Environmental Sustainability in Small and Medium Enterprises in the Hawke's Bay region of New Zealand

Sujata Vijendra Singh

1st November 2013

A dissertation submitted to
Auckland University of Technology
in partial fulfillment of the requirements for the degree of
Master of International Hospitality Management (MIHM)

School of Hospitality and Tourism
Primary Supervisor: Monique Brocx
Secondary Supervisor: Warren Goodsir

Contents

Table of Figures

List of Tables

List of Abbreviations

AA: Automobile Association

AHMA: American Hotel and Motel Association

BOD: Biological Oxygen Demand

BS: British Standard

CDP: Carbon Disclosure Project

CFL: Compact Fluorescent Lighting

CST: Certification of Sustainable Tourism

EcS: Economic Sustainability

EMAS: Eco-Management and Audit Scheme

EMS: Environmental Management Systems

ES: Environmental Sustainability

ESA: Environmentally Sustainable Accreditations

ESP: Environmentally Sustainable Practices

ESS: Environmentally Sustainable Standards

EU: European Union

GDP: Gross Domestic Product

GG21: Green Globe 21

GRI: Global Reporting Initiative

IHEI: International Hotels Environmental Initiative

IHRA: International Hotel and Restaurant Association

ISO: International Organization for Standards

KPAs: Key Performance Areas

MANZ: Motel Association of New Zealand

NEAP: Nature and Eco-Tourism Accreditation Programme

NGO: Non-Governmental Organizations

NZ: New Zealand

NZTB: New Zealand Tourism Board

TSAs: Tourism Satellite Accounts

SBIs: Sustainability Benchmarking Indicators

SD: Sustainable Development

SMEs: Small and Medium Enterprises

SPSS: Statistical Package for the Social Sciences

SS: Social Sustainability

TIANZ: Tourism Industry Association of New Zealand

TNZ: Tourism New Zealand

UK: United Kingdom

US: United States

WECD: World Commission on Environment and Development

WTO: World Tourism Organization

WTTC: World Tourism and Travel Council

WWF: World Wide Fund

Attestation of Authorship

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

Sujata Vijendra Singh

November, 2013

<u>Acknowledgements</u>

Abstract

Most literature on sustainability begins with referencing the 'Brundtland Report', issued in 1987 by the World Commission on Environment and Development and formerly known as *Our Common Future*. This report is considered the main driving force behind all sustainability reinforcement, including the provision of an understanding between economic growth and environment protection. This report revolutionized the business community to adopt sustainable practices. Numerous studies have been conducted in the field of sustainability and its benefits for businesses. The common outcome from these studies proposed that 'sustainability is not just good for people and the planet, but sustainable business practice make good economic sense' (Collins, Roper & Lawrence, 2010, p. 481).

Sustainability can be interpreted in many ways, and in various industries it is practised differently. Businesses, regardless of their size or management, are taking positive steps to incorporate sustainable practices. Sustainability is further interpreted into social, economic and environmental considerations, forming a triple bottom line of any business. This research specifically explores aspects of environmental sustainability (ES)-related practices that are employed in small and medium sized accommodation providers within the Hawke's Bay region of New Zealand. A Similar study was conducted with hotels by Ustad (2010) also in the field of Environmental Sustainability but from the hotel managers' perspectives.

The industry in which this research has been conducted is the hospitality and tourism industry. There are many hospitality and tourism operators around the world, such as Hilton and Hyatt properties, that have successfully adopted environmentally sustainable practices and have reaped abundant benefits.

These business providers have set an excellent example for others to follow; however, there may be a lapse in understanding in certain parts of the industry, such as in small and medium enterprises. The results of this research demonstrate that the property owners are aware of environmentally sustainable practices but are less knowledgeable about environmental management systems and environmentally sustainable standards and accreditations. The practices are carried out of general knowledge regarding the environment and as a responsibility towards the conservation of the planet.

Chapter 1: Introduction

This chapter introduces the research and the background of sustainability. It also discusses the main aims of this research, which helps in understanding the levels of knowledge in small and medium accommodation owner/operators regarding environmentally sustainable practices, as well as whether they are motivated to continue with environmentally sustainable practices.

1.1 Background to the research

The need for sustainability has arisen from the recognition of the excessive, wasteful and inequitable nature of current economic development, which, when projected into the not-so-distant-future, leads to biophysical impossibilities.

Rahman, Reynolds & Svaren (2012) discuss that most industries around the world have embraced the concept of sustainability in some form or another. It was observed that the amount of energy burnt each day by the current global economy takes roughly 10,000 days to create by the planet. In other words, 27 years' worth of stored solar energy is burned and released by utilities, cars, houses, factories and farms every 24 hours. It was also observed that we as humans consume 40 per cent of the green material produced on earth each year, 35 per cent of the productivity from the ocean shelf and 60 per cent of the fresh water run-off. It is also claimed that if every human were to consume as much as an average U.S. inhabitant does, four Earths would be required to support that level of consumption.

Moreover, consumers in the industrialised nations are believed to consume more than 80 per cent of the limited resources and, as a result, consumption disproportion has led to significant global tension. This raises the issue of sustainable consumption whereby each person should consume only their 'earth share' in order to make the consumption socially equitable or justified and contribute towards ecological sustainability (Huang & Rust, 2011).

Buckley (2012, p. 529) emphasized that 'Sustainability requires modification to human society so as to reduce its aggregate impacts which depend on the size and distribution of the global human population and its social organization, which includes economy, governance and civil society along with the consumption and/or the protection of nature as a result of such social organizations.'

Moreover, the hospitality and tourism industry is also believed to be heavily reliant on the natural environment and the irreplaceable natural resources for its viability. The tourism industry renders a significant impact on the ecosystem and on the attractiveness of tourist destinations (McNamara & Gibson, 2008).

Ruiz-Molina, Gil-Gaura and Moliner-Velazquez (2010, p. 467) identify that approximately 75 per cent of hotels' negative environmental impacts are attributed to the excessive consumption of non-durable goods, such as energy and water, leading to emissions released into the atmosphere and soil. Rodriguez-Anton, Alonso-Almeida, Celemin, and Rubio (2012) similarly suggest that the rise in tourism supply has caused the formation of hotel clusters that are blamed for the contribution towards the destruction of natural resources in major tourist destinations.

As a result, an urgent need was recognized for transition into environmental sustainability due to the rapid deterioration of 'global life-support systems' in order to sustain these systems indefinitely (Goodland, 1995, pg. 5). Thus, this research will help identify whether there is an understanding among small business operators regarding environmental sustainability.

1.2 Purpose of the research

The aim of this research is to identify the extent of knowledge of 'environmental sustainability-related awareness' and the practices observed by the owners and/or managers of small and medium sized enterprises (SMEs) in the Hawke's Bay region of New Zealand. The businesses chosen for this research are mainly self-contained accommodation providers.

This dissertation adds to a previous study conducted on hotels and their environmentally sustainable practices in the New Zealand hotel industry by Ustad (2010), who suggested that New Zealand hotels were implementing more environmentally sustainable measures, whereas this research focuses on small and medium business operators in the Hawke's Bay region of New Zealand.

This research will be significant as it will determine the behaviour and attitude of business operators towards environmental sustainability in response to the 100% Pure brand image of New Zealand.

As Collins, Roper and Lawrence (2010) correctly indicated, despite the businesses' willingness to embrace the banner of sustainability, a sustainable enterprise or sustainable business is by far a contested concept.

In the context of a recent comment by Anderson (2012) of *The New York Times* who suggested that the New Zealand Tourism's 100% Pure campaign is '100% pure fantasy', it is opportune to conduct research which will ascertain the nature and extent of environmentally sustainable practices associated with the small and medium accommodation enterprises (SMEs). This research will also provide an understanding of the differences, if any, between SMEs and larger accommodation operators like hotels.

For this research, the Hawke's Bay region has been chosen due to the abundance of SME operators in the area which cater to the growth of international and domestic tourists. This research will particularly focus on establishments that are small in terms of size and output (productivity and yield), in order to understand the levels of awareness of sustainable policies along with their applicability in the establishments.

As this research complements a previous study, conducted by Ustad (2010), which researched environmental sustainability awareness in hotel properties in New Zealand, the research questions for this study are:

1. What are the levels of awareness among business owners/operators regarding environmentally sustainable practices (ESP)?
2. To what extent do the small and medium business operators have the ability to be 'environmentally sustainable'?
3. What is the motivation of business owners to keep up with the requirements of the environmentally sustainable accreditations (ESA) and environmentally sustainable standards (ESS)?

Figure 1: Map of New Zealand highlighting Hawke's Bay

1.3   <u>Structure of this dissertation</u>

The second chapter of this study explores the literature and background of sustainability, and then further discusses the relationship between the three main aspects of sustainability, which are social, economic and environmental, constituting the triple bottom line. The study then further explores the literature on environmental sustainability in the hospitality and tourism industry and small and medium enterprises (SMEs). The literature review further explores sustainable practices and the link between environmentally sustainable standards, systems and accreditations.

The research further discusses the hospitality and tourism industry of New Zealand. The SME industry in New Zealand and Hawke's Bay region is also discussed as the tourism industry is one of the main driving forces in the New Zealand economy, and small and medium businesses are the major contributors to this economy.

Chapter Three discusses the positivist methodology used in this research, the research paradigm, research questionnaire and ethical considerations related to this dissertation.

Chapter Four explains the findings and results from the survey, which suggest that the participants/business owners had some relevant knowledge regarding environmentally sustainable practices and that even though the level of knowledge regarding the concepts of environment management systems or standards were low, the practices were being observed regardless.

Chapter Five discusses these findings with the addition of the model adapted by Chopra (2013) with Chapter Six listing the references.

The last part of this dissertation is the Appendices, which contain additional tables related to the findings and which support the results and discussion. A copy of the questionnaire, participant information sheet and the letter of approval from the Ethics Committee are also provided.

Chapter 2: Literature review and research context

2.1   Introduction

This literature review is presented to support the three research aims that assess:

1. The levels of awareness among business owners/operators regarding environmentally sustainable practices (ESP);
2. The extent to which the small and medium business operators have the ability to be 'environmentally sustainable'; and
3. The motivation of business owners to keep up with the requirements of environmentally sustainable accreditations (ESA) and environmentally sustainable standards (ESS).

This chapter presents the literature on sustainability and the issues surrounding sustainability in general. It then discusses sustainability issues in the hospitality and tourism industries and also provides an insight into the relationship between environmental, economic and social sustainability. This literature review also discusses ways to manage environmental sustainability (ES), along with ways to practice sustainability in an efficient manner. Finally, it provides information about the small and medium enterprises (SMEs) in New Zealand and in the Hawke's Bay region.

2.2   Sustainability as a concept

The term 'sustainability' is defined by Crognale (2011) as a derivation from the Latin word *sustinere*, which means 'to uphold' or 'the means to support'. The origin of the construct of sustainable tourism was introduced by the Brundtland Commission's report presented at the World Commission on Environment and Development (WECD) in 1987, *Our Common Future*, describing it as 'development that meets the needs of the present generation without compromising the ability of the future generations to meet with their own needs' (Watson & Emery, 2004 and Dale & Newman, 2005). In this particular context, sustainability refers to the ways the decision of an organization affects society

and the environment and how the organization manages to conduct business while being sensitive to those affected by the decision.

Crognale (2011) describes sustainability as a term whose involvement is dispersed among various industries, such as manufacturing, construction, hospitality and tourism.

Horsley and Ahmed (2011) observe that sustainability, sustainable business, sustainable development and corporate social responsibility refer to identical organizational concepts that address environmental, social, economic and cultural aspects of an organization's activities. They also claim that there is an increased acknowledgement identifying that a sustainable business model could be the solution to the current economic, social and environmental problems. Horsley and Ahmed (2011) further suggest that in order to be able to live in a sustainably society requires a transparent governance process with effective communication of related activities and performance, along with stakeholder engagement.

2.2.1   Social sustainability

Goodland (1995) clarifies in his study that the environment is becoming a major constraint on the progress of individuals. Fundamentally, environmental sustainability is considered a prerequisite for social sustainability and economic sustainability. Social sustainability is achieved only by systematic community participation and a strong civil society. Social sustainability, when linked with environmental sustainability, results in a contribution towards sustainable development (SD), which can be defined as 'development without the throughput of matter and energy beyond regenerative and absorptive capabilities' (Goodland & Daly, 1996, p. 1002).

Lozano (2008) states that sustainable development can be defined in a number of ways, but most of these definitions were developed by scientists from different countries who rarely consider the importance of social aspects and the inter-relation with economic and environmental aspects. The author also explains that in countries where the basic human needs, such as food, shelter, and security, are not looked after, often environmental sustainability is neglected and unachieved.

One of the main definitions of SD, as described by Katyal (2009), indicates that sustainable development integrates all three aspects of sustainability: social, economic and environmental. Sustainable Development focuses on resolving social issues, such as poverty, literacy, hunger, disease and inequity.

Goodland and Daly (1996) also identify that social cohesion, cultural identity; diversity, tolerance, humility, laws and discipline constitute part of social capital, which, in the end, contributes to environmental sustainability.

2.2.2   Economic sustainability

The hospitality and tourism industry has seen significant growth that has changed the extent of the industry dramatically over the past twenty years (Rodriguez-Anton et al., 2012) as demonstrated by remarkable changes due to the increase in disposable income, causing a rise in business and personal trips.

According to Rahman et al. (2012), studies have shown that economic benefits are one of the main reasons hotels are adopting green practices, including strengthening employee organizational commitment and improving public and investor relations. However, the negative impact on the environment caused by the hospitality and tourism industry can also prove to be an opportunity for businesses to promote their corporate responsibility. This can be achieved through employee education and providing knowledge to the customers, embracing eco-friendly practices and also by influencing complementary industries, such as hotel suppliers. Economic sustainability implies optimizing the development growth rate, and environmental sustainability recognizes the natural resources of the individual community (Choi & Sirakaya, 2006). Goodland and Daly (1996) elaborate that sustainable development definitions can be segregated into the following categories: economic, social and environmental, as set out in the following comparison table:

Table 1: Comparison between social sustainability, economic sustainability and environmental sustainability (summarised from Goodland & Daly, 1996)

Social sustainability (SS)	Economic sustainability (EcS)	Environmental sustainability (ES)
• SS will be achieved by systematic community participation and strong civil society. • Social cohesion, cultural identity, diversity, sodality, comity, tolerance, humility, compassion, patience, forbearance, fellowship, fraternity etc., constitute part of *social capital.* • *Human capital* is investment in the education, health and nutrition of individuals, which is now accepted as economic development. • The creation of social capital as needed for SS is not yet adequately recognized.	• The widely accepted definition of economic sustainability is 'maintenance of capital' of keeping capital intact. • Of the four forms of capital (human-made, natural, social, human) economists have scarcely at all times been concerned with natural capital (forests and healthy air) because until relatively recently they have not been scarce.	• ES is needed by humans and originated because of social concerns; ES itself seeks to improve human welfare and SS by protecting the sources of raw materials needed for human use and ensuring that the sinks for human wastes are not exceeded. • Humanity must learn to live within the limitations of the biological and physical environment, both as a provider of inputs (sources) and outputs (wastages). • This means that we need to control the waste emissions within the assimilative capacity of the environment without impairing it. • It also means keeping the harvest rates of renewables within regeneration rates. • ES means maintaining natural capital, similar to the definition of EcS which is needed by ES.

2.2.3   Environmental sustainability

Environmental sustainability is a subject that has been recognised as a topic of growing concern among many business operators within the hospitality and tourism industry (Kasim 2006). Rahman et al. (2012, p. 712) highlight that most industries today are adopting environmental sustainability practices in one way or another. Alonso and Ogle (2010) agree that environmental awareness is becoming an imperative issue for managers and a high priority not only for the business owners, but also for supporting governments.

