to reduce their impact on the planet, that's the only way we are going to solve these big challenges like global warming is if everyone gets on board. So in that sense I hope for a day where there wouldn't be a difference because everyone would be working to such a high standard. But I also know that's not the reality at the moment, and so specifically for organic ingredients, like I said, we pay our farmers a premium, the organic fruit we buy comes at a premium. At the moment it would be a fair expectation that people would pay abit more whether its organic or in the same way that anyone on a supermarket shelf would charge more for any kind of added value whether that's their packaging or convenience or something like that, added value certainly would command an increase in price but I guess green products is a really general term and like i said, if its really just greenwashing, what exactly are you paying for, what is that extra value, what is the extra cost to the company. Hopefully every company would be working to green their product in the future.

14. What recommendations would you make to other companies wishing to engage in green marketing?

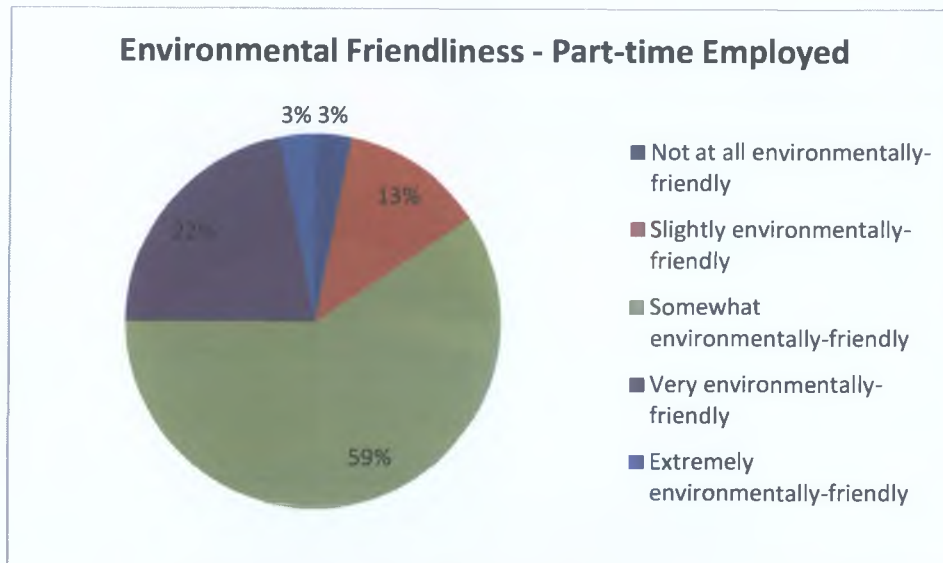
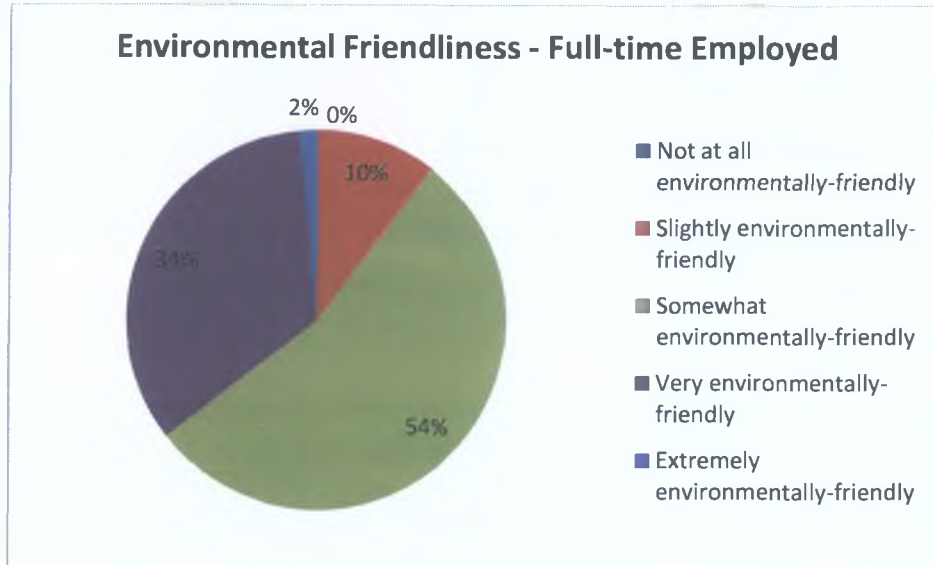
I think educating themselves, getting involved, there's a lot of great online forums for sharing practice and definitely if it's an Irish company to get involved with Origin Green, talk to Bord Bia, and get on board with that because you actually work with Bord Bia to create a sustainability plan that's externally audited by a company called STI (SCI?) but even if the company is still very new they could put together some goals, it's a five year plan, and it would put them on the road to sustainability. Any company can start by evaluating their energy, evaluating their impact, and working to reduce it, and thirdly, communicating it. Starting with communicating you probably know you're not off on the right foot.

Researcher: Would you say that there is plenty help out there?

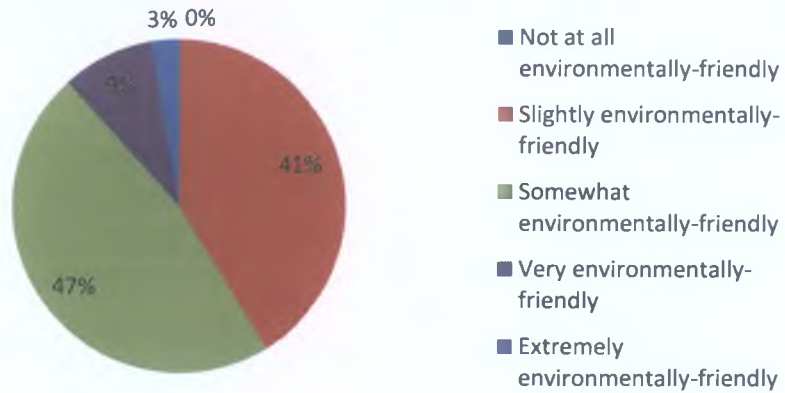
Yes the carbon trust is a great resource over in the UK in terms of how to measure your footprint from an individual to a business. Get online, educate yourself about what other companies are doing and what the gold standard is in sustainability and then look at your own company and start trying to figure out ways in which you can address your energy and your impact.

Appendix VI: Further breakdown of survey analysis

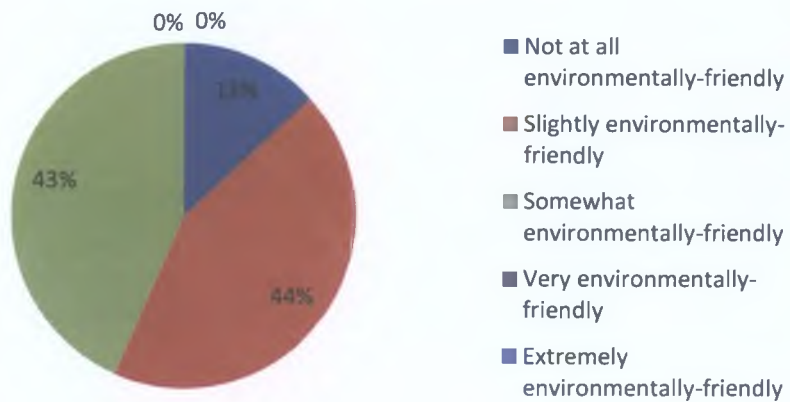
Breakdown of environmental-friendliness by respondents age and employment status