Brown (1996) explains that the adoption of an environmental policy is regarded as one of the main requirements of an organization undertaking a 'green' strategy. The 'greening' of the industry has been a matter of concern since the late 1980s.

Although the chemical and oil industries have been in the spotlight due to visible impacts, such as water and energy consumption, chemical and atmospheric contamination, waste production and waste water management on the environment, the service industries were also beginning to find themselves under scrutiny (Becken, Simmons & Frampton, 2003).

The application of environmental regulations has been affecting businesses and industries since the late 1960s whereas, in the 1980s, governmental regulations pushed people towards awareness of environmental management, and in the early 1990s, organizations started to incorporate 'green' practices and sustainable environmental concepts into their corporate cultures (Revilla, Dodd & Hoover, 2001).

Revilla et al. (2001) point out that the most environmentally sensitive practices are based on the premise of the three R's of environmental management: reduce, reuse and recycle. The environmental sustainability issues faced by the hospitality and tourism operators include the external business environment, global recession and increasing customer demand for quality products and services, which can have a severe consequence on the environment.

Similarly, Withiam (2010) explains how consumers of hospitality and tourism service expect the businesses to be sustainable, but they don't always know how to define sustainability. In most cases, guests start thinking that the hotels are trying too hard to promote their sustainability efforts and are often accused of 'green-washing'. It is suggested that hotels should make sure that their environmental sustainability (ES) programme is well underway before they start publically announcing their green efforts.

2.2.4   <u>Marketing</u>

Revilla et al. (2001, pg, 118) discuss green or environmental marketing and explain it as consisting of 'all activities designed to generate or facilitate any exchanges intended to satisfy human need or wants, such that the satisfaction of these needs and wants are accomplished with minimal detrimental impact on the natural environment'.

Revilla et al. (2001) identify a new kind of marketing process known as the 'enviropreneurial marketing strategy', which is used for formulating and implementing entrepreneurial and environmental beneficial marketing activities whose goal is to create revenue by providing exchange that satisfies a firm's economic and social performance objectives.

In order to achieve economic growth and stability Wallis and Woodward (1997) explain that the companies must adopt a responsible approach towards development and operation facilities, thereby appropriately supplying to the demand for environmentally sustainable goods and services. In a study of Edinburgh hotels, Kirk (1995) found that managers believed the main benefits of environmental management were to improve public relations, to assist with local community relationships, to provide a marketing advantage over competitors and to improve consumer satisfaction.

2.3 Environmental sustainability in the hospitality and tourism industry

Sustainability in the hospitality and tourism industry is a well-known concept, and defined on the basis of sustainable development (SD) concepts presented at the Rio Earth Summit in 1992. Following the summit, the World Travel and Tourism Council (WTTC), together with the World Tourism Organization (WTO) and the Earth Council, published *Agenda 21 for the Travel and Tourism Industry — Towards Environmentally Sustainable Development* (Goodman, 1994).

Meade and Monaco (2001, p. 130) define sustainable tourism as "development that meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, and biological diversity and life support systems."

The tourism industry is arguably the fastest growing industry and is considered as a means of economic development and growth in many developing countries and regions of the world.

Moreover, with changing consumer trends in the hospitality and tourism industry, there is a possibility for sustainability to become a longstanding concept, but Withiam (2010) suggests otherwise, given the growing interest among hoteliers to operate in a more economical and sustainable manner.

2.3.1 Environmental sustainability in small and medium enterprises (SMEs)

In order to define SMEs, Ayyagari, Beck and Demirguc-Kunt (2007) first identify various versions of SMEs and then explain the wide range of measures taken to distinguish between them. Some of the most commonly used criteria are the number of employees, total net assets, sales and the investment level of the organizations. However, the employment factor is the most-used basis for determination of the type of small and medium enterprise.

Jasra, Khan, Hunjra, Rehman and Azam (2011) define small and medium enterprises (SMEs) as organizations that employ fewer than 250 employees and work on a small scale. The technical definition, however, differs from country to country, but is usually based on employment, assets or a combination of both. SMEs contribute a major portion of the country's Gross Domestic Product (GDP) and economic activity.

These enterprises are considered as 'engines of economic growth' worldwide and include job creation (Sangwan, 2011). There are numerous definitions that explain the role of SMEs in various countries. The authors further categorize SMEs into micro-firms, which employ five or fewer full-time employees, small firms, which employ six to 50 full-time employees, and medium firms, which employ 50 to 99 full-time employees.

Although Bohdanowicz (2005) highlights that hotels are significant users of consumer goods where waste generation is probably the most 'visible effect' on the environment, Cassells and Lewis (2011) argue that small and medium enterprises dominate the business culture in most countries. While many SMEs may wish to exempt themselves from the responsibility due to their small scale, their collaborative impact could result in quite severe consequences.

In 2002, the European Commission estimated that SMEs in the EU were responsible for 50 per cent of pollution and waste.

In the UK, the Environment Agency calculated that SMEs are responsible for 60 per cent of commercial waste and as much as 80 per cent of pollution. Cordano, Marshall and Silverman (2010) argue that in small and medium enterprises, the management and staff are usually reluctant to implement environmental practices and that this in turn proves to be a 'barrier to superior environmental performance'. This reluctance is mainly due to the cost of implementing and certifying the properties with environmental sustainable certifications.

For example, in the winery industry, only a few wineries in Europe, the United States of America, Australia, and New Zealand have certified their vineyards with ISO14001, for reasons involving the significant cost associated with certification, the small size of the organizations, and the resulting financial implications (Cordano et al, 2010).

Cassells and Lewis (2011) emphasize that if SMEs collectively begin to apply practices, the potential is for them to contribute positively towards sustainability issues. This is true in terms of New Zealand where 99 per cent of the business population is small or medium in size.

2.4   <u>Introduction to Eco-Labelling</u>

Chavan (2005) and Matthews (2003) explain that new developments related to environmental sustainability guidelines that seek to minimize total life-cycle energy inputs and thereby using the non-renewable energy sources in a more efficient manner are constantly being revised. Environmental sustainability starts with core activities, such as environmentally sustainable practices (ESP), followed by environmental sustainable standards (ESS), that set benchmarks for companies to adopt. This leads to environmental management systems (EMS), which help organizations to meet the industry 'benchmarks', termed as environmentally sustainable accreditation (ESA).

These can be collectively termed as 'eco-labels' as in the model adopted from Chopra (2013), which identifies the relationship between ESS, EMS and ESA.

Figure 2: Hierarchy of environmental sustainability eco-labels (adapted from Chopra, 2013)

Environmentally
Sustainable
Accreditations
(ESA)

Environmental
Management Systems
(EMS)

Environmentally Sustainable
Standards (ESS)

Holt (1998) describes environmental sustainability standards (ESS) as a very basic and introductory level of environmental sustainability practice verifier. ESS allows the companies to achieve environmental sustainability by underlining guidelines and appropriate practices, for example, BS-7750, which was first used in the UK and later replaced with ISO worldwide (Richard & Hall, 2000). Environmental management systems (EMS), such as ISO-14001, are one of the most recognised systems. The relationship between the two, can be understood as ESS, and is a foundation or benchmark for EMS that helps frame a structure for environmental objectives for organizations to adopt (Chan, 2009).

2.4.1   Environmentally sustainable practices (ESP)

Environmental sustainability is seen as an emerging trend that helps make organizations more environmentally and socially conscious. Quirino (2008) recommends that a properly designed energy management system can help in achieving significant energy savings, without compromising guest comfort.

Many hotels are now taking part in resolving environmental issues by embarking on activities like recycling, waste management, energy conservation and afforestation. Rahman et al. (2012) identify that in an independently owned business, the manager or the owner usually enjoys the freedom to operate their facilities in their own unique way. As a result, the extent to which the property is sensitive to environmental concerns is highly dependent on the operator's knowledge, attitude and willingness to act upon environmental policies and practices.

Molina, Gil-Saura and Velazquez (2010) also highlight that hospitality organizations have been making proactive and voluntary efforts towards implementing environmental policies, for example, fast food industries have begun to identify the 'organic quality' of food and beverages, whereas hotels have started on recycling and conservation programmes as a means of reducing energy costs and the amount of solid wastes. Despite all the apparent positive impacts, hotels still tend to affect the environment of the destination, resulting in one of the biggest reasons for the depletion of energy resources.

Sustainability studies have been conducted in different regions of the world relating to the issues regarding the use and misuse of the planet's irreplaceable natural resources. Among these, hospitality and tourism businesses have received criticism concerning sustainability because of the significant use of fossil fuels by the transport sector. Sangwan (2011), Lynch-Wood and Williamson (2007) have conducted studies on environmental sustainability and although there does not appear to be a lack in knowledge and identification of the current issues, according to Alonso and Ogle (2010), hospitality and tourism businesses have developed a misconception surrounding environmental sustainability.

This is caused by the notion that environmental management in the tourism industry only constitutes the re-use and recycling of natural resources, rather than the reduction in their consumption. Becken et al. (2003) point out that the tourism industry tends to focus more on the recycling of natural resources rather than the reduction in their consumption. Hence, the application of sustainability within the hospitality and the tourism industry is directly related to the regulated usage of resources, which may result in slower depletion of natural resources.

Moreover, Beeton, Bergin-Seers and Lee (2007) emphasise that the level of knowledge of sustainability practices and their applicability is due to the perception that the hospitality and tourism industry uses a significant amount of natural resources of limited availability. The emphasis of applying the practices and policies of environmental sustainability in the hospitality and tourism industry has been of primary concern for hospitality organizations, especially for well-known hospitality brands.

Mensah (2007) emphasizes that one of the main reasons for only a small percentage of existing hospitality organizations who have implemented sustainable measures is due to the lack of mainstreaming and awareness of sustainable practices by the hospitality and tourism industries. Molina et al. (2010) and Rahman et al. (2012) conducted studies which indicated that about 75 per cent of a hotel's environmental impact can be attributed to the excessive consumption of non-durable goods, energy and water, followed by emissions released in air, water and soil.

In the Mediterranean, for example, hotels could use approximately 400 litres of water per guest per day, while locals use only 700 litres per day in total. Hotels are also known to acquire land from local communities, one such example being a property in Nepal where 400,000 hectares of forest were cleared each year to construct hotels, lodges and furniture manufacturing to provide fuel for cooking, hot showers and campfires; all of which led to landslides and flooding. The hotels also generate huge amounts of solid and liquid waste which are discharged into the surrounding water bodies (Mensah, 2007, p. 17).

A typical solid waste production comprises of 46 per cent of food and non-recyclables, 25 per cent paper, 12 per cent cardboard, seven per cent plastic, five per cent glass and five per cent metals; out of which 47 per cent is recyclable (Kasim, 2006). Even though food production and catering leaves a significant carbon footprint, there are a few ways of making a difference (Allen, 2007). The implications of food and its ecological footprint can be understood by the increment in food transport over the years and how its impact has been overlooked. The reason behind this can be explained by the requirement to satisfy customers' needs with the increase in societal wealth and diversification of tastes.

17

In case of the UK hospitality industry, only 6 out of every 1,000 fruit products bought in the country are actually grown locally, and the food system alone accounts for up to 40 per cent of all UK road freight. Allen (2007) suggests a few easy ideas that will not only help reduce the carbon footprint of the businesses, but also demonstrate environmental responsibility to customers.

2.4.1.1 Green Practices in Hospitality and Tourism Organizations

The origins of the environmental movement began from the first Earth Day in 1970. Two decades later, environmental concern grew rapidly following alarming reports of global warming, thus making it the beginning of the 'green decade', which brought with it 'green customers' as people began to understand the environmental effects of consumption habits. This also became the reason for the introduction of the concept of green hotels (Rahman et al., 2012). The authors emphasize that the 'green' hotel business is booming due to the need to differentiate themselves from other non-green counterparts in fulfilling the demands of today's informed consumers. The Green Hotels Association (Rahman et al., p. 721) defines a green hotel as 'environmentally friendly properties whose managers are eager to institute programs that save water, saving energy, and reducing solid waste while saving money'.

Environmental management is increasingly becoming a critical issue with regards to the sustainable development within the hospitality and tourism industry and is the primary reason for growing awareness among tourists, governments and other associations. In the hospitality and tourism industry, the green hotel movement and ecotourism are gaining popularity, and the applications of such concepts are constantly improved within the industry (Manaktola and Jauhari, 2007). On a similar note, Enz and Siguaw (1999) believe that the operation of a 'green' property is not only good practice, but can also result in a profitable business. The authors also highlight that many environmentally-friendly property operators firmly believe that, due to the increasing pressures from the government to follow regulations, going 'green' may prove to be the right thing to do. Similarly, McPhee (2006) notes that with sustainable resource management in the hospitality industry, managers are trying to manage resources and costs by

implementing waste reduction and recycling programmes. One such example is the case of Doubletree Hotel, located in Oregon, US. Since 1996, the hotel's waste disposal volume has been reduced by 65 per cent by following programmes such as food scraps recycling and composting. The hotel has also undertaken additional waste reduction programmes and has managed to earn certification and awards. The hotel has also claimed to reduce their waste to zero by the year 2015, suggesting that the managers of the organization are committed to establishing and continuing the 'green' image.

Enz and Siguaw (1999) conducted a similar study of four hotels in the US that have undertaken responsible initiatives towards environmental concerns and have not only exhibited but also developed functional recycling programmes by building and implementing environmental operations, resulting in environmental management system (EMS) programmes that focus on natural resource conservation, education and involvement of the community. Studies conducted by Revilla et al. (2001) and Moreo, Demicco and Xiong (2009) disclose that some hospitality companies have made proactive and voluntary efforts to incorporate 'green' policies. For example, fast food chains have adopted environmental policies, restaurants are opting for more 'organic quality' of the food and beverages as raw materials, and hotels have begun conservation and recycling programmes as a means to reduce energy costs and solid and liquid wastes. Furthermore, the 12,000-member American Hotel and Motel Association (AHMA) launched a 'Good Earthkeeping' programme in May 1996.

Many hotels in America, such as the Habitat Suites Hotel in Austin, Texas, EverGreen Rooms by Hartford, Hampton Inns, Embassy Suites, Best Western Hotels and Comfort Inns, have adopted green practices by installing a combination of applications, such as low-flow shower heads, faucet aerators, low-flow sprinkler systems, compact fluorescent lighting (CFL) in rooms and halls, energy efficient air-conditioning units, bulk soap and shampoo dispensers, and air and water filtration systems.

Similarly, Allen (2007) recommends practices such as sourcing from sustainable fisheries, buying organic products, composting food waste, using bio-degradable packaging, recycling cooking oil, and buying locally as some of the 'green'

practices to be undertaken by hoteliers. The success of such programmes will result in a population that is exceptionally aware and conscious and will be willing to pay for the efforts applied by the hotels (Revilla et al., 2001 and Kirk, 1995). Similar results were observed when consumers were asked about their preference for 'green' accommodation. Watkins (1994) deduces from a survey that some frequent travellers wanted to stay in hotels that show concern for the environment, but that they are not always willing to pay extra to support the 'green' policies of the hotels.

2.4.2   Environmentally sustainable standards (ESS)

An ESS is referred to as 'a document that provides requirements, specifications, guidelines or characters that can be used consistently to ensure that materials, products, processes and services are fit for their purpose' (www.iso.org, 2013).

The need to develop environmental standards arose from environmental law which rapidly evolved and existed in most countries by the mid-1990s. The standards were based on the environmental regulation of 'command and control' where regulatory agencies were to specify goals to achieve and the methods to achieve them. However, this approach received tough criticism due to the strategies being too difficult to implement. The dissatisfaction caused by this approach led to the introduction of 'new environmental policy instruments', which included market-based instruments, such as 'eco-taxes', and informational devices, such as eco-labelling and environmental auditing schemes (Watson & Emery, 2004).