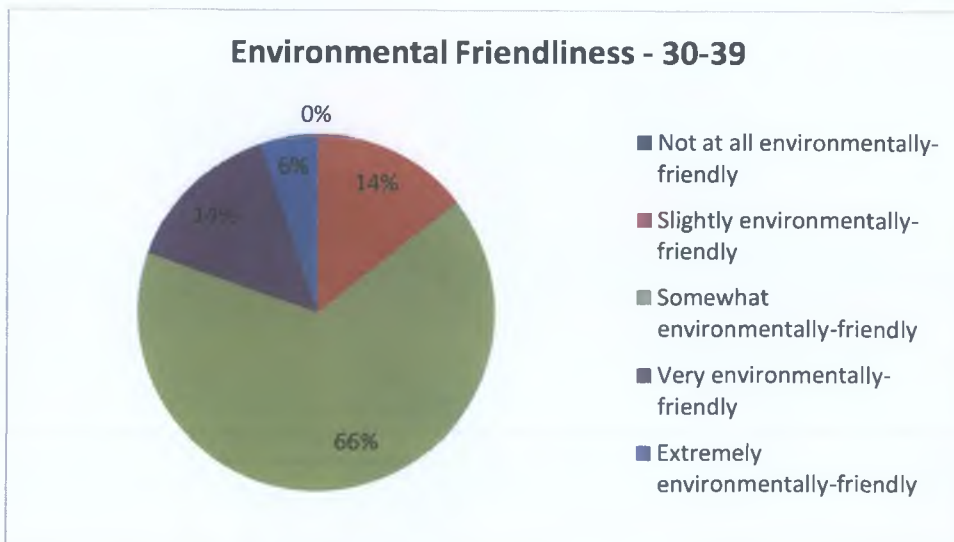
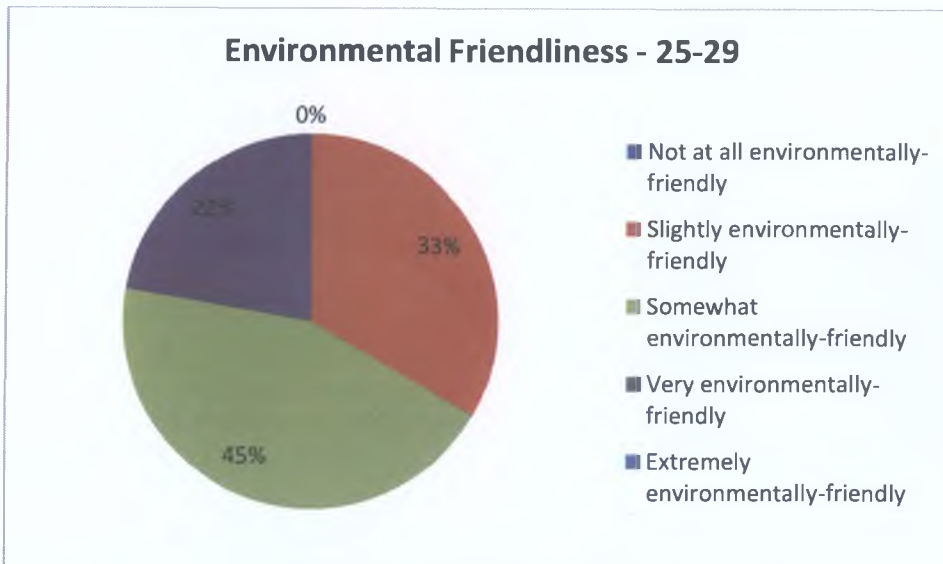
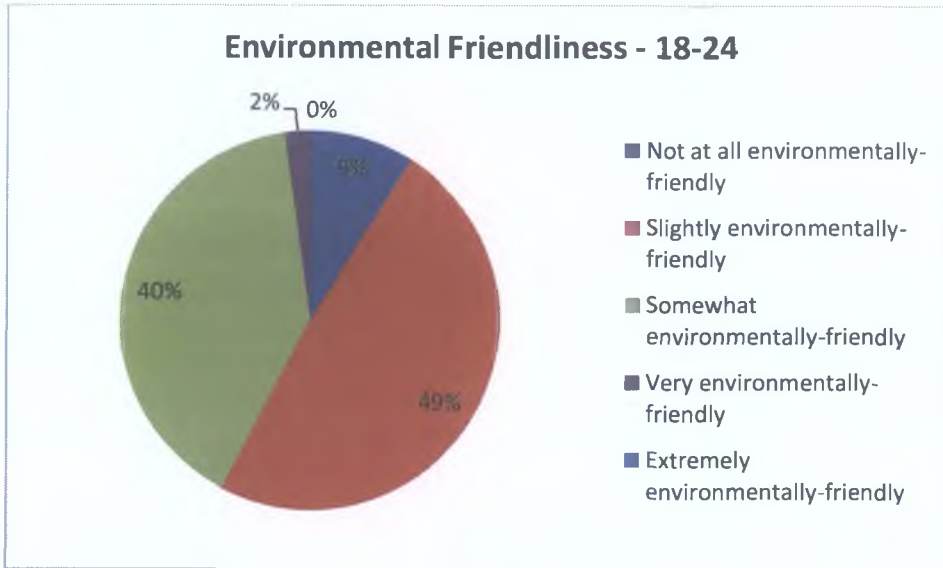


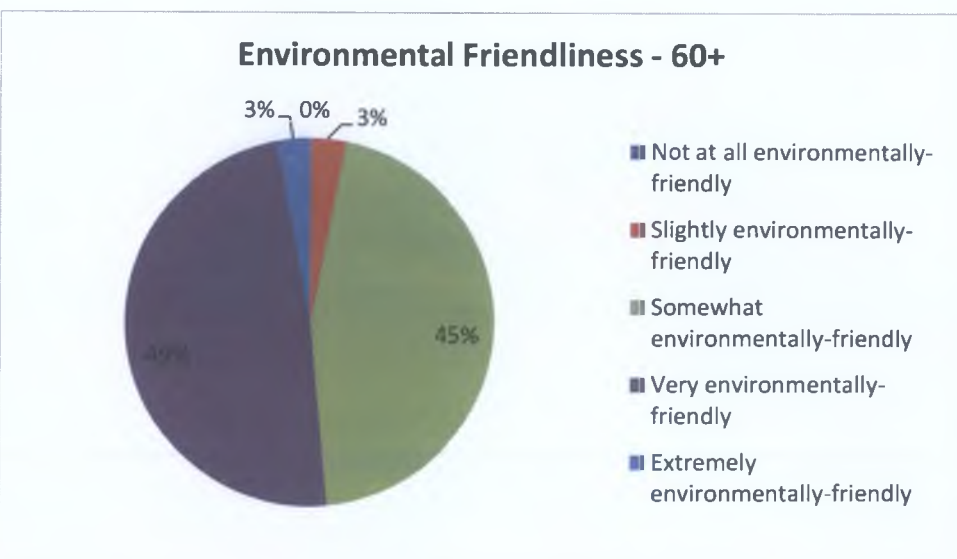
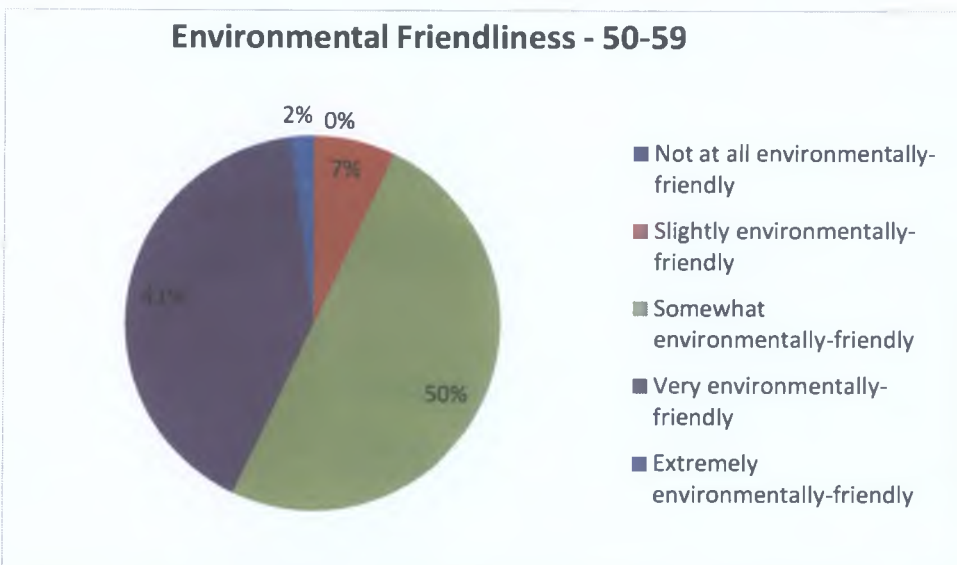
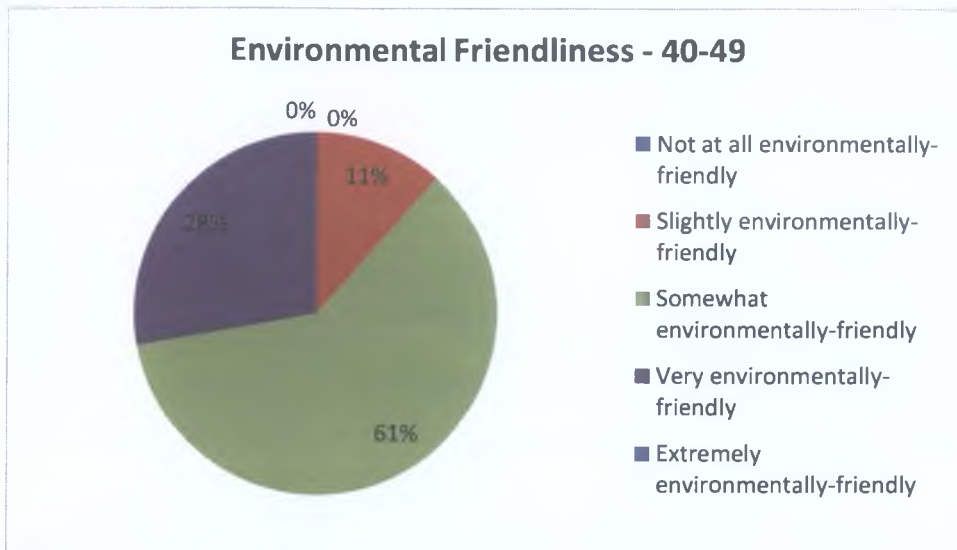
Environmental Friendliness - Unemployed



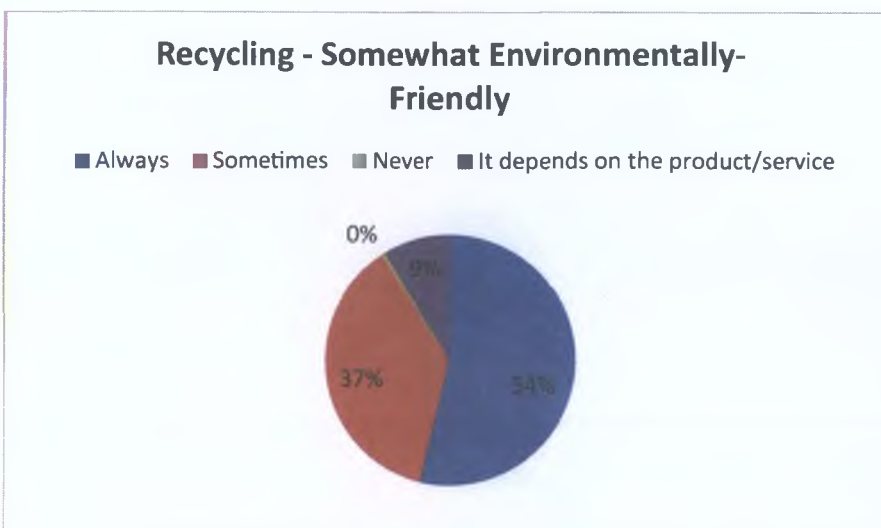
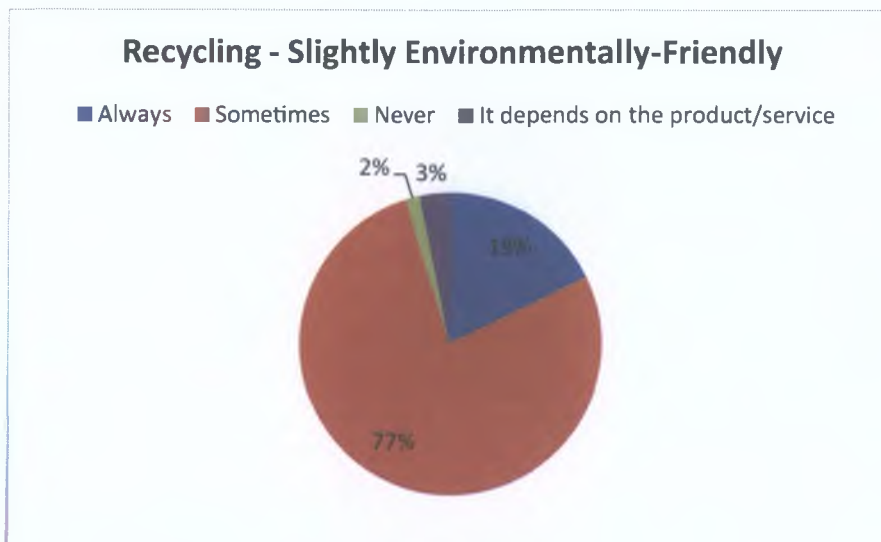
Environmental Friendliness - Student





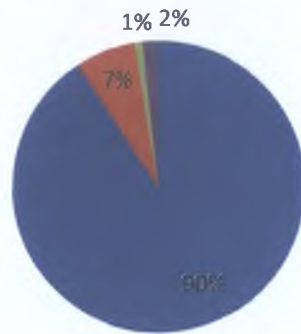


Breakdown of recycling habits based on environmental friendliness



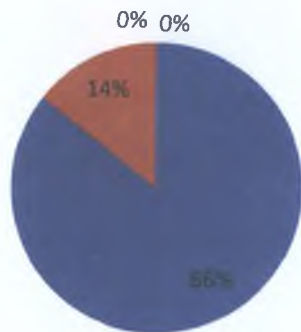
Recycling - Very Environmentally-Friendly

■ Always ■ Sometimes ■ Never ■ It depends on the product/service

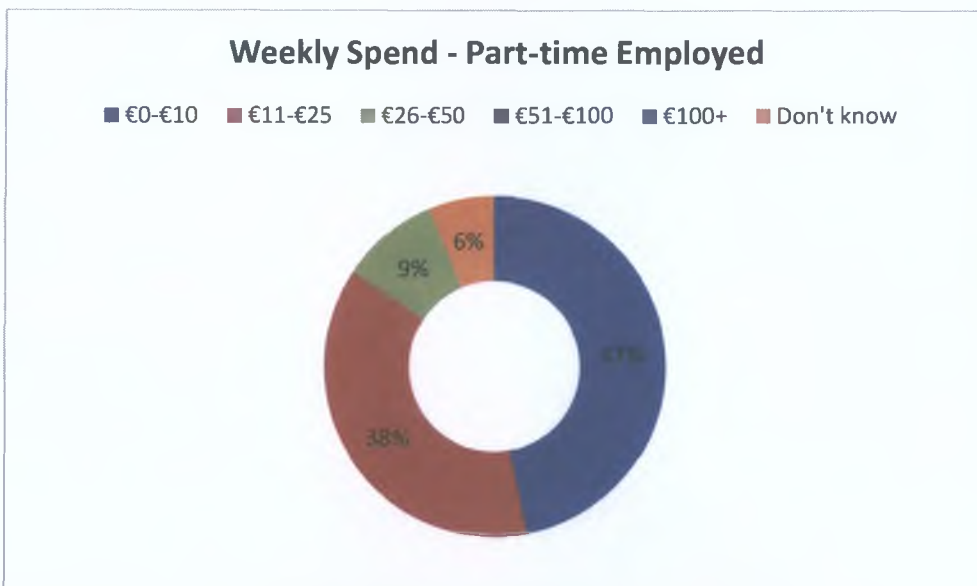
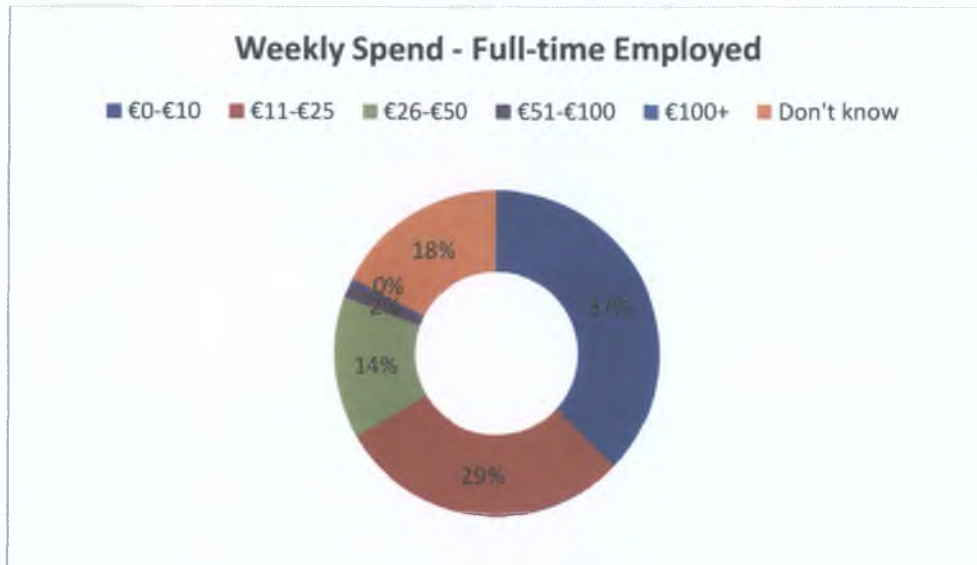