The concept of sustainability is constantly being developed and introduced into mainstream businesses all over the world with the help of non-governmental organizations, such as the Global Reporting Initiative (GRI), Carbon Disclosure Project (CDP) and the International Organization for Standards (ISO). These organizations have developed guidelines for establishments that wish to showcase their efforts towards sustainability, which includes the amount of energy used or saved, the emissions, effluents and waste products generated or saved (Crognale, 2011).   The implementation of such environmental strategies is being undertaken in hotels in various parts of the world, such as Europe, Asia and the U.S., not only as operating policies, but also in an effort to attract the 'green' customer.

Chief executives of 11 major international hotel chains, including Accor, Forte PLC, Hilton International, Holiday Inn Worldwide, Intercontinental Hotels Group, Marriott Lodging Group, Ramada International Hotels and Resorts, and ITT Sheraton were the charter signatories of the International Hotels Environment Initiative (IHIE) that binds signatories to the promotion of high environmental standards (Mensah, 2007).

An international standard referred to as the International Organization for Standardization (ISO) is a collection of voluntary standards that assist organizations to achieve environmental and financial benefits through the implementation of effective environmental management. The standard provides a model as well as guidelines to ensure that environmental issues are being resolved (Massoud, Daily & Bishop, 2011). There are over 19,500 ISO standards that cover almost all aspects of technology and business.

At the European level, there is a standard known as Eco-Management and Audit Scheme (EMAS), which was introduced by the European Union Council regulation (No. 1836/93), requiring implementation in all European Union member states. Although EMAS was officially introduced to the UK in April 1995, the country has had its own EMS standard since 1992, the BS 7750 (Holt, 1998), which lasted until 1996 and was then replaced by ISO 14001 for not reporting the negative impacts a particular business (who had BS 7750 standard) was causing in regards to the level of pollutants released daily by the businesses.

ISO 14001 is one of the standards that are chosen largely by major overseas businesses rather than by small to medium enterprises (SMEs) as SMEs have a relatively smaller turnover, resulting in smaller return on costs of certification. ISO 14001 is also known to be positively related to both environmental performance and operational performance (Massoud et al, 2011).

Although a fully certified ISO, EMS may not be suitable for smaller businesses as it provides essential guidelines that help deal with environmental issues and, hence, SMEs can use ISO 14001 as a model for designing their own EMS. Although many SMEs may lack the expertise to operate and implement environmentally sustainable practices effectively, the number of externally

certified validating systems continues to rise (Watson & Emery, 2004, p. 924). Standards relating to the New Zealand's hospitality and tourism industry, such as 'Qualmark', will be discussed further in this literature review.

Wallis and Woodward (1997) and Tzschentke, Kirk, and Lynch (2004) observe that initiatives such as the International Hotels Environmental Initiative (IHEI) are becoming increasingly popular with larger hotel chains. Moreover, in the wake of recent sustainable tourism developments, many regional and international organizations are adopting new management schemes in order to obtain appropriate certifications and eco-labels. These eco-labels are a collection of benchmarked environmentally sustainable practices that are developed by third-party-organizations.

These labels are also referred to as schemes that aid organizations to develop and integrate their own practices (Mensah, 2007). Hotel operators use these eco-labels not only as an encouragement for consumers to participate in purchasing sustainable product, but also to educate the consumers about greening concepts. Bohdanowicz (2005) reflects that these greening movements within the hotel industry have gained momentum through the efforts of various associations. The author also claims that stringent environmental-based regulations are constantly being adopted and enforced. The corporate industry is being encouraged to engage in environmental-based regulations, along with triple bottom line reporting.

Organizations such as the International Hotel and Restaurant Association (IHRA), the American Hotel and Lodging Association (AHLA) and the International Hotel Environmental Initiative (IHEI) are examples of standards developed as environmental guidelines.

Most branded hotel corporations prepare their own action plans and training programmes in the field of environmental protection, for example, the Orchid Hotel in Mumbai, India, where a 'green team' is set up, comprising hotel employees from different departments who provide training and education on the various ES practices to the rest of the hotel staff (Jones, 2002).

2.4.3 Environmental management systems (EMS)

Environmental management systems (EMS), as described by Chavan (2005) and Massoud et al., 2011) and Rodriguez-Anton et al. (2012), is a tool for managing the impacts of an organization's activities on the environment. This system provides a structured approach towards planning and implementing environment protection measures. It also refers to the adoption of standards as a tool for improving a company's internal management and for planning and assessing environmental performance. An EMS's job is to monitor performance and integrate environmental management into a company's daily operations and aids in long-term planning.

An EMS is designed to achieve environmental care in all aspects of operation whereas the International Standards Organization (ISO) 14000 series is an international standard for EMS. The ISO 14001 was issued in 1996 and forms part of the ISO 14000 series of standards, which provide specifications and guidelines along with advice on a wide range of environmental issues, including auditing, labelling and life-cycle assessment.

Matthews (2003) and Meade and Monaco (2001) also refer to EMS as a means for organizing internal corporate environmental benchmarking that focuses the environmental issues of an organization and encourage them to improve their environmental performance. EMSs usually consist of policies, procedures, and audit protocols for operation to reduce waste material or emissions. In order to develop an EMS, an organization must assess their environmental impacts then set targets to reduce these impacts and plan how to achieve them.

For an EMS to be effective, organizational commitment is the most important component and must be enforced by all members of the organization (Chavan, 2005). Massoud et al. (2011) iterates that the main purpose of an EMS is to prevent negative effects on the environment and to help the organization improve their environmental practices. Furthermore, the adoption of cleaner production processes, greener products and measures of environmental performances can also contribute to the successful implementation of an EMS. In spite of the growing popularity of EMS in hotels, only larger hotels have been found to be at the forefront of environmental management.

2.4.4   **Environmentally sustainable accreditations (ESA)**

In the tourism sector, certification schemes play an integral part in their contribution towards bringing about more sustainable tourism as they provide the partaking organizations with an action plan for improvement. Certification is part of a suite that is required to make tourism more sustainable. Tourism certifications are provided by a wide range of initiatives that provide a marketable logo to organizations that manage to exceed a set level of standards. These logos are then presented to companies to display their environmental credentials. From a consumer's perspective, this allows them to identify organizations that claim to operate in an environmentally sustainable manner.

A good certification/accreditation programme should require its participants to meet or exceed a set benchmark prior to being given the certification and logo, and be reinforced by third party auditing and verifications. Some of the examples of certification institutions are:

- Green Tourism Business Scheme — Scotland
- Green Key — Denmark
- Nature and Ecotourism Accreditation Programme (NEAP) — Australia
- Certification of Sustainable Tourism (CST) — Costa Rica
- Eco-label for hotels — Nordic Countries
- ECOTEL Initiative — HVS international
- Green Globe 21 — USA
- Qualmark — New Zealand (Meade & Monaco, 2001)

In this study, Green Globe 21 (GG21) and Qualmark will be discussed as Green Globe 21 was once present in New Zealand and was replaced by Qualmark.

2.4.4.1   Green Globe 21

Green Globe is a global benchmarking, certification and improvement system for sustainable travel and tourism and is based on Agenda 21 principles of sustainable development. In other words, Green Globe 21 (GG21) is an affiliate of the World Travel and Tourism Council, which is an EMS standard designed specifically for the travel and tourism industry.

GG21 is a combined attribute of ISO 14001 with the sustainable tourism principles of Agenda 21 (Meade & Monaco, 2001). Green Globe 21 was considered as the best-known international programme to cover an entire scope of global tourism activities. GG21 uses straightforward accreditation criteria based on continuous improvement in the environmental performance, relating to operational aspects, such as energy consumption, waste minimization, greenhouse gas emissions and waterways quality. This scheme is extended to any destination as a whole or to individual organizations and results in benefitting companies, communities and consumers (from destination management to individual sectors, comprising the international travel and tourism industry). At the member stage, the Green Globe 21 standard allows organizations to learn more about Green Globe and prepare benchmarking and certification.

The benchmarking stage requires organizations to measure their environmental performance against Green Globe 21's performance and, if they are above the baseline performance, they are given the Green Globe 21 logo. In addition to this, based on the ISO 14001 environmental management systems (EMS), the Green Globe standard allows its participants to set their own ES targets.

The Green Globe benchmarking stage focuses on the measurement of sustainability benchmarking indicators (SBIs), which are based on nine key performance areas (KPAs), as follows:

- Greenhouse gases
- Energy management
- Air quality
- Freshwater resources
- Waste minimization
- Social and cultural impact
- Land use management
- Ecosystem conservation
- Re-use and recycling (Patterson & McDonald, 2004)

These SBIs are specifically recommended for communities, natural protected areas and nineteen other travel and tourism sectors. Previous pilot studies include in the Kaikoura district of the South Island of New Zealand, and Redland Shire and Port Douglas Shire, both in Australia (McNicol, Shone & Horn, 2002).

<u>Drawbacks of Green Globe 21</u>

The success of any certification or scheme is highly dependent on the consumer's demand for sustainable tourism. A report submitted to the World Wide Fund UK by Synergy (WWF, 2000) identifies that tourism certification had been slow, despite the willingness of consumers to pay more for provision of sustainable products. The reason for such performance is blamed for the lack of concern for the issues of sustainability, closely followed by price, and health and safety.

However, failure of this certification was due to the lack of credibility suffered, combined with poor marketing along with the surplus of other schemes which only contributed to the confusion. In addition to this, GG21 had undergone numerous changes and unclear benchmarks were required for certification.

As a result, the GG21 logo is still being used by over 500 companies of which only about 50 meet the correct requirement for usage. A few of the other weaknesses of GG21 include a partially developed destination programme and the absence of standard guidelines and procedures for the sectors that GG21 claims to address outside of the travel and tourism industry. Despite these drawbacks, other tourism certification programmes have reported significant progress since the 1990s and continue to contribute towards the development of sustainable tourism (WWF, 2000).

2.4.4.2 **Qualmark**

Qualmark was a Tourism New Zealand (TNZ) initiative that developed the Qualmark Enviro Awards (Gold, Silver and Bronze) in 1993 in order to recognise the sustainable business practices 'which were determined through five key actions areas, namely, energy efficiency, water conservation, waste management, conservation initiatives and community activities' (Qualmark, 2012, and Ustad, 2010). These Enviro awards are a way to rate independent tourism businesses in a way that can be used as a marketing tool, similar to a third-party eco-labelling regime.

TNZ created Qualmark as a distinct authority to inspect and rate various business and organizations within the tourism industry (Morrow, 2013). The collaboration of the government of New Zealand (Tourism New Zealand and the Ministry of

Tourism) and the tourism industry (Tourism Industry Association of New Zealand (TIANZ) resulted in two initiatives that were aimed at developing sustainable and superior quality tourism. The first was to develop a quality tourism standard in conjunction with 'Qualmark', which focused on safety, compliance with regulatory requirements, service delivery, environmental management, cultural management and business skills and practices. The second was support from 'Green Globe 21' (Patterson & McDonald, 2004).

Qualmark is considered as a tool that helps deliver the '100% Pure New Zealand' experience to tourists and visitors by providing a pure and unadulterated quality through an environmental accreditation system. Qualmark is jointly owned by TNZ and the New Zealand Automobile Association and provides star rating for accommodation providers and other tourism operators along with a quality endorsement programme for other tourism-related businesses (TNZ, 2010).

Qualmark aids tourists and international traveller suppliers to select the right tourism product to suit individual needs. This programme is run as a service to the New Zealand tourism industry on a non-profit basis where over 2100 tourism businesses carry a Qualmark logo. The two main objectives of Qualmark are to enable travellers to select accommodation; activity and attraction options with confidence, knowing that the businesses they've chosen have been quality-assessed and work with the tourism industry, for the benefit of the tourism industry (TNZ, 2010).

However, in a recent article by Flynn (2013, p. 11), where he asked Professor Simmons about the broad range of enviro-labels available in the tourism industry, Simmons recommended using the Australian-based EarthCheck system due to its scientific credentials. Simmons also emphasized the selection of one brand throughout the country for providing a rating system, for example, EarthCheck. As a board member of Sustainable Travel International, Professor Simmons was responsible for introducing Green Globe 21 in New Zealand, which caused much confusion about the branding system in the country. Simmons states that the only problem with Qualmark was that it was seemingly light and its procedures were 'not up to the level of aspiration or behaviours as larger brands'.

2.5   The hospitality and tourism industry in New Zealand

New Zealand is small, geographically isolated in the South Pacific region, and is an economically developed nation with a population of just under 4.5 million (Statistics New Zealand, 2013a and Collins et al., 2010). The economy relies on primary industries, such as farming and forestry. Although New Zealand has branded itself internationally as 'clean and green', sectors such as dairy, tourism and organic food have leveraged off the clean and green image through their advertising as their business practices have not necessarily supported the image. A 'Ministry for the Environment' published a report in 2001, stating that 'if New Zealand were to lose its clean and green image, it would have an enormous effect on New Zealand's economy'.

Because the economic sector plays a key role in sustainable development, most New Zealand firms are under pressure to take a responsible approach towards their social and environmental impacts (Collins et al., 2010). The advent of tourism in New Zealand is not a recent phenomenon. It has been recorded that tourists have been visiting New Zealand since the early nineteenth century, touring destinations such as the famous Pink and White Terraces, among other popular features. The government first became involved in 1901, then known as the Department of Tourism and Heath Resorts, and started promoting tourism by developing a number of resorts in locations such as Rotorua, Hanmer and Mount Cook.

According to Statistics New Zealand (2000), the earliest recorded number of tourists arriving in New Zealand was 5233 in the year 1903. There is recorded data suggesting that the growth of tourism in the past five decades has been rather slow with sustained periods of negative growth. It was not until the 1960s that significant growth was experienced which accelerated in a dramatic fashion throughout the 1970s to 1990s, following an exponential growth curve. Over this period, there was an increase from 100,000 international visitors in 1963 to 1,560,000 in 1999 and over 2 million visitors in the year 2003 (Patterson & McDonald, 2004). Personal interviews with Ms Monique Brocx (who was part of the Tourism Committee at that time) also suggest that there was an increase in the sale of airline seats to nearly double during the 1980s.

28

Figure 3: Annual visitor arrivals (retrieved from Statistics New Zealand, 2013)
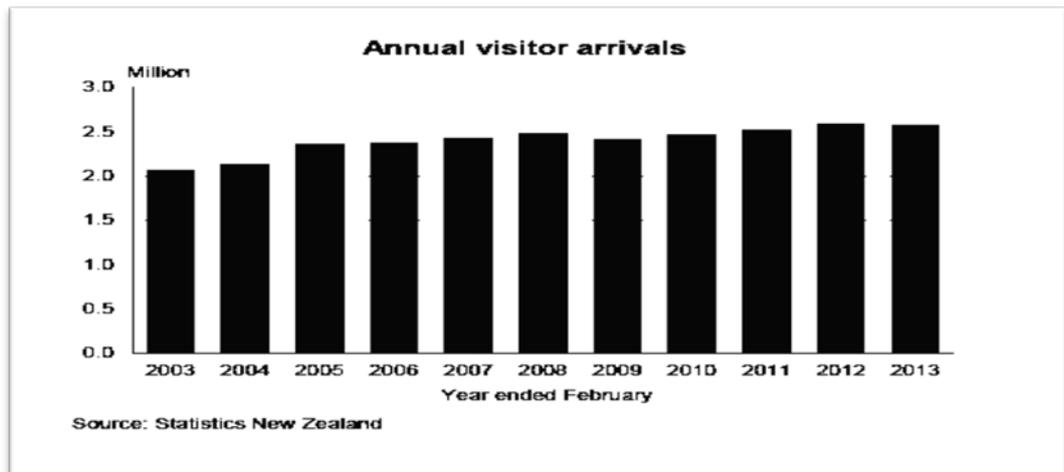
The development of tourism in New Zealand in the 1990s reflected growth and change in the dynamics of tourism in the 1980s. International visitor arrivals were reported to have more than doubled in the 1980s due to significant changes in the framework of tourism, brought about by the Tourist and Publicity Department. This department was later on downsized to focus mainly on tourism in New Zealand and was later replaced by the New Zealand Tourism Board (NZTB) and a very small Ministry of Tourism, which was to act as a policy unit within the Ministry of Commerce (Pearce 2001).

This led to the Tourism Industry Association of New Zealand (TIANZ) releasing a draft strategy in 1999, followed by the formulation of a strategy that focused on sustainable development of the tourism industry, including socio-cultural, economic and environmental perspectives. For this reason, Statistics New Zealand for the first time constructed Tourism Satellite Accounts (TSAs), which described the economic operations of the tourism sector in 1997–8. These accounts (also referred to as integrated economic-environmental accounts) were created to obtain an improved understanding of the economy-environment links within the tourism sector. These accounts also extensively covered the usage of natural resources (land, energy, water) and the production of pollutants (water discharges, nitrates, biological oxygen demand [BOD], phosphorous and carbon dioxide) by the tourism sector. These TSAs indicated that for the year 2000,

tourism was a $4.8 billion industry, contributing 4.6 per cent towards GDP and generating export earnings of 16 per cent (Statistics New Zealand, 2013).

Marketing the image of New Zealand's tourism industry is heavily reliant on the natural and physical environment and on the 'clean and green' image as highlighted by the Tourism New Zealand's 100% Pure marketing campaign, launched in 1999. Tourism New Zealand (2012) has spent millions of dollars advertising this image since 1999, aiming to attract international as well as domestic tourists. This advertising campaign was launched as a simple yet straightforward slogan of '100% Pure New Zealand', a strategy that was based on the short-term conversion of tourists' inclination to visit the country (Morgan, Pritchard & Piggott, 2002)

Moreover, tourism in New Zealand continues to be one of most significant and fastest-growing economic sectors with 2.41 million international arrivals in 2006, accounting for 19.2 per cent of total export earnings and providing employment for 9.9 per cent of the workforce (Connell, Page & Bentley, 2009). Between 1993 and 2007, the number of international visitors was reported to be doubled, making the tourism sector the country's top export earner.

It was also forecasted that there would be a further growth of four per cent per annum, which would reach 3.17 million by 2013 with domestic tourism to increase by 0.8 per cent per annum from 52 million trips to 55 million trips from 2007 to 2013. Since New Zealand is not considered a major global tourism destination in terms of volume, the increase in visitors to a country with sensitive natural and cultural resources and a population just over 4.5 million raises significant challenges for the sustainable development of the sector. Based on a 59.5 per cent increase in the international visitor arrival numbers from March 1999 to March 2012, which is a 4.6 per cent per annum average, Tourism New Zealand maintains that the 100% Pure campaign has been successful (Tourism New Zealand, 2012). There was also a corresponding increase of 4.6 per cent per annum in tourist expenditure over the same period of 1999 to 2012.

In terms of international tourist expenditure, the year ended March 2012 ($9.6 billion) represented 15.4 per cent of the total export earnings ($62.2 billion), with

tourism being New Zealand's second-largest export earner, following the number one exporter, dairy ($12.7 billion or 20.4 per cent of exports), in 2012 (Statistics New Zealand, 2012a).

The tourism industry in New Zealand also accounted for over 90,000 full time-equivalent jobs, directly and indirectly. The number of international visitors continued to grow at an average rate of 5.4 per cent in the 1990s (Patterson & McDonald, 2004).The growth of tourism in New Zealand not only brought with it economic benefits but also environmental costs that have become an integral concern of the government and the tourism industry. These concerns regarding the environmental impacts of tourism led to an investigation by the Parliamentary Commission for the Environment that released a report making 'one principle recommendation' regarding the conservation of natural resources, which was that government must 'facilitate and resource the development of a strategy for sustainable tourism in New Zealand'.

As discussed earlier, this research presents a comparison with Ustad's (2010) study of hotels in New Zealand where he explores the awareness and perceptions of hotel managers with regard to environmental sustainability. The hotels were found to be sustainably equipped to manage their environmental impact. Further on, this research explores the small and medium enterprises in New Zealand along with the accommodation sector in the Hawke's Bay region. The next section of the literature review presents the link between sustainability and the New Zealand government. A brief history of Tourism in New Zealand will also reflect on how the tourism industry is affected by sustainable unawareness in the SME sector.

2.5.1   Small and medium enterprises in New Zealand

Horsley and Ahmed (2011) observed that New Zealand's government and sustainability are inter-reliant, with the government being one of the prime mechanisms to achieve sustainable operations. SMEs are identified as a significant source of socioeconomic wellbeing and a basis of continuous employment in New Zealand. In New Zealand's context, the term SME can be defined as any organization that employs fewer than 20 employees with 86 per cent of New Zealand's SMEs employing fewer than five full-time employees

(Laurinkeviciute & Stasiskiene, 2010). Ninety-seven per cent of all New Zealand businesses fall under the category of small- to medium-sized enterprises (SMEs), employing no more than 20 employees and constituting organizations such as entrepreneurial start-ups, established manufacturing businesses, family-owned businesses, partnerships, tax-efficient companies and sole-trading agricultural enterprises, which contribute to 40 per cent of the economy's total output.

SMEs employ 30 per cent of all employees in New Zealand and account for 97 per cent of all enterprises, generating 39 per cent of the total gross domestic product (GDP) (smallbizCRM.com, 2012). The existence of such SMEs not only contributes towards the economic growth of any place but also creates more competition. Laurinkeviciute and Stasiskiene (2010) further emphasize that SMEs needs to constantly adapt according to the changing business needs and be open to change and flexibility in their businesses.

Despite the limited local market and the size of small businesses, there is no doubt that SMEs contribute towards the environment and society, although the impact is significantly different from that of larger firms. It is also noted by Battisti, Lee and Cameron (n.d.) that, collectively, SMEs are responsible for up to 70 per cent of global pollution; however, this figure has not been supported by any quantifiable studies. The authors also emphasize profitability as a crucial requirement for SMEs whereas governance and sustainability considerations are given a low priority. The sustainability issues here refer to matters such as waste reduction, recycling, transport/travel savings and carbon targets, all of which contribute to the bottom line.

2.5.2   Hawke's Bay

Hawke's Bay is one of New Zealand's warmest and driest regions, resulting in its reputation as being one of New Zealand's leading wine producers, notably for red wines, such as cabernet sauvignon, merlot and syrah, along with some white wines. Hawke's Bay is also New Zealand's centre of art deco as the city was rebuilt after a severe earthquake in 1931 (Hawke's Bay, 2013). The population of Hawke's Bay is estimated to be 155,500 and has increased by 3400 or 2.2% since the 2006 census year when the region represented 3.5 per cent of the national population (Bevin, 2013 a). Hawke's Bay tourism offers extensive wine tours,

various forest trails in the Ruahine and Kaweka forest parks and recreational tours at Cape Kidnappers.

Hawke's Bay also offers a variety of accommodation facilities, ranging from exclusive luxury lodges, self-contained units, motels, hotels, camping grounds, and bed and breakfasts to homestays (New Zealand, 2013). According to Hawkes Bay Wines.co.nz (2013), Hawke's Bay accounts for 3.4 per cent of national GDP; land-based industries account for approximately 30 per cent of regional GDP with some of the primary industries being pastoral, farming/meat processing, pip-fruit growing, grape growing/wine making, forestry/forest products, along with a contribution of 20 per cent towards national horticultural industry activity. The tourism industry in Hawke's Bay contributes to approximately 5 per cent of total GDP.

The total visitor arrival numbers into the Hawke's Bay region and staying in commercial and private (VFR) accommodation were approximately 1.1 million for the year ended March 2012, an increase of 2.3 per cent from 2011. However, the annual number of arrivals has fallen by 12 per cent since the peak year of 2006. Of total visitors in 2012, domestic visitors accounted for 74 per cent of total night-stays in the Hawke's Bay region and international visitors accounted for 26 per cent. The total commercial accommodation occupancy rate in Hawke's Bay was 39.9 per cent at March 2013, compared with a national figure of 37 per cent. The leading accommodation sectors for the area were mostly motels (50 per cent), hotels (49 per cent), backpackers (40 per cent) and holiday parks (14 per cent) (*Hawke's Bay Region Economic Monitor June 2012*, and Bevin, 2013b).

SME accommodation in Hawke's Bay

There are over 150 listed accommodation properties in the Hawke's Bay region, ranging from hotels, motels, bed and breakfasts, backpackers and holiday parks, and homestays. For this reason, the Hawke's Bay region was chosen as there is an abundance of small and medium businesses, which have become the focus of this study.

2.6   Conclusion

The SME sector is often regarded as lagging behind in green business and in respect of adoption of necessary practices. The SMEs are also often associated with management and resourcing issues and are characterised as incapable of engaging in the practices due to a lack of resources. This relates to the attitudes of the owner-managers and plays an important role in the determining of the extent of a firm's engagement towards environmental sustainability (Horsley & Ahmed, 2011).

Studies have identified three main barriers to adoption of environmental practices in SMEs. The first barrier can be indicated as a perception that SMEs have little impact on the environment. The second barrier is the lack of expertise and the third barrier is cost (Lawrence, Collins, Pavlovich & Arunachalam, 2006). This research will help in determining if these barriers really are a factor in implementing environmentally sustainable practices and acquiring environmentally sustainable accreditation.

There is, however, a need to understand sustainability from the perspective of the owners of these small businesses in relation to their business practices and how they understand sustainability in its entirety, including social as well as environmental aspects.

Chapter 3: Methodology

This chapter will elaborate on the research methodology used for this dissertation and discuss the research paradigm and research questionnaire in relation to the structure and population size of the survey. Ethical considerations of the research are discussed along with details of the data collection process.

3.1   Introduction

The aim of this study is to determine the level of awareness towards environmental sustainability in small and medium enterprises in the Hawke's Bay region of New Zealand. The research will establish whether SME business operators have the necessary knowledge, resources, ability and/or motivation to apply and maintain environmentally sustainable practices. The research paradigm used in this research is a positivist quantitative approach, as used by Ustad (2010) in his study of environmentally sustainable hotels in New Zealand.

3.2   Research Paradigm

The positivist research paradigm used for this research, as described by Ponterotto (2005), is the compilation of various interrelated assumptions on specific themes which provides a philosophical and conceptual structure to the study. Research paradigms are theoretical frameworks that affect the way in which collected knowledge is analysed and interpreted on a specific subject (Mackenzie & Snipe, 2006).

Similarly, Ponterotto (2005) and Bryman and Bell (2011) define positivist paradigm as a methodology which entails realism and a universalistic approach for acquiring, analysing and understanding data on a specific theory. Moreover, Mackenzie and Snipe (2006) and Bryman and Bell (2011) refer to positivist paradigm as a 'scientific method', which suggests that a singular approach can be applied towards the study on a certain subject in any discipline. Ponterotto (2005) explains ontology as a form of a theory and the knowledge that can be attained. This research aims to understand the knowledge base of accommodation owners in terms of environmentally sustainable practices.

The theory suggests that SMEs are one of the main industries unaware of their contribution towards environmental degradation. This research will explore this discussion from the SME operators' point of view. Guba and Lincoln (1994) define epistemology as the relationship between a researcher and the research participants.

The epistemological considerations for this research aimed to encourage people to disclose information about their understanding of environmentally sustainable practices, the procedures to carry on these practices, and their motivation to stay environmentally sustainable in the future. The positivist ontological research approach refers to the most basic beliefs about the existence and nature of reality and also explains that quantitative data analysis is based on the idea that social phenomena can be quantified, measured and expressed numerically (Grant & Giddings, 2002).

3.3   <u>Research questionnaire</u>

A questionnaire has been devised in order to gather quantifiable data to detect patterns of association, as described by Bryman and Bell (2011). This method can analyse information about a social phenomenon that is expressed in numeric terms, and can be analysed by using statistical methods. Furthermore, this research will also focus on similar issues related to the SME operators of the hospitality and tourism industry in the Hawke's Bay region of New Zealand. Hotels like the Accor Group and the Langham are already known to have made significant environmentally sustainable contributions to the industry (Ustad, 2010). It is opportune to find out to what extent small businesses are making the same contributions, and also to know the nature of their knowledge. The method of data collection is through quantitative survey using an online survey tool, Qualtrics.

The aim of this research is be to measure the level of awareness of environmentally sustainable practices by tourism and hospitality SMEs in the Hawke's Bay region of New Zealand. Furthermore, the willingness of the business owners to make changes in order to accommodate sustainable practices in their daily operations and the barriers to adopting environmentally sustainable practice will also be investigated.

The research questionnaire is based on the questionnaire used by Ustad (2010) in his research with hotels in New Zealand. A similar questionnaire was considered the most appropriate method to collect this research. The questionnaire helped to obtain information from participants by focusing on direct and brief option-based questions. Due to time constraints, the online survey option was considered to be the most suitable option for this research.

A questionnaire-based survey allows the researcher to quantitatively summarise results that are less likely to be achieved with an interview. This also allows the respondents to answer the survey in their own time and without the presence of the researcher. A questionnaire is devised to obtain results from a larger sample size whereas an interview is usually conducted with smaller sample sizes which involve in-depth data collection. Questionnaires also offer anonymity, allowing respondents to express their thoughts and ideas more freely.

This questionnaire was targeted at obtaining information from small and medium business owners (motel and bed and breakfast owners) regarding environmentally sustainable practices in their properties. The questionnaire also aimed to gain an insight into their experiences with the accreditation provider and their knowledge about environmental sustainability practices.

3.3.1   Structure

The structure of the survey questionnaire was designed to be close-ended, with specific questions helping to determine clear responses. The survey consisted of 15 general questions about the property concerned, and multi-choice questions to elicit the participants' opinions and/or problems relating to the accreditations and knowledge about the procedures.

3.3.2   Population and sample size

The chosen sample was the motels and bed and breakfast owner/operators in the Hawke's Bay region of New Zealand. This sample was chosen mainly due to the abundance of small and medium business in the region and also due to the lack of information in academic journals about the region and its environmental sustainability link.

The sample size was reduced from over 150 to 100 after randomly selecting the properties from four main tourism websites, namely, Jasons, AA, Motels Association of New Zealand (MANZ) and Qualmark. The properties were selected within three sub-regions of Hawke's Bay: Napier, Hastings and Havelock North. The total number of properties listed on the websites collectively accounted for over 150 properties, including all motels and bed and breakfasts.

Table 2: Number of properties listed on official tourism websites

Tourism websites	MOTELS	BED and BREAKFASTS	ATTRACTIONS	OTHER (Tours)
QUALMARK	27	26	69	8
JASONS	87	12	-----	-----
AA GUIDE	75	23	119	-----
MANZ	45	----	-----	-----

Table 2 represents the number of properties listed on the four major tourism websites. A collated list was compiled as most of the properties were listed on all four websites.

The online survey link was sent to over 100 businesses, of which only 11 completed the survey electronically. Results from physical data were found to be more forthcoming and only 30 further properties in Napier and Hastings were covered due to time constraints. Of the 25 survey forms that were physically distributed, 23 were returned completed and five properties refused to take part in the survey.

The majority of the businesses approached acknowledged receiving the online survey and mentioned that it was easier for them to fill out a hard copy of the survey rather than doing it online. However, most of the property owners were happy to complete the survey on the spot if it took less than 10 minutes. Five businesses, on the other hand, refused to complete the survey altogether.

The lack of response to the online survey and hence the need to physically collect surveys can be understood as due to either a lack of computer knowledge or a lack of interest in the subject matter, or possibly even the older age of the respondents, observed during the distribution of the survey questionnaire.

3.4   Ethical considerations

Ethical approval for this research was required as the research involved human participants. Factors such as informed consent, anonymity and data collection methods were assessed before ethical approval was granted. An information sheet was prepared for the participants to read before they answered the survey and a questionnaire was submitted along with the ethics application. A consent form was not required as completing the online survey would serve as content. After some minor changes to the questionnaire, the ethics application was submitted with approval granted on 18 March 2013.