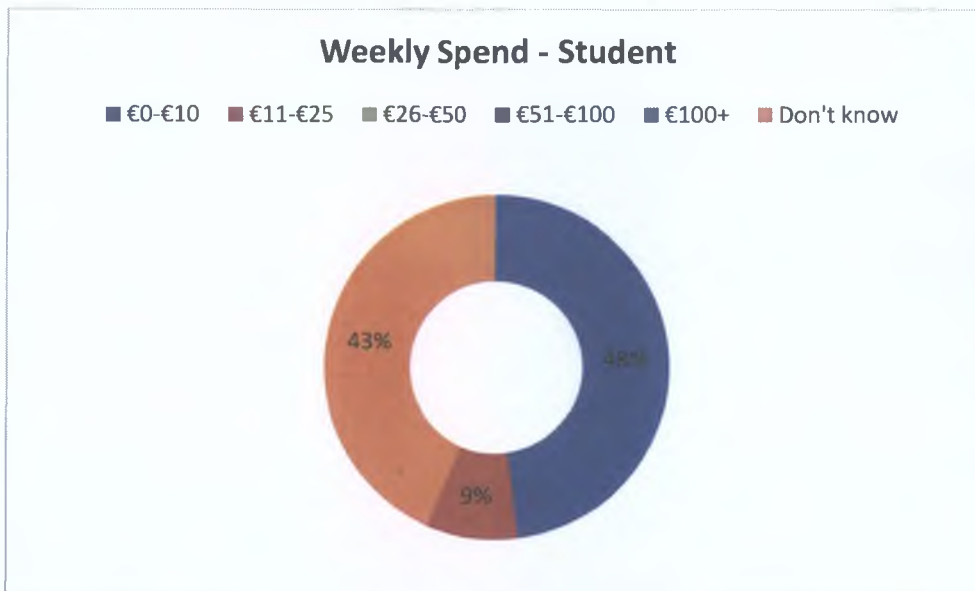
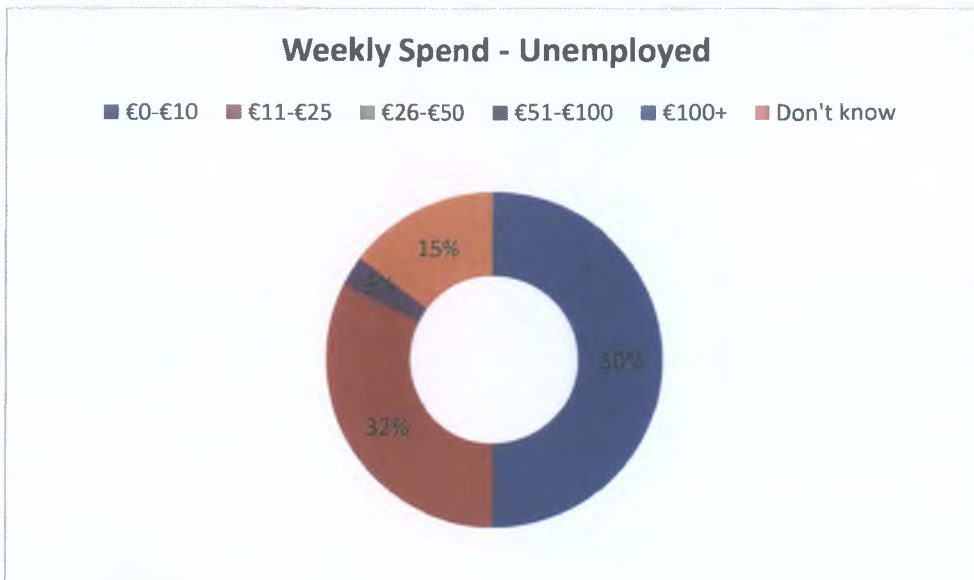
Recycling - Extremely Environmentally-Friendly

■ Always ■ Sometimes ■ Never ■ It depends on the product/service



Breakdown of Weekly Spend on Green Products based on Employment Status & Environmental Friendliness







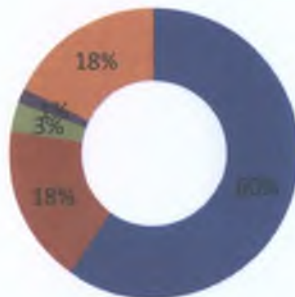
Weekly Spend - Not at all environmentally-friendly

■ €0-€10 ■ €11-€25 ■ €26-€50 ■ €51-€100 ■ €100+ ■ Don't know



Weekly Spend - Slightly environmentally-friendly

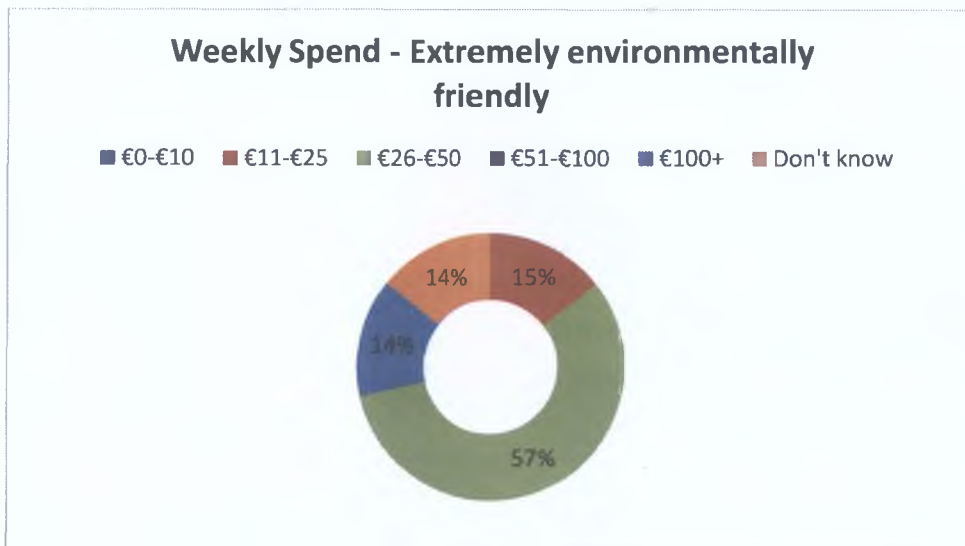
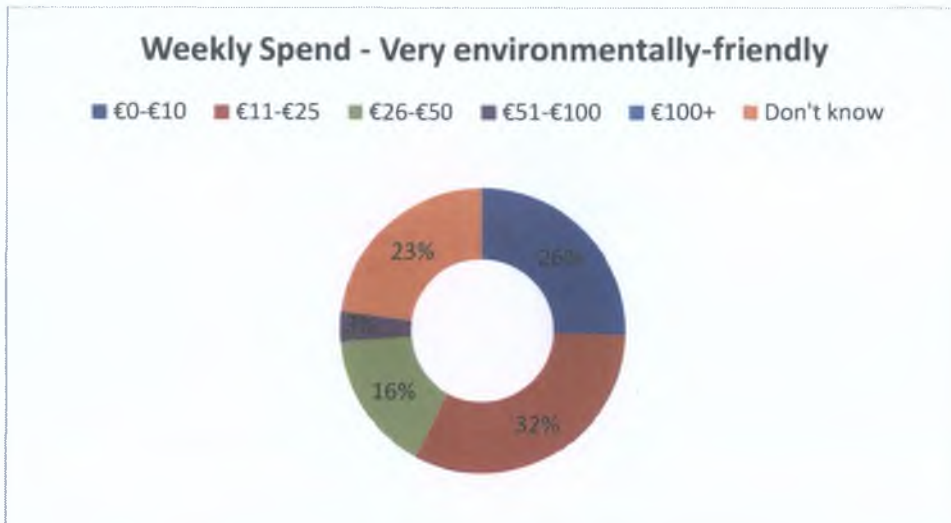
■ €0-€10 ■ €11-€25 ■ €26-€50 ■ €51-€100 ■ €100+ ■ Don't know



Weekly Spend - Somewhat environmentally-friendly

■ €0-€10 ■ €11-€25 ■ €26-€50 ■ €51-€100 ■ €100+ ■ Don't know

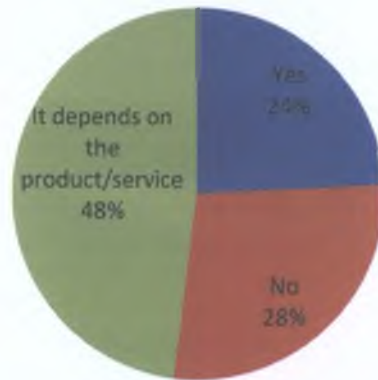




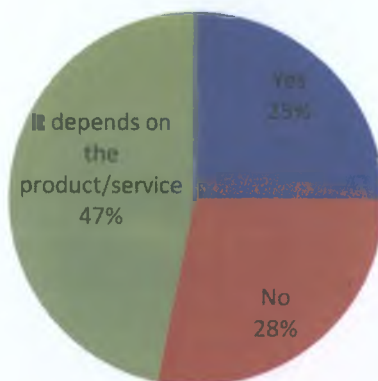
Breakdown of willingness to pay a higher price for green products based on employment status and environmental friendliness



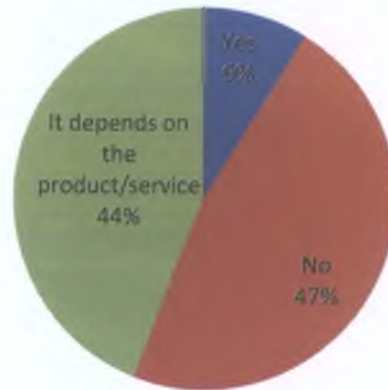
Willingness to pay a higher price - Full-time Employed



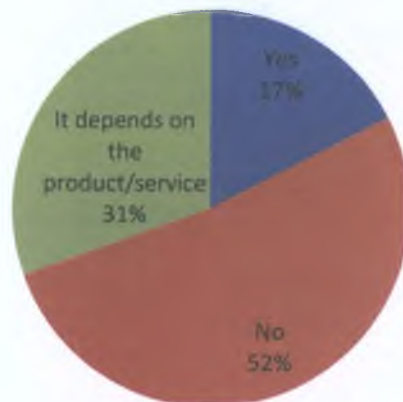
Willingness to pay a higher price - Part-time Employed

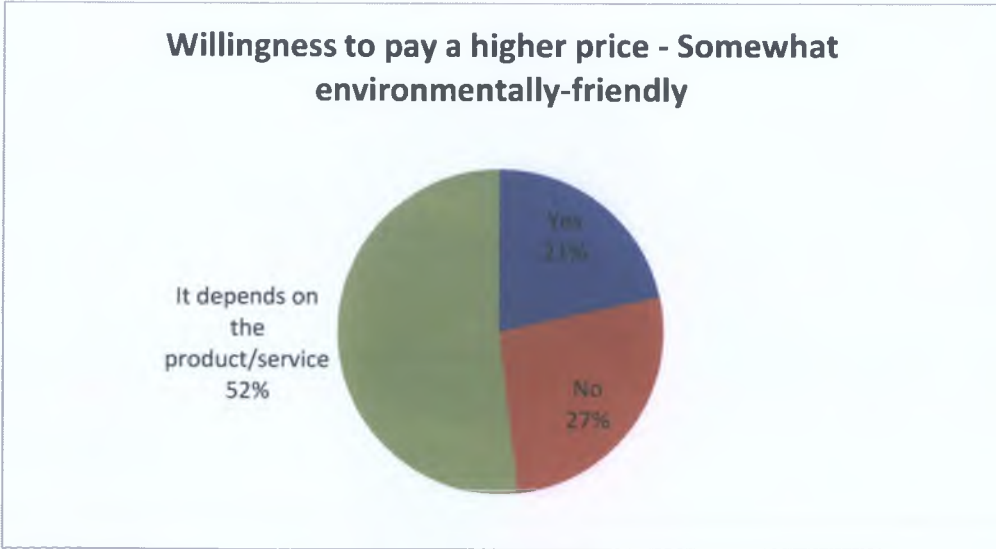
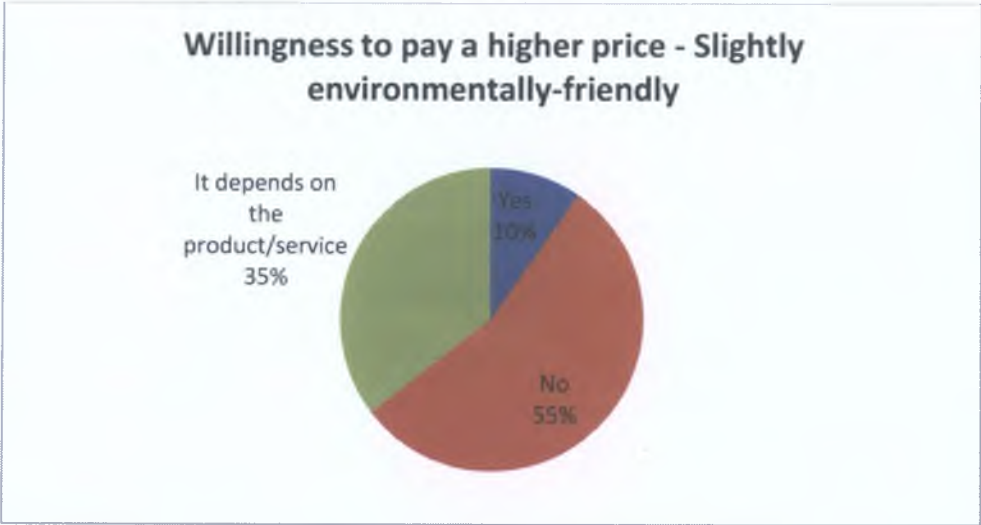
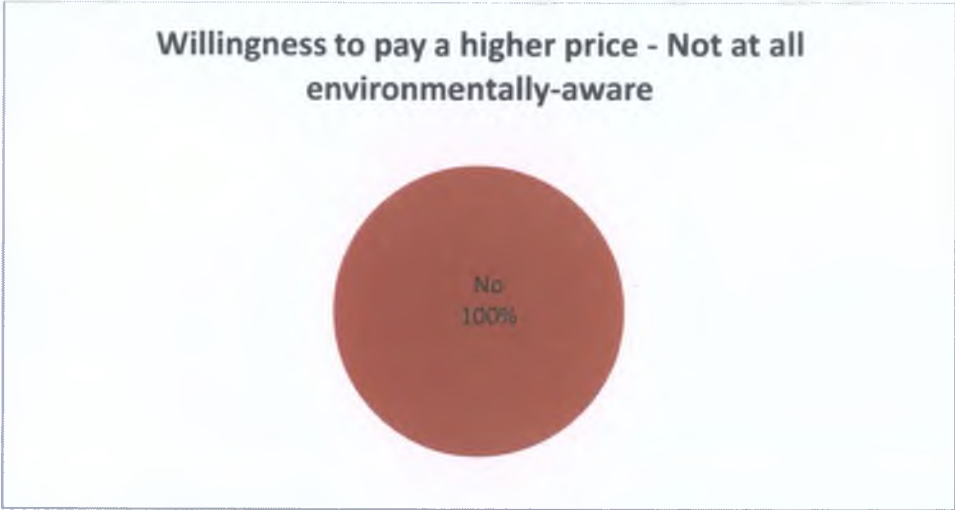


Willingness to pay a higher price - Unemployed

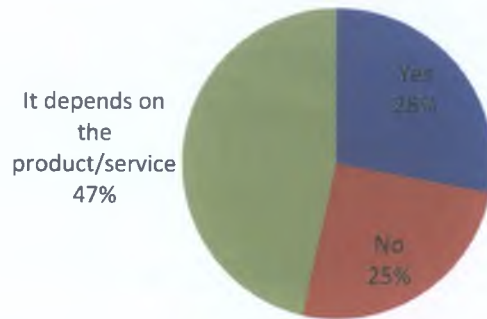


Willingness to pay a higher price - Student

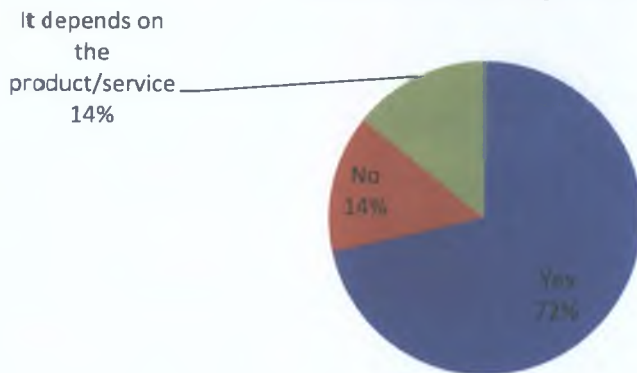




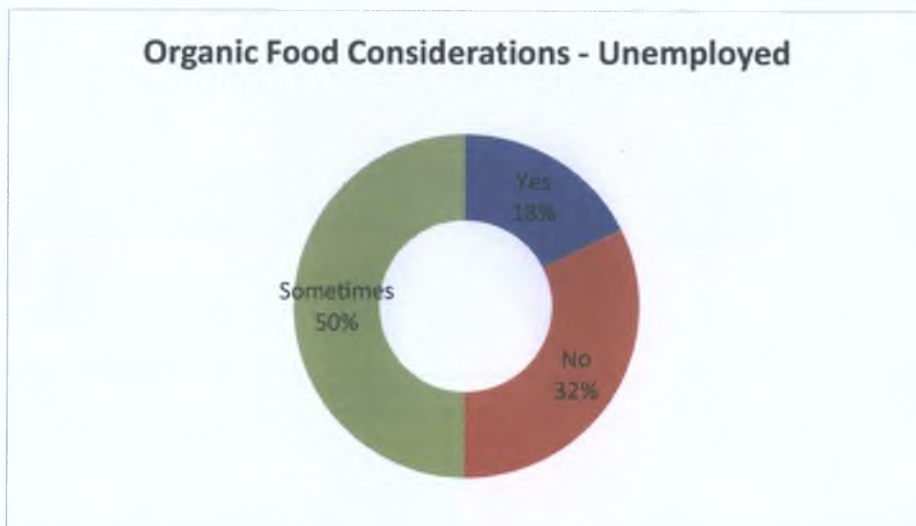
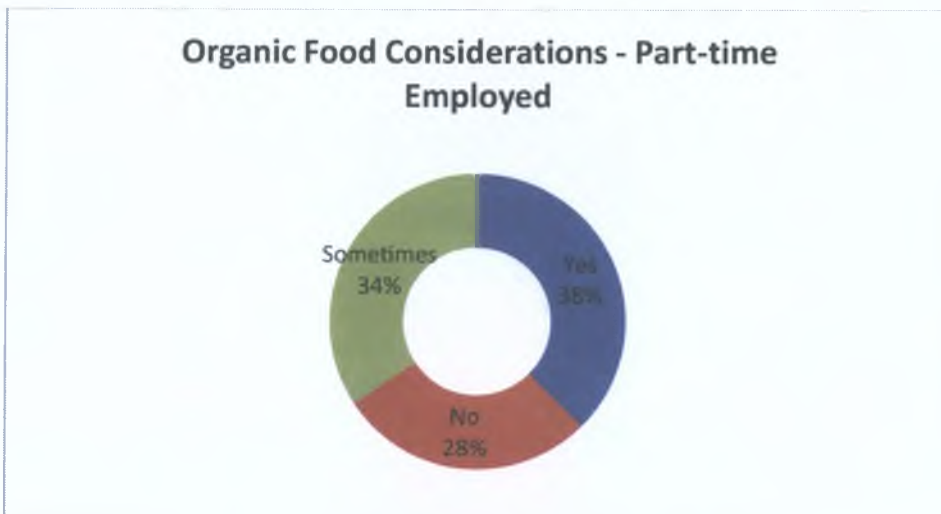
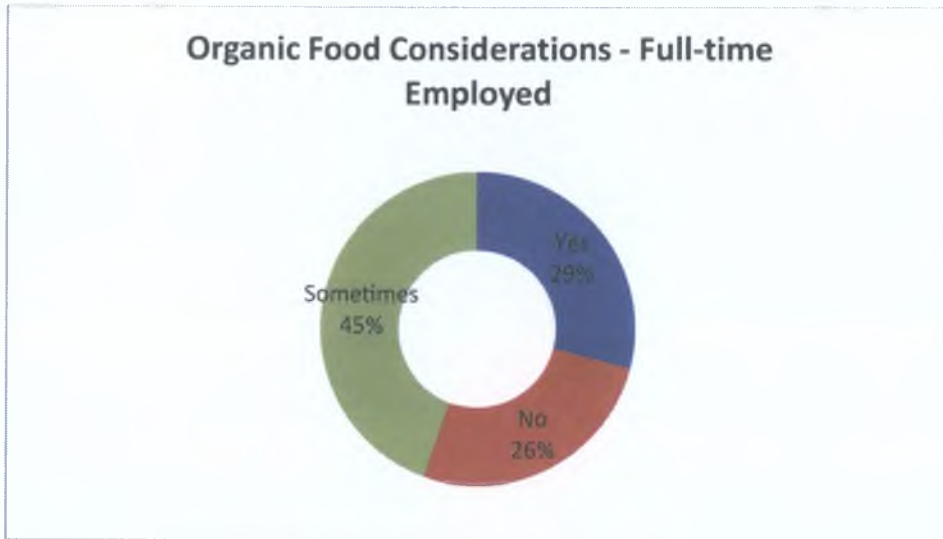
Willingness to pay a higher price - Very environmentally-friendly