3.5   Data collection

An online invitation and an information sheet were sent to 100 participants via email and a direct link was provided to the Qualtrics survey. The participants were selected randomly from the properties listed on official tourism websites, such as MANZ, AA, Jasons and Qualmark. 'Qualmark' is an independent organization that certifies hospitality and tourism providers which operate in an ethical, professional and environmentally sustainable manner. This is a star grading system to ensure customers of the required systems that are available and the operation of health and safety policies (Qualmark.com, 2012).

A list of emails was collated from the three websites and questionnaires were directed to the owners/managers of the businesses and consisted of enquiries regarding their existing knowledge about sustainable practices.

Table 3: Number of accommodation businesses in Hawke's Bay region listed on Qualmark website

Type of accommodation	Total on website	Non-Qualmark	Total Qualmark	Enviro-Gold (incl. Qualmark)	Enviro Silver (incl. Qualmark)	Enviro Bronze (incl. Qualmark)
Motels	27	16	11	-	6	2
Bed and Breakfasts	26	20	4	1	1	-
Backpackers	7	6	1	-	1	-
Tours and Activities	86	77	9	-	1	4
Total	146	119	26	1	9	6

3.5.1 Data collection process

The collection of the data began in May 2013 when the survey was launched via Qualtrics. The recipients of the survey were contacted via email and a link to the survey and an information sheet was sent. The email addresses of the recipients were retrieved from tourism websites, such as Jasons, AA, Tourism and Qualmark. The survey was sent again after an interval of 14 days as a reminder. Given the low response rate to the online survey, a door-to-door physical survey was conducted in the Hawke's Bay region by handing out a hard copy of the questionnaire to the business operators, then collecting them the next day.

3.6 Data analysis

Qualtrics was used to collect and analyse the data. This quantitative method of research is appropriate as the questionnaire consisted mainly of fixed-choice or 'closed' questions. Alongside Qualtrics, a computer-based statistical analysis programme, known as SPSS (Statistical Package for the Social Sciences), was also employed to aid the researcher in accomplishing the research aims (Bryman and Bell, 2011). The use of quantitative data for the analysis enables the research to reach appropriate conclusions based on frequencies, distributions and cross-tabulations, as per Ustad (2010).

Chapter 4: Findings/results

The research objectives of this dissertation were to understand the level of knowledge and understanding of the concept of environmental sustainability along with the motivation to be environmentally sustainable in small and medium accommodation operators in the Hawke's Bay region of New Zealand. This research was also aimed at finding out whether these small and medium business operators have the motivation, resources and/or knowledge to apply green policies and practices in the foreseeable future.

The literature review in chapter two concluded that the SME sector is often regarded as irresponsible in regard to environmental sustainability issues. This includes in the implementation of necessary practices to help reduce the impact caused by daily operations. The SME sector is mostly thought of as being insignificant contributors to environmental pollution, even though the SME industry makes up to 97 per cent of New Zealand's total economy (smallbizCRM.com, 2012).

The following two chapters, Four and Five, will present the research findings/results and discussion of the survey.

Chapter Four is further divided into six subsections:

- Section 4.1 describes the response rate of the survey,
- Section 4.2 provides descriptive characteristics of the respondents,
- Section 4.3 analyses accreditation of the motel and bed and breakfast properties,
- Section 4.4 discusses influences on the property owners, encouraging them to practice environmental sustainability,

The above four sections will collectively determine the levels of awareness of SMEs and their ability to maintain their sustainable brand and product answering the research questions one and two.

- Section 4.5 discusses barriers to implementation of environmental management systems along with motivation levels of the participants answering the research question three.

- Section 4.6 discusses the satisfaction levels of property owners' environmentally sustainable properties,

- Section 4.7 concludes the findings, and,

- Section 4.8 presents barriers to implementation of environmentally sustainable practices.

Chapter Five discusses the findings from the research and concludes this dissertation.

This research contributes to findings regarding the environmental sustainability (ES) measures taken by small and medium enterprises (SMEs) and provides an insight into the business operators' points of view and the perception of consumers' demands. This survey also provides an insight into the New Zealand accreditation system and provides an understanding of why small and medium business operators are struggling to keep up with the rising demands of accreditation providers.

The quantative findings are supplemented by brief remarks made by the respondents when the survey was distributed. One of the main problems the owners/operators mentioned was a lack of knowledge by the community and guests, along with a lack of initiative from the council as the cost of recycling was perceived to be considerably high.

Two of the motel owners with environmental Qualmark accreditation who had been down-graded from their previous 'Silver' to a 'Bronze' rating explained that the constant revision of procedures and increasing requirements from Qualmark was one of the main reasons why they were not very happy with the service.

4.1   Response rate

The population of 100 participants for this research was randomly chosen from approximately 150 properties from four major accommodation websites, namely, Qualmark, Jasons, MANZ and AA Tourism.

A total number of 33 responses were collected, 11 via Qualtrics and 22 collected physically at the location site. The questionnaire was posted online for a period of 3 months (April to June 2013). In total, out of 100 properties invited to complete the survey, 33 responses were completed, thus giving a response rate of 33 per cent.Of the participants' surveys retrieved from the Qualmark website, 16 properties had a rating from Qualmark Enviro. Of the 16 listed properties, 12 responded to the survey; suggesting a possible bias towards businesses aware of environmentally sustainable accreditation.

4.2 Descriptive characteristics of the respondents (demographics)

4.2.1 Property type

Figure 4: The percentage breakdown of property type
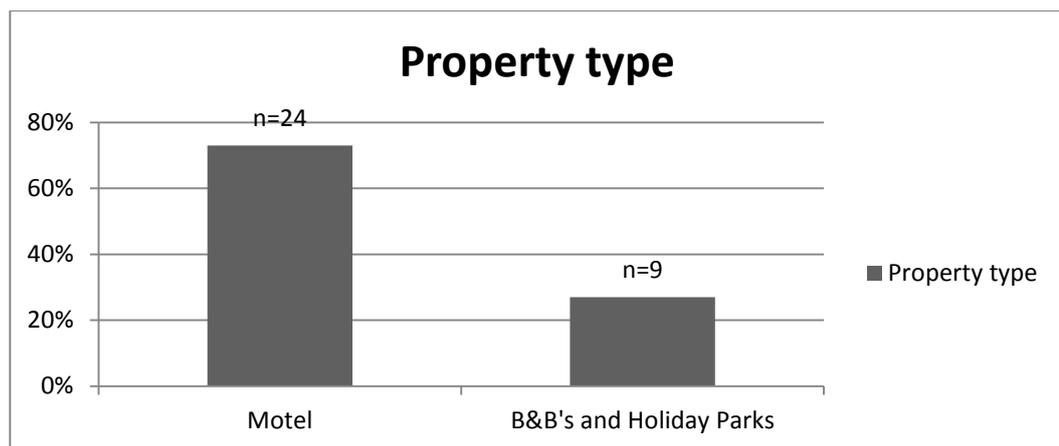
The owners/managers who participated in the research were asked to indicate the type of property they were operating. Of the 33 properties, it can be established that most of the properties were motels (n=24, of which one property was listed as a hotel, but due to the small number of employees it was considered as a SME) whereas a small percentage of the properties were a mix of bed and breakfasts and holiday parks (n=9). The number of stay units in motels was an average of 19.25 units. The number for bed and breakfasts was 1.75 stay units and holiday parks had an average of 36.25 stay units.

Figure 5: Stay units
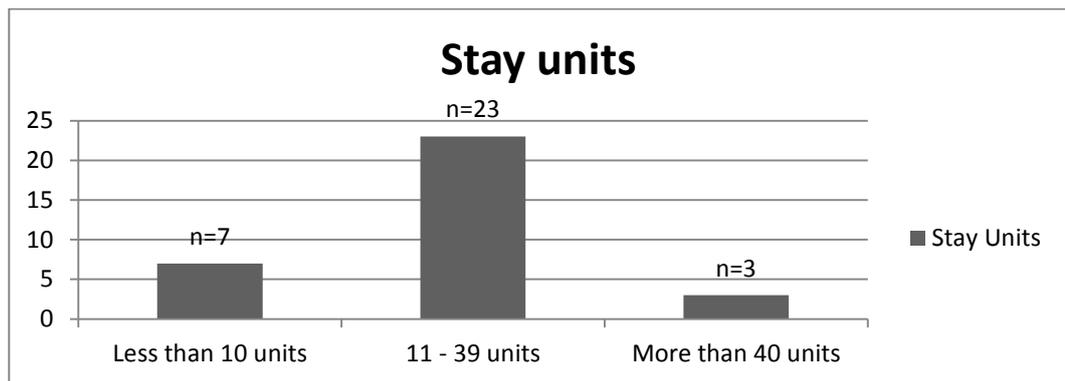
The respondents were asked about the size of their property, that is, the number of stay units available. Of the 33 respondents, most of the properties had fewer than 30 units and were classified as motels or holiday parks, whereas some of the other holiday parks had more than 40 units, the largest sized properties, and the bed and breakfasts were the smallest of all.

4.2.2   Property ownership

This section discusses ownership of each property and the type of property. The respondents were asked about their role in the management of the property, the number of years of operation of the property and the management of the property. Of the 33 respondents, 21 motel operators indicated that their property was owner-operated and three were administered by a general manager on behalf of the owners. Of the remaining 9 properties in the 'other' category, seven were owner-operated and two properties were managed by a general manager.

Figure 6: Property ownership years
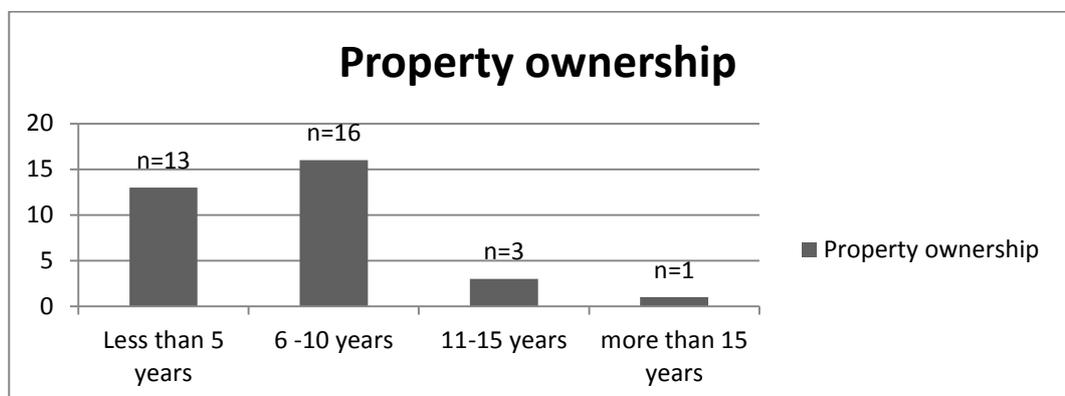
The respondents were asked about the type of ownership of their property. Of the 33 respondents, 30 property owners indicated that they are locally-owned and operated whereas three properties owners indicated that they were part of a New Zealand-owned chain/franchise.

The property operators were asked about their years of operation. Of 33 respondents, 13 properties (39%) have been operating for less than five years. Sixteen properties (49%) have been operating for less than 10 years. Three properties (9%) have been in operation for less than 15 years, and only one property has been operating for more than 15 years. The only property that had been in business for more than 15 years old did not have any EMS in place. The results determined that most of the properties had been owned for an average of five years. Regarding ESP, the properties that did not have any EMS in place displayed sustainable practices in their businesses, suggesting that even though the business owners were not aware of the concept of EMS, they had minimal knowledge about sustainable practices and had implemented the same in their business (see Table 4).

Table 4: A cross-tabulation of years of operation and environmental management systems (EMS)

Years of operation	EMS		Total
	Yes	No	
1-5	7	6	13
	53.8%	46.2%	100%
6-10	11	5	16
	68.8%	31.2%	100%
11-15	2	1	3
	66.7%	33.3%	100%
15+	0	1	1
	0.0%	100%	100%
Total	20	13	33
	60.6%	39.4%	100%

An assumption that could be made from these finding is that the number of years a property has been operating could affect their level of commitment towards environmentally sustainable practices (ESP). A cross-tabulation of property ownership and EMS and property ownership and ESP was undertaken.

The chi-square test indicated no significant difference between the length of property ownership and EMS, and the results suggested that the properties that were less than 10 years old had EMS in their business, whereas properties that were less than 5 years old and more than 10 years old displayed mixed results (see Table 5).

Table 5: A cross-tabulation of property ownership and environmentally sustainable practices (ESP)

Property ownership	ESP		Total
	Yes	None	
Locally owned/operated	29	1	30
	96.7%	3.3%	100%
Other	3	0	3
	100%	0%	100%
Total	32	1	33
	97%	3	100%

4.2.3 Property range

Figure 7: Percentage breakdown of property range
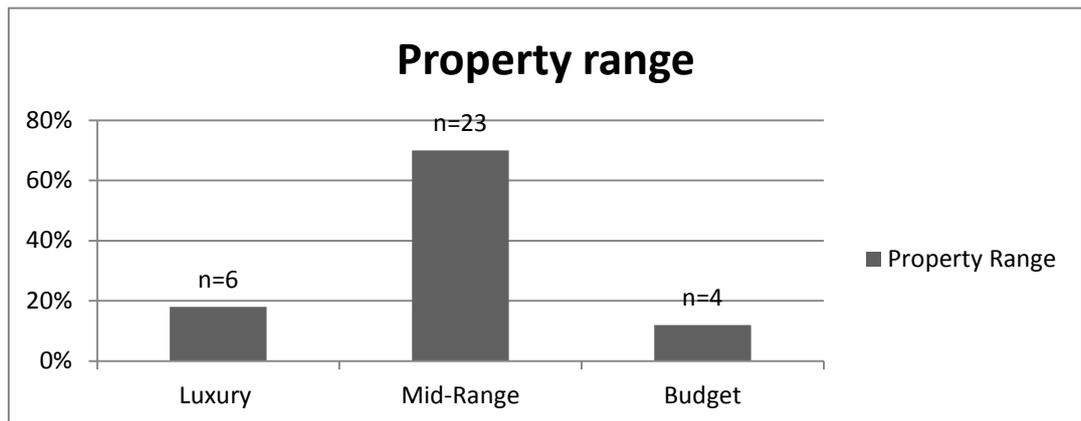
The respondents were asked to describe their property in terms of luxury. Of the 33 properties, six properties (18%) were classified as luxury properties, 23 properties (70%) were classified as mid-range and four properties (12%) were described as budget properties. These findings indicate that the ability of the

property owners/managers to charge more is limited because the guests may be less likely to pay more for services that they do not care about or which are not relevant, for example, recycling at the property, water conservation and energy saving. The luxuries that guests seem to want are often the same things that the property owner/manager wishes to reduce for environmental reasons.

For example, one of the property owners noted that in respect of guest comments that 'we try to ask the guest to help us conserve energy, but the guest doesn't care. They like fast-flowing showers and leave the heater on in their rooms. They want the luxuries of a hotel in a motel, but they don't want to pay for it. They want budget accommodation, but want the luxuries of a hotel.'