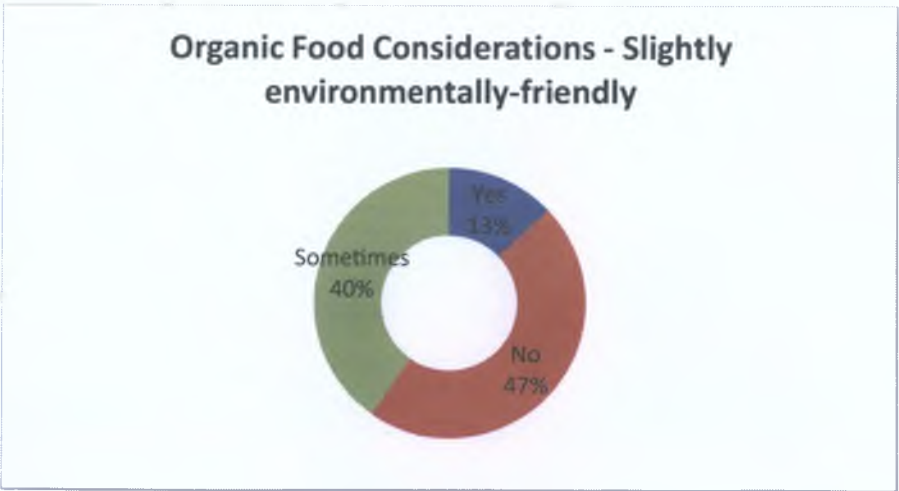
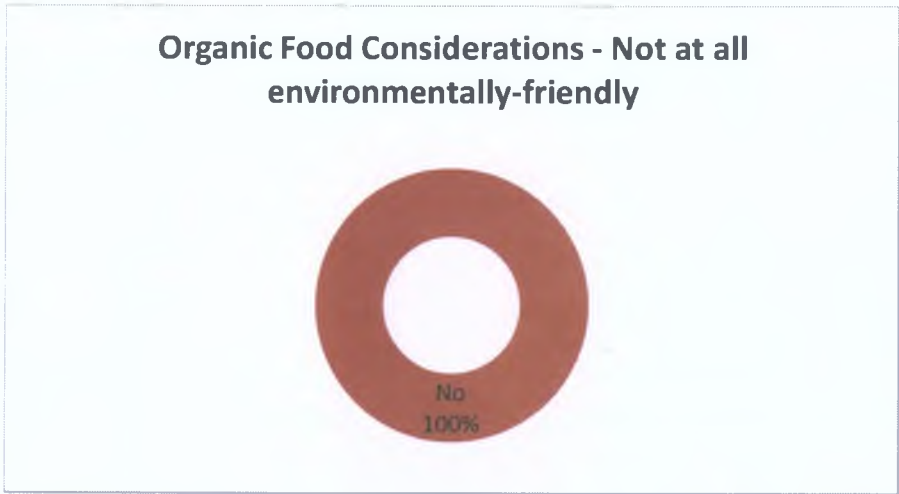
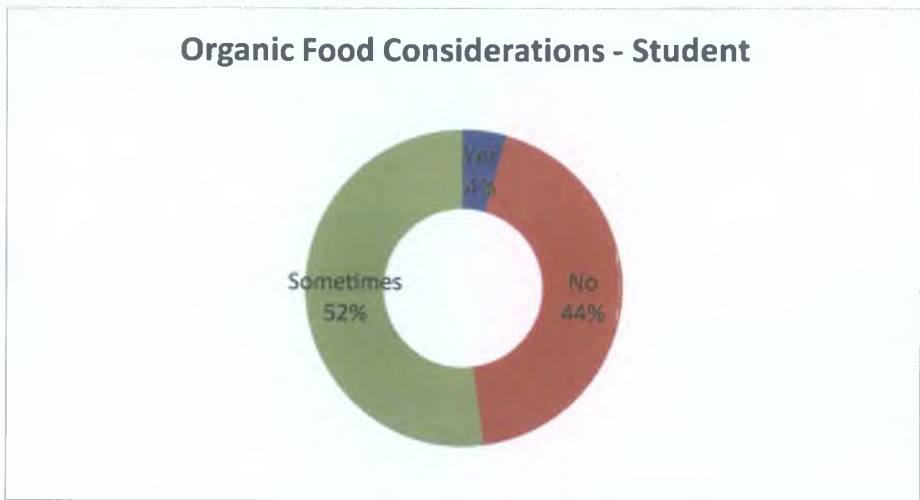


Willingness to pay a higher price - Extremely environmentally-aware

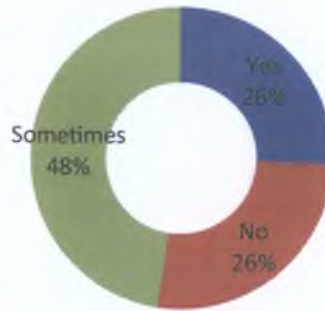


Breakdown of organic food considerations based on employment status and environmental friendliness

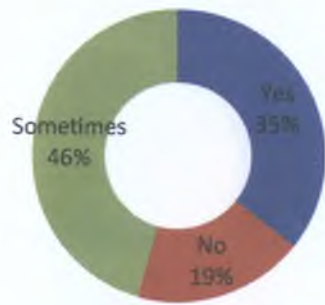




Organic Food Considerations - Somewhat environmentally-friendly



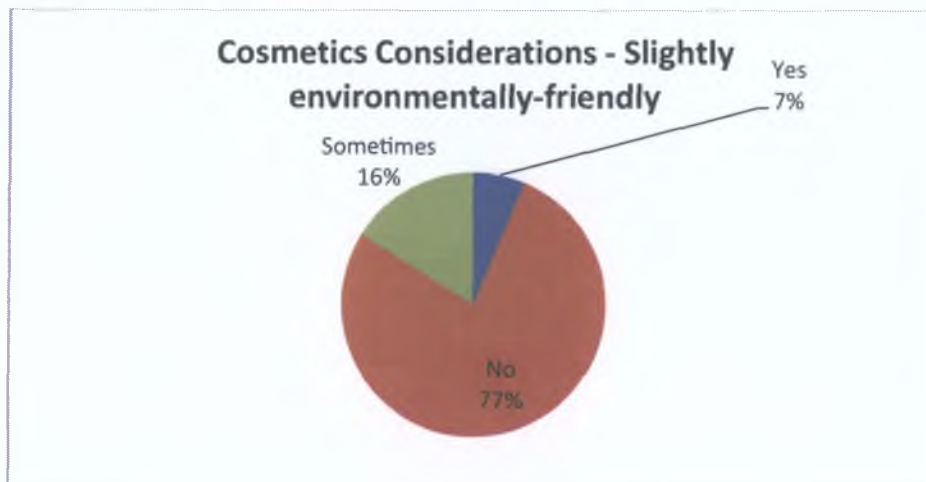
Organic Food Considerations - Very environmentally-friendly

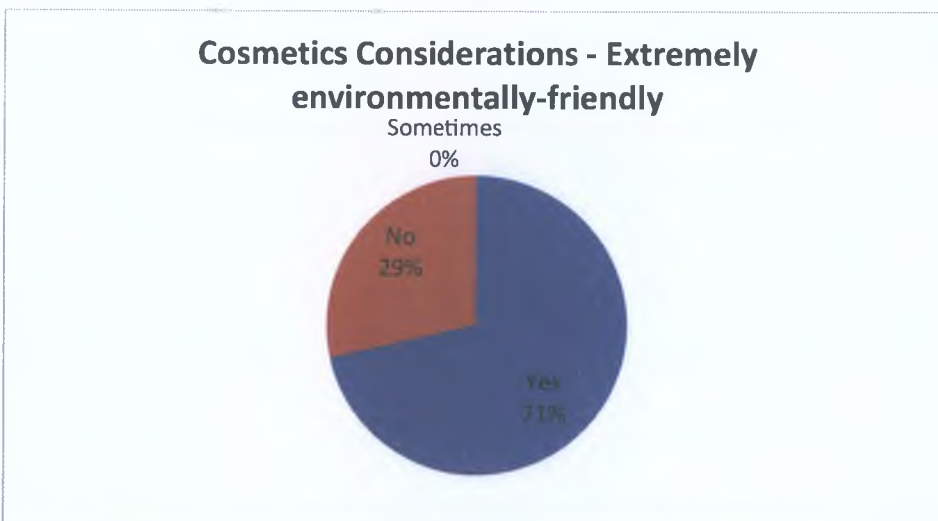
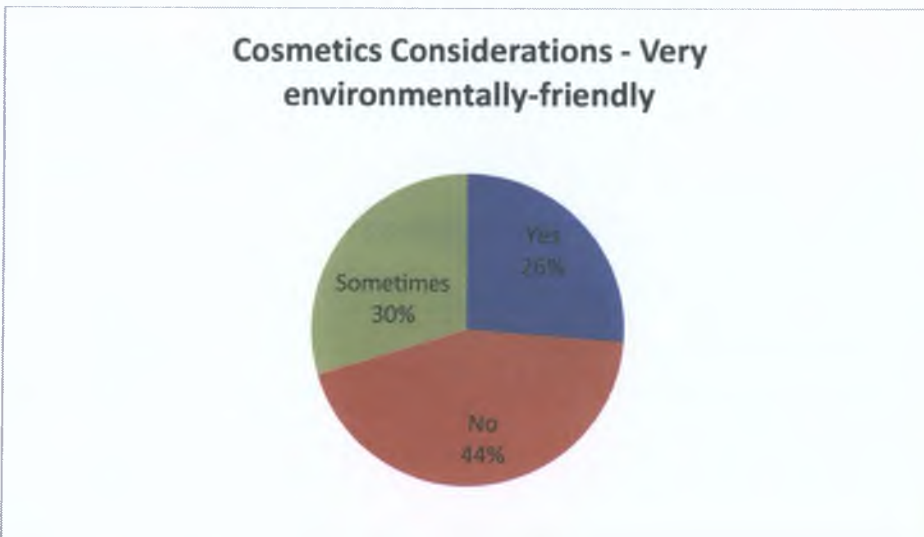
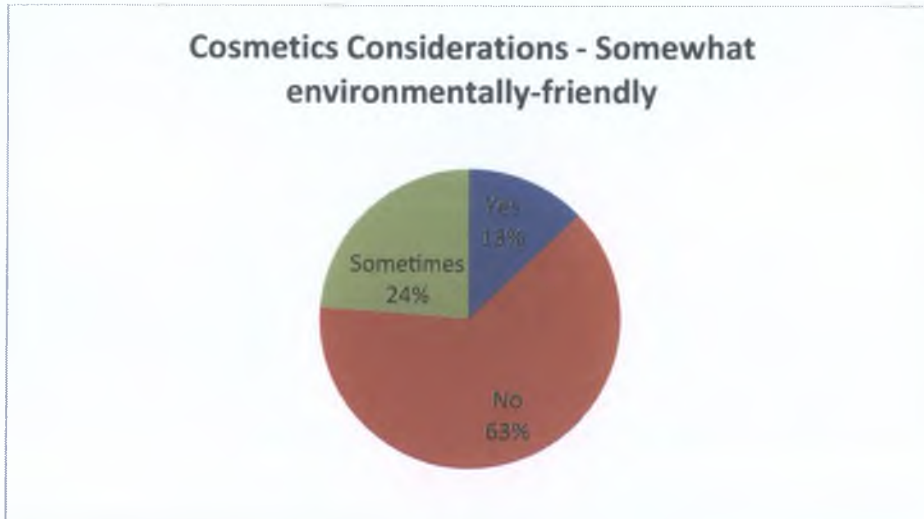


Organic Food Considerations - Extremely environmentally-friendly



Breakdown of environmentally-friendly cosmetics considerations based on environmental friendliness





Breakdown of Purchase Motivators (in order of importance) by Employment Status and Environmental Friendliness

Unemployed	Student	Full-time Employed	Part-time Employed
Price Quality Convenience Brand Environmental impact	Price Quality Convenience Brand Environmental impact	Quality Price Convenience Environmental impact Brand	Quality Price Convenience Brand Environmental impact

Not at all environmentally-friendly	Slightly environmentally-friendly	Somewhat environmentally-friendly	Very environmentally-friendly	Extremely environmentally-friendly
Price Convenience Quality Brand Environmental impact	Price Quality Convenience Brand Environmental impact	Quality Price Convenience Brand Environmental impact	Quality Price Environmental impact Convenience Brand	Quality Price Environmental impact Convenience Brand

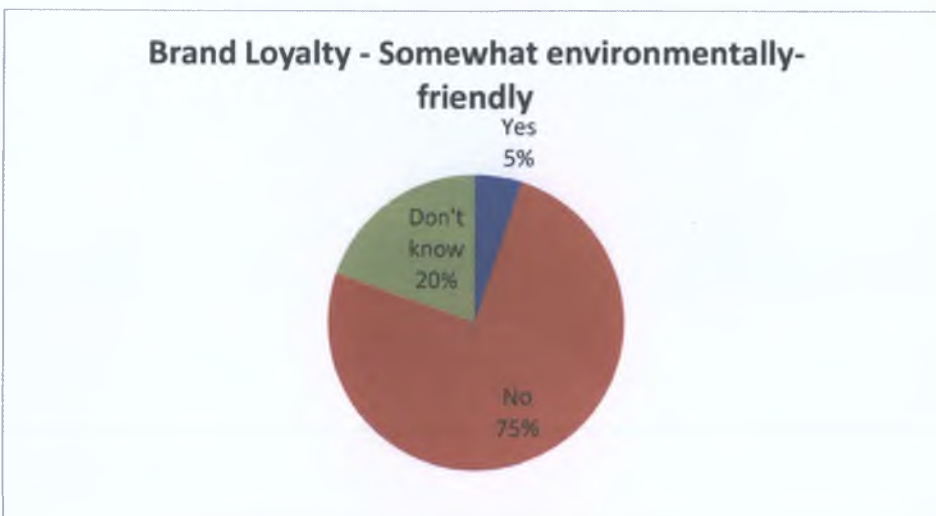
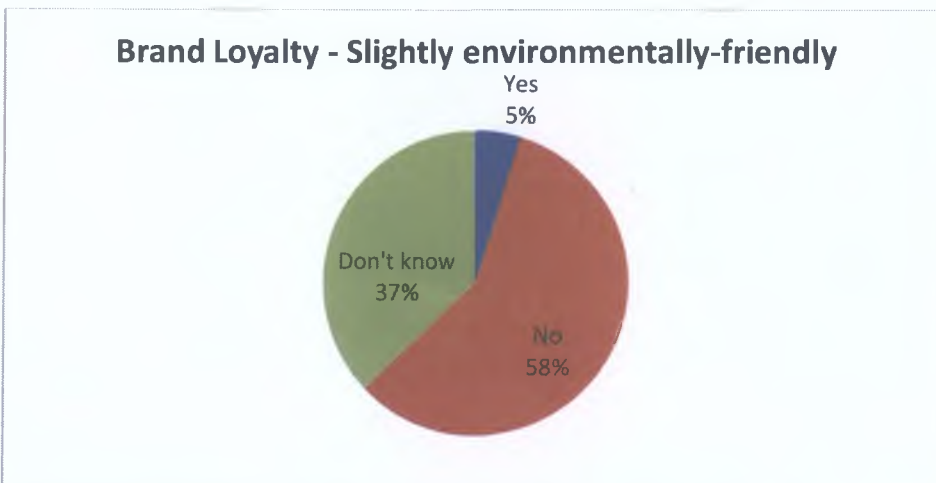
Breakdown of considerations in purchasing a car (in order of importance) by Employment Status and Environmental Friendliness