4.2.4   Staff

Figure 8: Number of full-time, part-time and casual staff
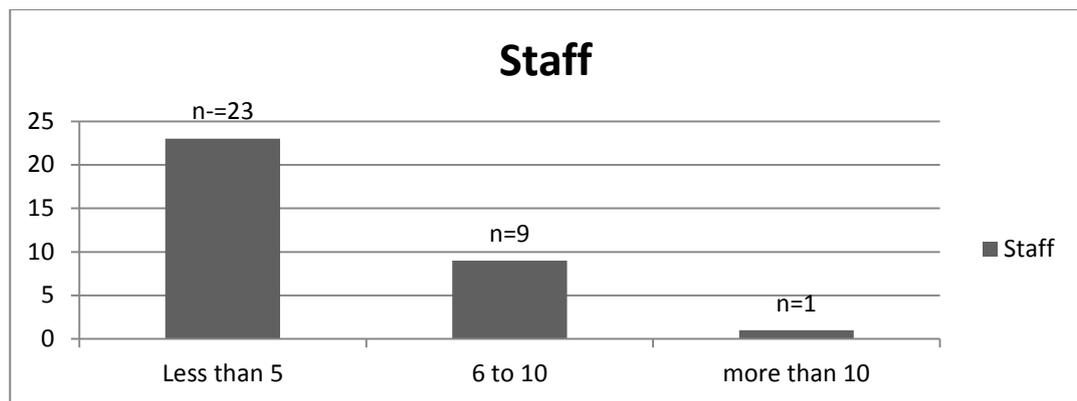
The respondents were asked about the number of staff they hire. Twenty-three properties of the total 33 hire fewer than five full-time, part-time or casual employees; nine properties hire fewer than 10 employees, whereas only one property hires fewer than 10 employees at any given point of time. One property was mentioned under the category of hotels on the accommodation and travel websites and is part of a New Zealand-owned chain, but due to the small size of the property, it is still classified as a small and medium business. The majority of staff employed by the properties is either cleaning/housekeeping staff or the owners themselves. This data determines that most properties hire their staff in accordance with their range and limit themselves to housekeeping employees.

4.2.5   EMS knowledge and applications

This part of the survey determines whether these SMEs have implemented any environmentally sustainable practices, and, if so, what these practices are.

4.2.5.1   General environmentally sustainability practices

Respondents were asked to indicate the extent of environmentally sustainable practices applied in their properties. The range of practices listed in the questionnaire was:

- Energy efficiency
- Waste management/reduction
- Responsible recycling
- Support for local community
- Carbon neutralization and Other

Four properties (12%) follow only one of the aforementioned activities, that is, energy efficiency, two properties (6%) follow waste management, five properties (15%) follow responsible recycling, 13 (40%) properties take various measures for the support for local communities, one property (3%) follows carbon neutralization, whereas eight properties (24%) follow all the aforementioned activities. The respondents were also asked whether they follow or apply any 'other' measures then the ones listed. Two of the eight properties who follow all the activities also follow solar energy harvesting by using solar panels.

4.2.5.2   Environmentally sustainable practices implemented

Property managers were asked to indicate the eco-friendly practices that they had implemented in their businesses. Some of the most popular and widely used practices included the use of:

- Energy-saving bulbs (88%, n=29),
- Use of low-flow shower heads (70%, n=23),
- Following correct recycling procedures (88%, n=29). (However, some owners did not seem happy with the costs of recycling each year)
- Minimization of food wastes (70%, n=23), and
- Minimization of chemical usage, (75%, n=25).

4.2.6   EMS

Of 33 respondents, 20 (61%) respondents agreed that they have environment management systems in place, whereas 13 (39%) properties did not. However, those properties that indicated they did not have any EMS in place demonstrated at least some of the environmentally sustainable practices, and three properties had Qualmark accreditation and nine did not.

On the other hand, a crosstab of EMS with accreditation indicates that of the properties that agreed they had EMS in place, 10 properties actually had accreditation and the other 10 properties did not. This indicates that most property owners/managers were not aware of the concept of environmental management systems (EMS) (see Table 6).

Table 6: A cross-tabulation of EMS and accreditation

EMS	Accreditation			Total
	Qualmark	Other	None	
Yes	9	1	10	20
	45%	5%	50%	100%
No	3	1	9	13
	23.1%	7.7%	69.2%	100%
Total	12	2	19	33
	36.4%	6.1%	57.6%	100%

4.3   Accreditation

Figure 9: Percentage breakdown of properties with accreditation
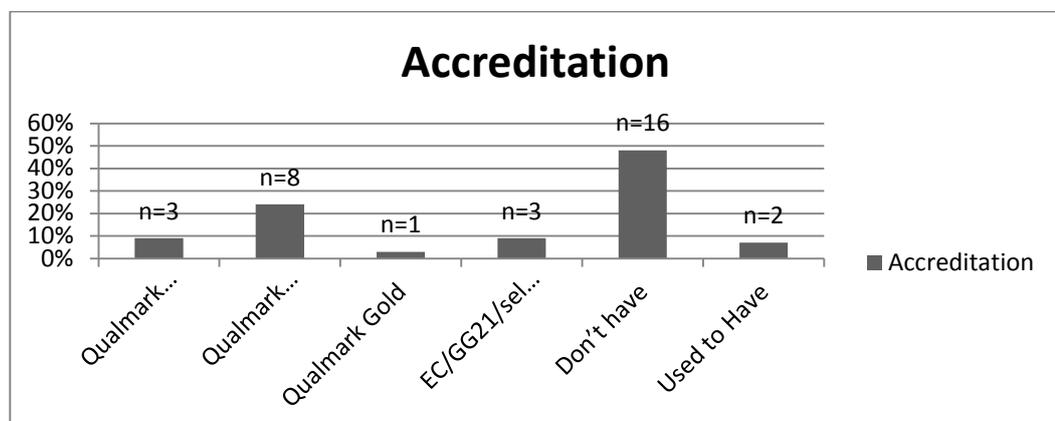
This section discusses Question 12 of the questionnaire, concerning the accreditation status of the properties. Fifteen properties (46%) of 33 indicated that they were accredited, whereas 18 properties (54%) claimed that they did not have any accreditation, or, used to have but do not have it anymore.

The respondents who have accreditation were further asked about the type of accreditation they have. Three properties (9%) had Qualmark Bronze certification, eight properties (24%) had Qualmark Silver certification, and one property (3%) had Qualmark Gold certification. The rest of the participants who indicated that they did not have any accreditation also included the two properties that used to have accreditation but do not have it anymore. The statedreason these properties did not have any accreditation was due to the constant revision of the requirements from Qualmark and as some owners/managers commented 'It was getting harder to keep up with the revisions every year and, more than that, the customers don't care.'

Three properties (9%) indicated that they had other certification (one had Earth Check [EC]; two self-rated), whereas 16 properties said that they have no certification and two properties said that they used to have Qualmark certification but do not anymore (a total of 18 properties).

A cross-tabulation of accreditation with property type resulted in the findings that motels are least likely to have a Qualmark rating, where 15 properties did not possess any accreditation, and only nine properties were accredited, whereas properties such as bed and breakfasts and holiday parks were more likely to be accredited than not (see tables 7 and 8).

Table 7: A cross-tabulation of property type and accreditation

Property Type	Accreditation			Total
	Qualmark	**Other**	**None**	
Motel	8	1	15	24
	33.3%	4.2%	<u>62.5%</u>	100%
Other	4	1	4	9
	<u>44.4%</u>	11.1%	44.4%	100%
Total	12	2	19	33
	36.4%	6.1%	57.6%	100%

Table 8: A cross-tabulation of accreditation and property range

Accreditation	Property range			Total
	Luxury	**Mid-range**	**Budget**	
Qualmark	1	10	1	12
	8.3%	<u>83.3%</u>	8.3%	100%
Other	1	1	0	2
	50%	50%	0%	100%
None	4	12	3	19
	<u>21.1%</u>	63.2%	<u>15.8%</u>	100%
Total	6	23	4	33
	18.2%	69.7%	12.1%	100%

Table 9: A cross-tabulation of property ownership and accreditation

Property ownership	Accreditation			Total
	Qualmark	**Other**	**None**	
Locally owned/operated	9	2	19	30
	30%	6.7%	63%	100%
Other	3	0	0	3
	100%	0.0%	0.0%	100%
Total	12	2	19	33
	36.4%	6.1%	57.6%	100%

A cross-tabulation of accreditations with property ownership indicated that when locally owned and operated properties are compared with properties that are a part of a franchise, the local properties are less likely to have any accreditation (n=19), whereas properties that are part of a franchise are more likely to be accredited. A chi-square test indicates that there is a significant difference in the proportion of locally operated properties to franchised properties (chi-square=5.775, df=2, p=.056) (see Table 9). To summarize, almost half of the respondents had accreditation.

4.4 Persuasions

Figure 10: Reasons for implementation of environmentally sustainable practices (ESPs)
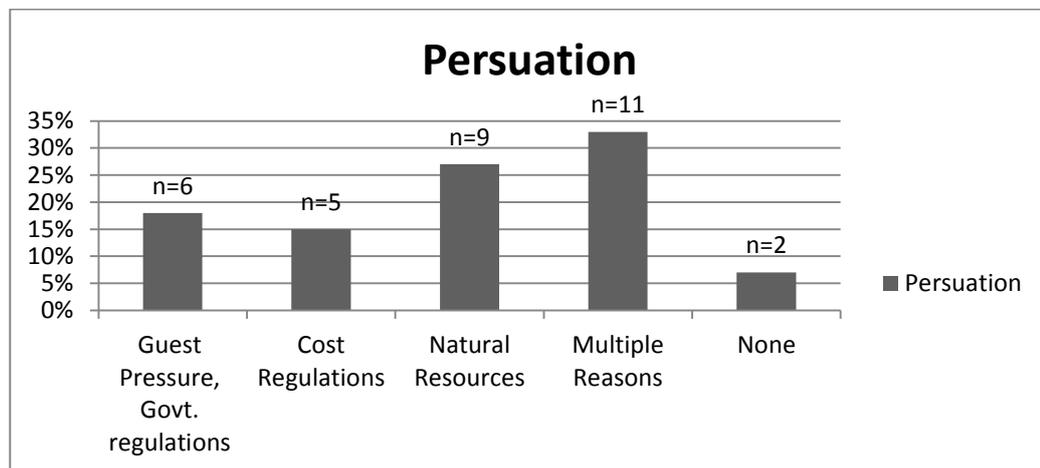
This section of the questionnaire looks at influences on the property owners to adopt these environmentally sustainable practices. Six properties (18%) indicated that their reason for adopting ES practices was due to guest pressure, government regulations and to keep up with competitors. Five properties (15%) indicated that adoption of ESPs may lead to cost savings in the future. Nine properties (27%) believe that it is important to conserve natural resources, whereas 11 properties (33%) indicated multiple influences, including the importance of conservation, cost savings, governmental regulations, and self-realization, and two properties did not indicate any reasons. These four sub-sections provide an insight into the research questions one and two, hereby describing the levels of awareness in owners/operators of SMEs and also if they are capable of maintaining their ES certifications.

4.5 Barriers to implementation of EMS

The respondents were asked to indicate to what extent they agreed or disagreed on factors which act as a barrier to the implementation of environmentally sustainable practices. The factors presented to the respondents were as follows:

1. Implementation cost is too high
2. Lack of knowledge (difficult to understand)
3. Lack of technology
4. No potential benefit
5. Lack of human resources
6. Making infrastructure changes is too difficult
7. Renewal cost of the certification is too high
8. The processes involve too much paper work
9. The processes are too time-consuming (see Table 10)

Table 10: Barriers to implementation of EMS

Barriers to EMS implementation	Strongly disagree	Disagree	Neither	Agree	Strongly agree
Implementation cost is too high	3	7	15	5	2
Lack of knowledge	0	7	15	8	2
Lack of technology	2	9	14	7	2
Lack of human resources	2	5	16	5	4
No potential benefit	1	0	15	12	4
Infrastructure changes too difficult	1	5	15	8	3
Certificate renewal cost is too high	2	9	15	4	2
Too much paper work	1	9	16	4	2
Too time-consuming	2	8	16	4	2

As summarised in **Table 10,** the aforementioned factors were presented with five response options (Strongly agree, Agree, Disagree, Strongly disagree or Neither agree or disagree). Of 33 respondents, 11 property owners agreed that the cost is too high for implementation, 7 respondents disagreed, and 15 neither agreed nor disagreed. On average, 42–48 per cent say 'Neither' to all statements.

Agree: The main barriers to EMS implementation that the respondents strongly agreed to are made up of three main factors. The highest response (48%) was for 'No potential benefit', the second-highest (33%) was for 'Infrastructure changes too difficult', and, lastly, 30 per cent was for 'Lack of knowledge'. This suggests that the respondents believe the reason for not being able to implement and continue environmentally sustainable practices is the perceived lack of potential benefit along with the lack of knowledge about the practices.

Disagree: The respondents, however, disagreed with four factors, implying that the implementation and renewal costs are not too high to act as barriers to application of ESP. They believe the paperwork and the processes are not too time-consuming, suggesting that they believe the processes to be fairly feasible and attainable.

Mixed responses: Factors that the respondents had mixed reactions towards were the 'accreditation costs', 'paperwork' and 'time involved'. These factors received mixed responses from the property owners. All the respondents who agreed to high certification costs also agreed to the processes being too time-consuming and involving too much paperwork.

A majority of property owners (18 properties) neither agreed nor disagreed to the three factors, hence suggesting that they do not have any accreditation or certification of any sort. Five of the properties disagreed with these factors and believe that the processes are in fact helpful and have benefitted the image of their properties. Some of the property owners reported from their own guest surveys that most guests do not care for the environmental sustainability measures taken by the property owners, but that they appreciate the convenience of the amenities provided in the guest rooms.

This suggests that the motivation of the owners regarding their environmental sustainability status relies heavily on the reviews of their customer however the processes of renewal and maintenance of the certificate were also considered as one of the factors leading to low motivation levels in the owners/operators of SMEs.

4.6   Satisfaction (with their ES practices)

Figure 11: Satisfaction of property owners with their ES practices
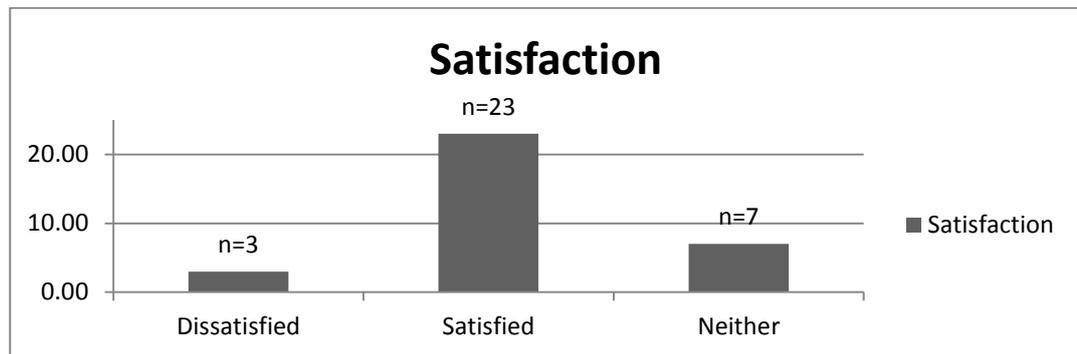
The respondents were asked to rate their overall experience and satisfaction levels with their properties. Twenty-three (70%) properties were either satisfied or very satisfied with their environmentally sustainable practices in place. Three (9%) of the properties were dissatisfied, and seven (21%) property owners were neither satisfied nor dissatisfied.

Cross-tabulations between satisfaction and staff in properties resulted in dissatisfaction of three properties with the least number of employees, whereas the properties with more than five staff members seemed more satisfied with their ES practices.

However, after a review of the questionnaires, it can be summarised that the properties that did not have any accreditation were more likely to be satisfied with their practices.

4.7   Conclusion to findings

The main objectives of this research were to understand whether small business owners/operators have the knowledge of environmentally sustainable practices, to ascertain whether they follow environmentally sustainable guidelines, and, if they don't, whether they have the knowledge to become 'environmentally sustainable' and continue with such practices.

Based on the demographic information elicited from the participants, it can be established that the majority of businesses were motels with fewer than 40 units and were owner-operated. The properties belonged mainly in the mid-range category with some of the environmental sustainability management systems in place. Although, some of the property owners indicated having EMS in place, they did not practice environmental sustainability procedures. These findings suggest that the property owners could be unaware of technical terms, but understand the basic concept of environmental sustainability practices, whereas the results from Ustad's (2010) research indicated that hotel managers were likely to have more knowledge about environmental sustainability, systems, standards and accreditation than SME owners/operators. Ustad's research also showed that the hotel industry was likely to be more proactive and involved in environmental sustainability than small and medium business.

Ustad's (2010) study of the environmental management systems in New Zealand's hotels was conducted from the manager's perspective and resulted in positive outcomes, whereas this research on SMEs by comparison has mixed results. The hotels in New Zealand not only supported by a written environmental policy, but also showed progressive initiatives towards implementing the said policies into their business. The hotel managers showed comprehensive knowledge of environmental sustainability, its adversities, as well as of the ways to resolve and reduce the forthcoming impacts.

The survey response rate seemed biased towards an ESA population, that is, properties with Qualmark and Qualmark Enviro ratings were more likely to respond to the survey than those properties that did not have any accreditation, the same businesses which chose to ignore the initial emails that were sent three times at intervals of two weeks.

56

After an approximate recalculation, it can be summarized that of approximately 150 properties, there were 16 properties that had the Qualmark Enviro certification (see Table 3, p. 40). This suggests that the response rate for this survey was biased towards the properties with environmental accreditation. It can now be safely assumed that, where the property owners/operators did not follow any environmentally sustainable practices, they chose not to complete the survey.

The findings also suggest that the respondents' expectations were not being met with their level of environmentally sustainable practices as it either costs too much or it does not yield the desired results due to the rigorous revisions of Qualmark's procedures and certification requirements each year.

4.8   Barriers to implementation

The findings of this research indicate that the small and medium (SME) accommodation providers in the Hawke's Bay region were not very positive towards environmentally sustainable practices. The results from this research convey the idea that even though business owners are aware of their responsibilities regarding environmental sustainability, there is not enough encouragement to keep the practices employed, particularly as the certification regulations are subject to constant revision.

In the case of Qualmark, many of the small businesses (motels and bed and breakfasts) were unable to keep up with the rigorous expectations, as deduced by surveys responses. This resulted in two properties either having been downgraded or not having a Qualmark rating at all.

The participants also had very little to no knowledge about the concepts of environmental sustainability per se, but had adopted practices as being common sense and due to a growing awareness of responsibility. Some of the participants commented that their guests were not interested in ES practices as they preferred convenience and comfort. The difficulties with the procedures for renewal of a certificate have become problematic and this is one of the reasons that some of the properties that used to have Qualmark certification do not have it anymore or have been downgraded.

Furthermore, this research suggests that small and medium business owners are aware of environmental practices at a base level, and in simple, non-technical terms. However, if the term 'practices' is used within technical terms such as EMS and ESS, there is a poor understanding and interpretation of the terms. This could be due to a low level of knowledge and interest among the business operators, along with poor marketing of environmental sustainability-related concepts.

By comparison, Ustad's research with New Zealand hotel managers yielded results suggesting a good level of knowledge among hotel managers regarding environmental sustainability, which was mainly due to the reason that branded hotels are the most likely to educate their staff about their environmental policies as they are responsible for their hotel's brand image.

Chapter 5: Discussion

A research gap was identified as there was no previous research regarding environmental sustainability conducted with SMEs in the accommodation sector in New Zealand. Nevertheless, the environmental sustainability issues and impacts are the same, regardless of size of the organization. The only difference is the amount of usage of natural resources as the hotels are likely of have a larger impact than the SMEs. Yet both sectors have equal responsibility and ought to take correctional steps in the conservation of resources in the context of the New Zealand 100% Pure image and promotional focus. This research was conducted with SMEs to address this gap and determine the motivation to adapt green practices in small and medium businesses.

5.1   Summary of research findings

O'Neil and Alonso (2009) emphasize that despite a great deal of literature on the issues relating to environmental sustainability (ES), there is not enough research on how small hospitality enterprises (SMEs) approach the ES issue. Some of the under-researched areas of ES, according to O'Neil and Alonso (2009), are awareness, practice, motivation and its barriers to practice. While the results from this research survey point towards an average level of awareness regarding ESP, there is also a low-level of understanding in terms of ES's practicality, along with poor comprehension of ESS, EMS and ESA.

Measures such as 'accessible and affordable' recycling centres and fees could be initiated by the local council and necessitated by the local community. The SME business owner/operators in this research have limited themselves to activities such as recycling, energy saving and usage of alternative energy forms much like many environmental sustainability aware citizens. There was also indication of low interest in marketing their green image and a low level of contribution from guests reported towards supporting ES. In this case, the reason for SME owner/operators' low level of knowledge about the benefits and mechanisms of environmentally sustainable accreditations would appear to be a lack of motivation.

In this regard, Hutchinson (1992, cited in O'Neil and Alonso, 2009, p. 230) explained 'that in order to appropriately respond to the environmental challenge of the future and capitalise more fully in terms of new business opportunities, operators need to recognise that environmental practice must pervade all aspects of the businesses.

With the persistent increase in environmental challenges, including polluted air, shrinking landfill areas, and water shortage, it is critical that businesses gain awareness about how to reduce their negative impact on the environment.

Kasim (2006, p. 19) suggests that 'the slow response towards the applicability of the responsible environmental and social considerations into tourism planning and development indicates the need for a collective and conscious effort of all tourism businesses, governmental policymakers and planners as well as the key stakeholders'. This factor is clearly reflected in this research as the SME owners/operators had in many cases tried to incorporate ESP in their business, but support from their local government regarding environmental policies and procedures was yet to make any influential impact. There was a very low level of educational inclination from the civic bodies, according to the respondents, which has resulted in ES practices being largely carried out based on general knowledge or common sense in the properties that did not have any accreditation.

Rahman et al. (2012) similarly states that effective environmental management in the hospitality and tourism industry is not easily achieved. Unlike the manufacturing and construction industry, the hospitality and tourism industry does not cause wide-scale obvious environmental pollution resulting in the depletion of the ozone layer from the earth's atmosphere and significantly contaminating the non-renewable resources of the planet. However, there is an opportunity to attempt to reduce these effects and track unnecessary consumption.

Some research participants mentioned in the survey that customers seeking hospitality services expect deluxe facilities and conveniences in their rooms. Services such as high-pressure showers, fresh laundry and linen, accessibility to hot pools and sauna and valet services are expected.

It was believed that the lack of or refusal to provide these services, according to some SMEs, may result in loss of potential customers. The literature provides many recommendations for properties to convert into 'green properties'. Ecological responsibility takes many forms, including energy management and appropriate recycling practices. If New Zealand's hospitality and tourism industry's measures towards making ES practices are to be more widely adopted by SMEs, the government needs to take a lead role in order to encourage the owners and the local councils to take effective steps on their own and be equally involved because SMEs appear to be lacking motivation and knowledge.

Buckley (2012) and Collins et al. (2010) conclude that sustainability in the hospitality and tourism industry is as important as in any other sector of the human economy and equally difficult to achieve. The authors also determine that sustainability is not just good for people but sustainable business practices makes good economic sense as well.

In conclusion, as proposed by the model provided by Chopra (2013), which postulated that EMS, ESS and ESA are interdependent in an hierarchy, Figure 12 suggests that in order to obtain either of the eco-labels, certain environmentally sustainable practices (ESP) are required to be incorporated into the daily operations of the business. In the case of SMEs in Hawke's Bay, the integration of ESP was observed hence the research objective was achieved, that is, the level of knowledge regarding environmental sustainability, however little, is present in the owners/managers of the businesses. Their motivation for continuation is also low due to constant reviews of Qualmark and no beneficial yield from their efforts to adopt environmentally sustainable practices.

In relation to the model presented by Chopra (2013), the environmentally sustainable activities were shown in a hierarchy based on the ESS, EMS and ESA with a bottom up approach (see page 14). Using the results from this study, and given that environmentally sustainable practices (ESP) were largely being followed despite any environmentally sustainable accreditations (ESA) or environmentally sustainable systems (ESS) in place, it can be suggested that environmentally sustainable practices may be observed in many businesses, regardless of standards, systems or accreditations.

Figure 12: Revised hierarchy of environmentally sustainable eco-labels and ESP
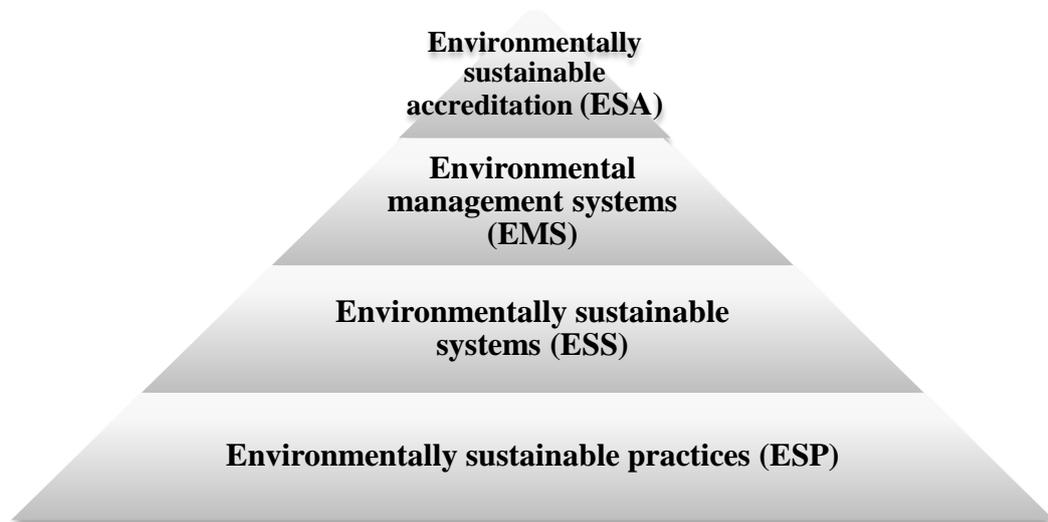
Hence, the model provided by Chopra (2013) could be revised to incorporate a component of 'environmentally sustainable practices' (ESP) (see Figure 12). The findings of this research exhibit that environmentally sustainable practices are commonly seen in businesses, even if the businesses are considered to be small in terms of revenue earnings and profit generation. The adoption of ESP appears in part to be about the economic benefits for the firm. It is evident that even though business owners were not knowledgeable about the concepts of environmental management systems, they are still aware of their environmentally relevant responsibilities to carry out general day-to-day practices that are sustainable in nature.

Figure 13: Relationship between ESA, EMS, ESS and ESP
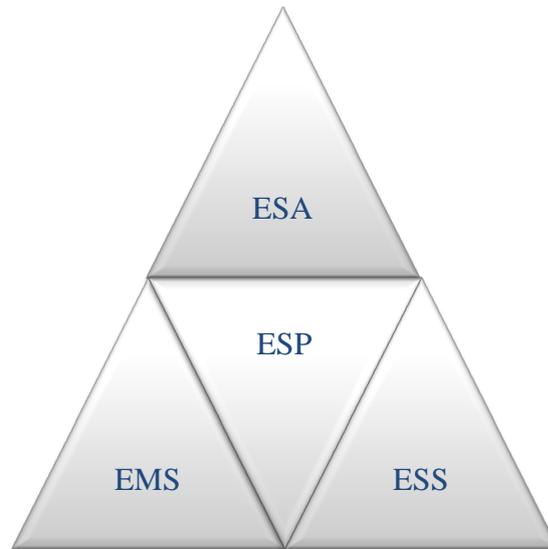
In conclusion, this study reveals that environmentally sustainable practices (ESP) exist even if there are no environmental sustainability standards, accreditations (ESS, ESA) or environmental management systems (EMS) applied to the business. Hence, with these new findings, a new model can be proposed by placing ESP in the middle of the triangle, surrounded by ESS, EMS, and ESA (see Figure 13), which suggests ESP as a core component within this proposed model of 'inter-relation and inter-dependency of environmental sustainability management'.

5.2   Limitations of this research

This research was conducted with small and medium accommodation businesses located in the Hawke's Bay region of New Zealand. Due to time and resource constraints, this research had to be limited to a small region which also meant limited research articles and surveys. This research would be the first of its kind to use the small and medium accommodation sector as participants for an environmental sustainability research study. Also, for the same reasons, the response rate of 33 per cent was considered to be a satisfactory response rate, enabling the conclusion that accreditation was not considered to be a requirement for the business owners in order to contribute to environmental sustainability.

The results from this research help in answering the three main aims of this research which were to understand the level of knowledge of environmentally sustainable practices among business owners, their ability to be environmentally sustainable, and whether they were motivated to stay environmentally sustainable. To answer the research questions, the respondents *were* aware of environmentally sustainable practices, but the level of knowledge regarding environmental management systems, standards and accreditation was minimal.

The property owners were able to employ general environmentally sustainable practices which rely on common sense in an attempt to help conserve natural resources. Lastly, the motivation levels of the property owners were not considered to be very high, given that they struggle with accreditation providers due to constant revision on procedures and requirements.

5.3   Recommendations for further research

Given that the sample of this study was limited to one region in New Zealand, it would be beneficial to discover how other regions in New Zealand behave in relation to environmental sustainability. Learning the viewpoints of owners/operators from other parts of the country will help contextualize the statistics calculated through this research and derive further relevant conclusions about environmental sustainability awareness in small and medium enterprises.

For further research, a larger population for the survey should be considered and should ideally include one or more popular tourist destinations in New Zealand. After conducting research on a local level, this research could be considered as a basis for a much larger sample in other countries. The questionnaire could be revised to add an age category and occupation category of the owners/operators prior to owning their current tourism-related businesses.

Those additional categories would help establish the background of the owners/operators that might shed light on their reluctance towards adopting environmental sustainability practices. Qualmark could be used as a basis for future research in an approach towards the accreditation providers which could provide an insight into what drives these organizations to constantly update their requirements for accreditation.

Also, if these small and medium businesses are not being able to keep up with Qualmark, a smaller, more affordable version of Qualmark rating could be developed or designed which specifically focuses on extremely small and medium sized businesses which have been downgraded or have never had any accreditation at all. This way, the properties would not lose any accreditation and would still be able to carry our environmentally sustainable practices without the pressure of accreditation providers. This would also provide an opportunity for properties with no accreditation to apply for accreditation rating, starting from a very basic level of ratings.

As Professor Simmons points out, Qualmark can be considered as being 'light', which could be understood as being more accessible and affordable for all types of small and medium properties as larger properties would use the Australian-based 'Green Globe' as accreditors. It can also be summarised from Professor Simmons' statements that even though EarthCheck is a sound choice for New Zealand business, Qualmark could be more suited for smaller businesses.

However, Qualmark must be made aware of the struggle of SMEs with high expectations. Hotels appear to have the ability to engage with more sophisticated EMSs and ESAs when compared to SMEs.

References

Aker, A. M. (2008). Please do not disturb (the environment): Greening your hotel. *Buildings, 102*(3), 56-58.

Allen, E. (2007). 10 steps to sustainability. *Caterer & Hotelkeeper, 197*(4498), 42-46.

Alonso, A. D., & Ogle, A. (2010). Tourism and hospitality small and medium enterprises and environmental sustainability. *Management Research Review, 33*(8), 818-826. DOI 10.1108/01409171011065626

Anderson, C. (2012, November 16th). New Zealand's green tourism pushes clashes with realities. T*he New York Times.* Retrieved from www.nytimes.com

Ayyagari, M., Beck, T. & Demirguc-Kunt, A. (2007). Small and medium enterprises across the globe. *Small Business Economics, 29*, 415-434.

Bader, E. E. (2005). Sustainable hotel business practices. *Journal of Retail & Leisure Property, 5*(1), 70-77.

Battisti, Lee & Cameron. (n.d.). 'Keeping the business running': Evidence of sustainability practices in New Zealand small firms. NZ centre for SME Research, Massey University, Wellington, New Zealand.