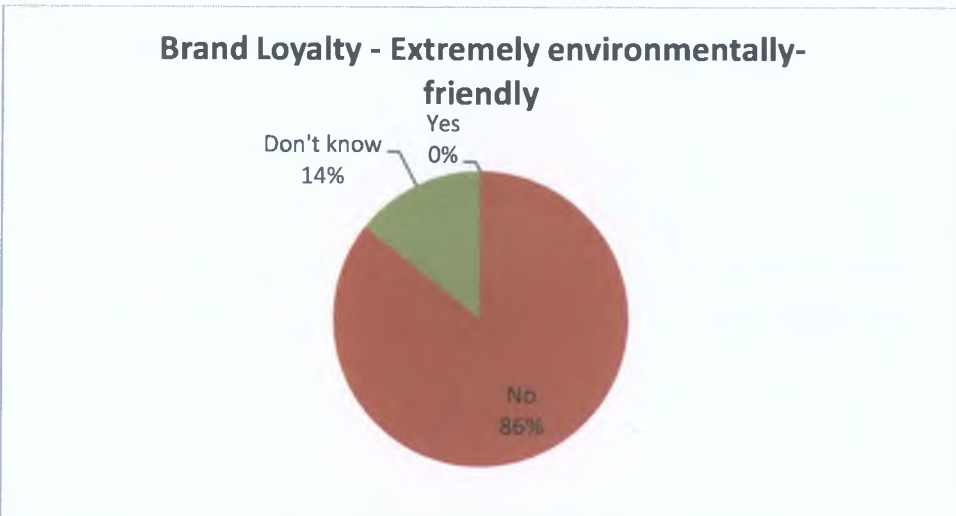
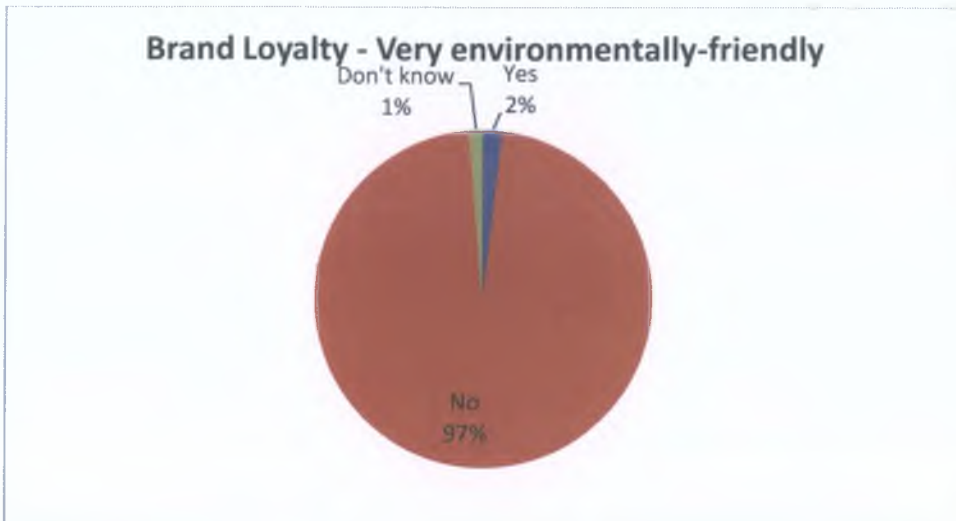
Full-time employed	Part-time employed	Student	Unemployed
Price Fuel Safety Engine size Tax fees Attractiveness Emissions	Price Fuel Safety Engine size Tax fees Attractiveness Emissions	Price Attractiveness Fuel Engine size Tax fees Safety Emissions	Price Fuel consumption Tax fees Engine size Safety Attractiveness Emissions

Not at all environmentally-friendly	Slightly environmentally-friendly	Somewhat environmentally-friendly	Very environmentally-friendly	Extremely environmentally-friendly
Price Attractiveness Engine size Fuel Safety Tax fees Emissions	Price Fuel Attractiveness Engine size Tax fees Safety Emissions	Price Fuel Safety Engine Tax fees Attractiveness Emissions	Price Fuel Safety Engine size Tax fees Emissions Attractiveness	Price Fuel Engine size Safety Tax fees Emissions Attractiveness

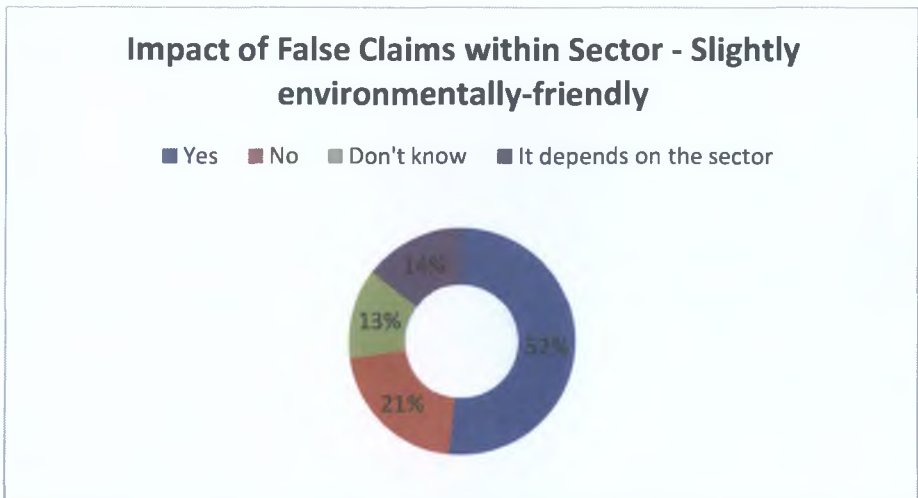
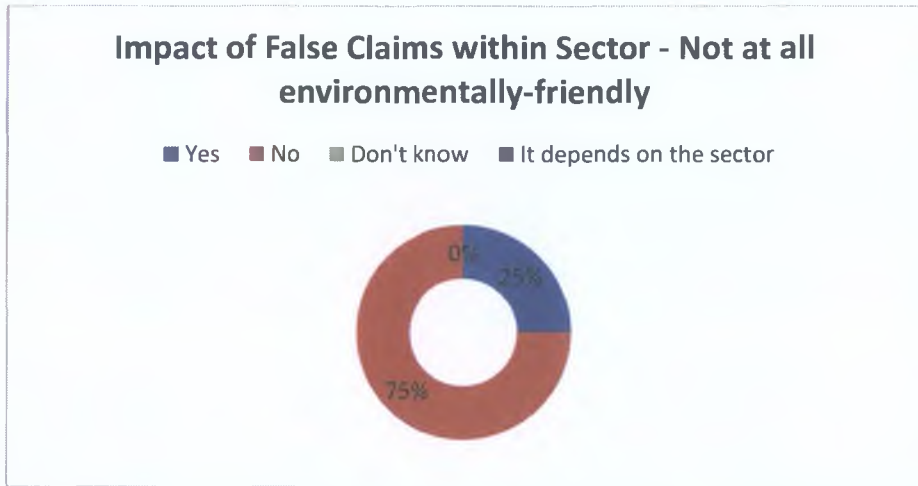


Breakdown of Brand Loyalty based on Environmental Friendliness – respondents were asked if they would remain loyal to a brand if they discovered that environmentally-false claims were made.





Breakdown of the Impact of False Claims Within a Sector based on Environmental Friendliness



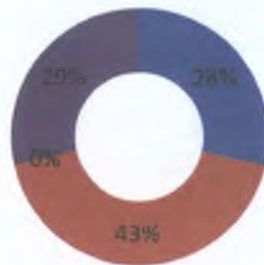
Impact of False Claims within Sector - Very environmentally-friendly

■ Yes ■ No ■ Don't know ■ It depends on the sector



Impact of False Claims within Sector - Extremely environmentally-friendly

■ Yes ■ No ■ Don't know ■ It depends on the sector



Breakdown of the Impact of False Claims in Other Sectors based on Environmental Friendliness

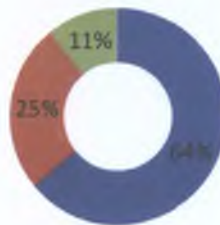
Impact of False Claims in Other Sectors - Not at all environmentally-friendly

■ Yes ■ No ■ Don't know



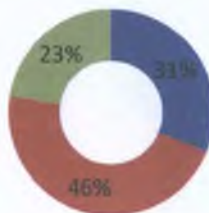
Impact of False Claims in Other Sectors - Slightly environmentally-friendly

■ Yes ■ No ■ Don't know



Impact of False Claims in Other Sectors - Somewhat environmentally-friendly

■ Yes ■ No ■ Don't know



Impact of False Claims in Other Sectors - Very environmentally-friendly

■ Yes ■ No ■ Don't know



Impact of False Claims in Other Sectors - Extremely environmentally-friendly

■ Yes ■ No ■ Don't know