Becken, S., Simmons, D. & Frampton, C. (2003). Segmenting tourists by their pattern for insights into achieving energy efficiency. *Journal of Travel Research, 42*(48), 48-56.

Beeton, S., Bergin-Seers, S. & Lee, C. (2007). *Environmentally sustainable practices of Victoria tourism enterprises.* Sustainable Tourism. Australia: CRC

Bevin, S. (2013). Napier Tourism Update. Economic Solution ltd.

Bohdanowicz, P. (2005). European hoteliers' environmental attitudes: Greening the business. *Cornell Hotel and Restaurant Administration Quarterly, 46*(2), pg. 188-204.   DOI: 10.1177/0010880404273891

Brown, M. (1996) Environmental policy in the hotel sector: "Green" strategy or stratagem? *International Journal of Contemporary Hospitality Management, 8*(3), 18-23.

Bryman, A. & Bell, E. (2011). *Business Research Methods (3rd ed). Oxford: U.K.: Oxford.*

Buckley, R. (2012). Sustainable Tourism: Research and reality. *Annals of Tourism Research, 39(*2), pg. 528-546. DOI: 10.1016/j.annals.2012.02.2003

Cassells, S. & Lewis, K. (2011). SMEs and environmental responsibility: Do actions reflect attitudes? *Corporate Social Responsibility and Environmental Management, 18*, pg.186-199. **DOI**: 10.1002/csr.269

Chan, W. W. (2009). Environmental measures for hotels' environmental management systems: ISO 14001. *International Journal of Contemporary Hospitality Management, 21*(5), 542 – 560. Doi: 10.1108/09596110910967791

Chan, W. W., & Ho, K. (2006). Hotels' environmental management systems (ISL14001) creative finances strategy. *International Journal of Contemporary Hospitality Management, 18*(4), 302-316.

Chavan, M. (2005). An appraisal of environment management systems: a competitive advantage for small businesses. *Management of Environmental Quality: An International Journal, 16*(5), 444 – 463. Doi: 10.1108/14777830510614321.

Choi, H. C., & Sirakaya, E. (2006). Sustainability indicators for managing community tourism. *Tourism Management, 27*, pg. 1274-1289.

Chopra, A. (2013). Are the expectations of corporate customers changing towards environmental sustainability in premium hotels of Delhi, India? (Unpublished Master's Dissertation). Auckland University of Technology, Auckland, New Zealand.

Collins, E., Roper, J., & Lawrence, S. (2010). Sustainability practices: Trends in New Zealand Businessess. *Business Strategy and the Environment, 19*, pg. 279-494. DOI: 10.1002/bse.653

Connell, J., Page, S. J. & Bentley, T. (2009). Towards sustainable tourism planning in New Zealand: Monitoring government planning under the Resource Management Act. *Tourism Management,30*, pg. 867-877.

Cordano, M., Marshall, R. S. & Silverman, M. (2010). How do small and medium enterprises go "green"? A study of environmental management programs in the U.S. wine industry. *Journal of Business Ethics, 92*, 463-478.

Cotton, B. (2007). We must find a balance of sustainability. *Caterer & Hotelkeeper, 197*(4498), pg. 32.

Crognale, G. (2011). Sustainability by the numbers. *Business and the Environment, July, pg.* 13-14.

Dale, A., & Newman, L. (2005). Sustainable development, education and literacy. *International Journal of Sustainability in Higher Education, 6*(4), 351-362.

Flynn, C. (2013). Big debate over tourism and the environment…Kiwis started it. *Inside Tourism, September, Pg. 9-14.*

Ginsberg, B. & Frame, B. (2004). Addressing local sustainability in Australia and New Zealand. *Local environment, 9*(6), pg., 501-505.

Goodland, R. & Daly, H. (1996). Environmental sustainability: Universal and non-negotiable. *Ecological Applications, 6*(4), pg. 1002-1017.

Goodland, R. (1995). The concept of environmental sustainability. *Annual Review of Ecology and Systematics. 26*(1), 1 – 24. Doi: 10.1146/annurev.es.26.110195.000245

Goodman, G. (1994). The Earth Council and its tasks for the future. *Environmental Conservation, 21*(1), pg, 80. Doi: http://dx.doi.org.ezproxy.aut.ac.nz/10.1017/S0376892900024206

Grant, B. M. & Giddings, L. S. (2002). Making sense of methodologies: A paradigm framework for the novice researchers. *Contemporary Nurse, 13*, 10-28.

Guba, E. G., & Lincoln, Y. S. (1994). Competing Paradigms in Qualitative Research. In Denzin, N. K. & Lincoln, Y. S. (eds.) *Handbook of Qualitative Research* (pp. 105 – 117). Thousand Oaks, CA: Sage.

Hawkes Bay (2013). About Hawkes Bay. Retrieved on July 17th from www.hawkesbay.co.nz

Hawkes Bay Wines. (2013). About us. Retrieved on July 17th from www.hawkesbaywines.co.nz

HB Economic Monitor. (2012). Hawke's Bay Region: Economic Monitor, June.

Holt, D. (1998). The perceived benefits of an environmental management standard. *Business Process Management Journal, 4*(3), 204 – 213. Doi: 10.1108/14637159810224313

Horsley, j. & Ahmed, D. (2011). Governance, sustainability and the New Zealand SME sector. *NZLawyer (March), 665-667.*

Hrivnak, J. (2007). Is relative sustainability relevant? *Environmental Design, 11*(2), 167-176.

Huang, M. H. & Rust, R. T. (2011). Sustainability and consumption. *Journal of the Academy of Marketing Science, 39*, pg.40-54.

Jasra, J. M., Khan, M, A., Hunjra, A. I., Rehman, R. A. U. and Azam, R-I. (2011). Determinants of business success of small and medium enterprises. *International Journal of Business and Social Science, 2(20), 274-280.*

Jones, P. (2002). The Orchid Hotel. *Tourism and Hospitality Research, 3*(3), 277 – 280. Retrieved August 29, 2012 from: http://search.proquest.com.ezproxy.aut.ac.nz/docview/237211855/fulltextPDF?accountid=8440

Kasim, A. (2006). The need for business environmental and social responsibility in the tourism industry. *International Journal of Hospitality and Tourism Administration, 7*(1), 1-22. doi.org/10.1300/J149v07n01_01

Katyal, A. K. (2009). Climate change: Social, economic, and environmental sustainability. *Environmental Forensics, 10*(3), pg. 177-182. doi.org/10.1080/15275920903130131

Kirk, D. (1987). Computer systems for energy management in hotels. *International Journal of Hospitality Management, 6*(4), 237-242.

Kirk, D. (1995). Environmental management in hotels. *International Journal of Contemporary Hospitality Management, 7*(6), 3 – 8. Doi: 10.1108/09596119510095325

Laurinkeviciute, A. & Stasiskiene, Z. (2010). Sustainable development decision-making model for small and medium enterprises. *Environmental Research, Engineering and Management, 2*(52), 14-24.

Lawrence, S.R., Collins, E., Pavlovich, K., & Arunachalam, M. (2006). Sustainability practices of SMEs: The case of NZ. *Business Strategy and the Environment, 15*, 242-257. **DOI**: 10.1002/bse.533

Lozano, R. (2008). Envisioning sustainability three-dimensionally. *Journal of Cleaner Production, 16*, pg. 1838-1946. doi:10.1016/j.jclepro.2008.02.008

Lynch-Wood, G. & Williamson, D. (2007). The social licence as a form of regulation for small and medium enterprises. *Journal of Law and Society, 34*(3), 321-341.

Mackenzie, N., & Snipe, S. (2006). Research dilemmas: paradigms, methods and methodology. *Issues in Educational Research, 16*(2), 193 – 205. Retrieved October 13, 2012 from: http://www.iier.org.au.ezproxy.aut.ac.nz/iier16/mackenzie.html

Manaktola, K., & Jauhari, V. (2007). Exploring consumer attitude and behaviour towards green practices in the lodging industry in India. *International Journal of Contemporary Hospitality Management, 19(5), 364-377.* DOI 10.1108/09596110710757534

Massoud, J. A., Daily, B. F., & Bishop, J. W. (2011). Perceptions of environmental systems: an examination of the Mexican manufacturing sector. *Industrial Management & Data Systems, 111*(1), 5 – 19. Doi: 10.1108/02635571111099703.

Matthews, D. H. (2003). Environmental management systems for internal corporate environmental benchmarking. *Benchmarking: An International Journal, 10* (2), 95 – 106. Doi: 10.1108/14635770310469635.

McNamara, K. E. & Gibson, C. (2008). Environmental sustainability in practice? A macro-scale profile of tourist accommodation facilities in Australia's Coastal zone. *Journal of Sustainable Tourism, 16*(1), p-85-100. Doi 10.2167/jost621.0

McNicol, J., Shone, M. & Horn, C. (2002). Green Globe 21, Kaikoura community benchmarking pilot study. A joint report by Landcare Research New Zealand Ltd and TRREC (Tourism Recreation Research and Education Centre) Report no. 53.

McPhee, M. (2006). Sustainable resource management in hospitality industry. *BioCycle, October*, 40-44.

Meade, B., & Monaco, A. D. (2001). Introducing environmental management in the hotel industry. *International Journal of Hospitality & Tourism Management. 1*(3), 129-142. doi.org/10.1300/J149v01n03_08

Mensah, I. (2007). Environmental management and sustainable tourism development: the case of hotels in Greater Accra Region (GAR) of Ghana. *Journal of Retail and Leisure Property, 6*(1), 15-22.

Mihalic, T., Zabkar, V. & Cvelbar, L. K. (2012). A hotel sustainability business model. Evidence from Slovenia. *Journal of Sustainable Tourism, 20*(5), pg. 701-719. doi.org/10.1080/09669582.2011.632092

Molina, M. E. R., Gil-Saura, I., & Valezquez, B. M. (2010). Good environmental practices for hospitality and tourism: The role of information and communication technologies. *Management of Environmental Quality: An International Journal, 21*(4), 464-476. DOI 10.1108/14777831011049106

Moreo, A., Demicco, F. J., & Xiong, L. (2009). Towards a model to measure the quality if environmental sustainability: The hospitality environmental scorecard. *Journal of Quality Assurance in Hospitality and Tourism, 10*(1), 44-58. doi.org/10.1080/15280080802713728

Morgan, N., Pritchard, A. and Piggot, R. (2002). New Zealand's 100% pure. Te creation of a powerful niche destination brand. *Journal of Brand Management, 9*(4/5), 335-355.\

Morrow. J. (2013). Translating the 100% Pure marketing campaign into an authentic sustainability management strategy: Practices, policies and perception of New Zealand tourist visitor information centres (i-SITEs) (Master's DISSERTATION). Auckland University of Technology, Auckland, New Zealand. Retrieved from http://aut.researchgateway.ac.nz/bitstream/handle/10292/5482/MorrowJ.pdf?sequence=3

Motel Association of New Zealand (MANZ). (2013). Regional motel guide. Retrieved on July 20th from www.nzmotels.co.nz

New Zealand.com (2013). Facts about New Zealand. Retrieved on July 20th from www.newzealand.co.nz

O'Neil, M. A. & Alonso, A. D. (2009). Small hospitality business involvement in environmentally friendly initiatives. *Tourism and hospitality planning and development, 6*(3), 221-234.

Patterson, M. & McDonald, G. (2004). How clean and green is New Zealand Tourism? Lifecycle and future environmental impacts.Landcare Research Science Series No. 24.

Pearce, D. (2001). Tourism. *Asia Pacific Viewpoint, 42*(1), pg. 75-84.

Ponterotto, J. G. (2005). Qualitative research in counselling psychology: a primer on research paradigms and philosophy of science. *Journal of Counselling Psychology, 52*(2), 126 – 136. Doi: 10.1037/0022-0167.52.2.126

Purcarea, I. (2008). The place of small and medium enterprises within the sustainable development framework. *Modern Economics, 3*(7), pg 65-69.

Qualmark. (2012). Looking for quality experience? Retrieved on 23rd November 2012 from www.qualmark.co.nz

Quirino,R. (2008). Energy management and sustainability practices. *Lodging Hospitality, January,* pg. 66.

Rahman, I., Reynolds, D., & Svaren, S. (2012). How 'green' are North American hotels? An exploration of low-cost adoption practices. *International Journal of Hospitality Management, 31,*720-727. doi:10.1016/j.ijhm.2011.09.008

Revilla, G., Dodd, T. H., & Hoover, L. C. (2001). Environmental tactics used by hotel companies in Mexico. *International Journal of Hospitality and Tourism Administration, 1*(3), 111-127. doi.org/10.1300/J149v01n03_07

Richards, G., & Hall, D. (2000). *Tourism and Sustainable Community Development*. London, UK: Routledge.

Rodriguez-Anton, J. M., Alonso-Almeida, M. M., Celemin, M. S. & Rubio, L. (2012). Use of different sustainability management systems in the hospitality industry: The case of Spanish hotels. *Journal of Cleaner Production, 22*, pg. 76-84.

Ruiz-Molina, M. E., Gil-Saura, I. & Moliner-Velazquez, B. (2010). Good environmental practices for hospitality and tourism; The role of information and communication technologies. *Management of Environmental Quality: An International Journal, 21*(4). Pg. 464-476. DOI 10.1108/14777831011049106

Sangwan, K.S. (2011). Quantitative and qualitative benefits of green manufacturing: An empirical study of Indian small and medium enterprises. Hesselbach, J. & Herrmann, C. (eds.) (2011). *Glocalised Solutions for sustainability in Manufacturing: Proceedings of the 18th CIRP International Conference on Life Cycle Engineering.* DOI 10.1007/978-3-642-19692-8_64,

Sloan, P., L, W., & Chen, J. S. (2009). *Sustainability in the Hospitality Industry: Principles of Sustainable Operations*. Oxford, UK: Butterworth – Heinemann.

SmallbizCRM. (2012). Small business definitions. Retrieved on 22nd November 2012 from www.smallbizcrm.com.small-business-sfinitions.html

Statistics, New Zealand. (2012a). Tourism Satellite Account: 2012. Wellington. Statistics New Zealand. Retrieved on 13th February from www.stats.govt.nz

Statistics, New Zealand. (2012a). International travel and migration: October 2012. Retrieved on 23rd November 2012 from www.stats.govt.nz

Tourism New Zealand (2010). Qualmark quality assurance. Retrieved on 6th August from www.tourismnewzealand.com

Tourism New Zealand. (2012). Market & Stats. Retrieved on 13th February from www.tourismnewzealand.com

Tzschentke, N. A., Kirk, D., & Lynch, P. A. (2004). Reasons for going green in serviced accommodation establishments. *International Journal of Contemporary Hospitality Management, 16*(2), 116 – 124. Doi: 10.1108/09596110410520007

Ustad, B. H. (2010). *The adoption and implementation of environmental management systems in New Zealand hotels: The manager's perspective* (Published masters dissertation). Auckland University of Technology, Auckland, New Zealand.

Wallis, J., & Woodward, S. (1997). Improving the environmental performance of Scotland's hospitality sector. *Managing Leisure, 2*(2), 94-109. doi.org/10.1080/136067197376220

Watkins, E. (1994). Do guests want green hotels? *Lodging Hospitality, December,* 70-73.

Watson, M., & Emery, A. R. T. (2004). Environmental management systems & auditing systems: the reality of environmental self – regulation. *Managerial Accounting Journal, 19*(7), 916 – 928. Doi: 10.1108/02686900410549439.

Withiam, G. (2010). Make sustainability a part of day-to-day hotel operations. *H&MM,* 18-19.

World Tourism Organization. (2013). *Facts and Figures*. Retrieved March 19, 2013 from: http://dtxtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_barom13_01_jan_excerpt_0.pdf

WWF. (2000). Tourism Certification: An Analysis of Green Globe 21 and other tourism certification programs.

Appendices

Appendix A: Research Questionnaire

Appendix B: Participant Information Sheet

Appendix C: Letter of Ethics Approval