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**TITLE OF ASSIGNMENT: Case Study Hotel Princess – Implementing Green
Certifications (ISO14001 and EMAS)**

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1. Abstract

Recently the interest in sustainable and environmentally friendly initiatives has increased dramatically in the hospitality industry due to a growing concern to protect the environment, as well as other numerous reasons. Although hotels implementing environmental certifications expect to obtain large benefits, disadvantages and challenges also exist for hoteliers to establish an environmentally responsible business.

Therefore, this study aims to have a closer look at the advantages and disadvantages that a hotel can obtain from implementing environmental certifications such as the ISO14001 and EMAS, which, in this case, the research is a single case study of a particular hotel, the Barcelona Princess Hotel. The main purpose is to analyze the specific outcomes from the implementation of green certifications from a managerial and employee perspective, and to provide some suggestions to increase the hotel's environmental management and performance.

In order to achieve the study aim, a mixed strategy of quantitative and qualitative research is undertaken. This case study uses a triangulation approach as it is based on multiple sources of evidence. The methods applied are a semi-structured interview to the General Manager, questionnaires to the employees and document analysis.

The findings show a wide range of benefits in different aspects that hoteliers can obtain from implementing EMS and ISO14001 standard, as well as the main disadvantages and challenges the hotel has to face. Moreover, the findings also found some differences between both the managerial and the employee perspective; and it provides with recommendations and conclusions for hoteliers to develop a more efficient environmental management.

The thesis concludes by giving recommendations for further research, which summarizing, encompass studies about benefits from implementing environmental certifications from different perspectives (stakeholders or customers), studies regarding the size of hotels, and finally, research taking into account the continent in which the study is being focused.

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5. List of Abbreviations

- CSR: Corporate Social Responsibility
- TBL: Triple Bottom Line
- RBV: Resource Based View
- RRM: Reputation and Risk Management
- GSTC: Global Sustainable Tourism Council
- EMS: Environmental Management System
- EMAS: Eco-Management and Audit Scheme
- EMP: Environmental Management Program
- CP: Communications Plan
- ETEM: Evolving Tourists Expectation Model
- BPH: Barcelona Princess Hotel
- BFD: Barcelona Forum District
- WOM: Word-of-mouth
- SMH: Small and Medium Hotels
- LED: Light-emitting diode
- HR: Human Resources

6. Introduction to sustainability within the hospitality industry

Background

In recent years, there has been an increasing trend in companies implementing environmentally and socially responsible initiatives. Great concern and growing interest in green habits have emerged due to negative impacts caused in our societies. Not only impacts on the natural, social and economic environments caused by the hotel industry are relevant, but also impacts caused by the growing number of travelers, imposing an increasing ecological footprint and contributing to climate change (Grosbois, 2012). Climate change constitutes one of the main significant environmental problems to be faced throughout the world as most of it is human-caused and is progressing at an unusual rate without precedents in the past 1,300 years (NASA, 2016). What is more, the UNWTO (2008) estimated that emissions from global tourism, including transport, accommodation and tourism activities subsectors make up 5% of total CO₂ emissions. As a consequence, responses towards a positive change have arisen for society to work towards sustainability, for individuals to act differently in their daily lives and for governments to work on responsible policy changes (Ramasamy, R. and Swamy, A; 2012). The World Travel & Tourism Council (2015) reports that tourism companies are 20% more carbon efficient today than in 2005 and the sector is on course to cut its CO₂ emissions by 50% from 2005 to 2035. A recent example is the Paris Climate Conference or COP21 (2016) aiming to achieve a universal agreement on climate in order to keep global warming below 2°C.

Therefore, Corporate Social Responsibility practices have gained popularity among organizations in order to increase their benefits while behaving in a responsible way. CSR is defined as “the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point of time” (Carroll, 1979, p.500). Environmental concern among hotels started growing significantly in the 1990s, which caused the beginning of new sustainable ideas and research related to green topics (Atay, L; Dilek, E. and Yildirim, M; 2013). As a consequence, application of Environmental Management Systems, green certifications and fulfillment of environmental standards (such as ISO14001) is a recent phenomenon which has huge potentialities that can lead to putting tourism in a sustainable path (Jovicic, 2011).

The hospitality industry, being one of the most dynamic industries in our market, has increasingly been changing, evolving and adapting to the new green occurrences. An investigation of these emerging trends within the hotel sector may generate many positive insights into the overall field of environmental management. Although research on implementing and developing environmental certifications has been previously studied by the authors (Álvarez, M; Burgos, J. and Céspedes, J; 2001; Ayuso, 2007; Grosbois, 2012; Hamschmidt, J. and Dyllick, T; 2001; Hasan, M. and Kit, C; 2014; Hays, D. and Ozretic, D; 2014; Jovicic, 2011; Meade, B. and Pringle, J; 2001; Morrow, D. and Rondinelli, D; 2002; and Rondinelli, D. and Vastag, G; 2000), little research has been examined regarding EMS implementation in small and medium-sized hotels (Chan, 2010). This thesis will take a closer look at the benefits and disbenefits of implementing and managing green certifications within the hotel industry. Therefore, a case study of the Hotel Princess Barcelona will be undertaken, which will provide a clear exemplary case when it comes to environmental management and sustainability contributing to stress the main advantages and challenges for medium-sized hotels to become green.

The study is structured as follows. First, a review of the extent literature on environmental management is developed, focusing on EMAS and ISO14001 in the hospitality industry, the stakeholder's role in ensuring environmental management and challenges of implementing environmental certifications. Then the methods used in the analysis of the study are outlined. The data obtained addresses the extent to which the findings show support for the study objectives and aim; and suggestions for hoteliers are established. Lastly, conclusions are discussed, and limitations and some suggestions for future research are posed.

Research Question

What are the benefits in Hotel Princess for implementing green certifications such as the ISO14001 and EMAS?

Research aim

The aim of this research study is to explore the implementation of green practices in the Hotel Princess and investigate the benefits that the hotel can obtain from implementing certifications such as the ISO14001 and EMAS.

Objectives

- Research the theoretical framework related to green practices, sustainable policies implemented in hotels and environmental certifications.
- Analyze the benefits of implementing EMAS and ISO14001 in the Hotel Princess by researching the different ways the hotel manage and implement the green practices.
- Explore the disadvantages of implementing environmental management systems in a hotel.
- To draw conclusions and suggestions for the hoteliers in order to improve the management of environmental impacts.

7. Literature review on environmental hotel management

This part of the thesis aims at giving the theoretical framework conducted by collecting data from previous researchers studying the field of environmental management and sustainable certifications. First, an overview of environmental responsibility within companies is developed, followed by an analysis on the perspective of green hotel management. The next section comprises the research on environmental certifications which includes the study of implementing ISO14001, EMS and EMAS Certifications, and the role of stakeholders in ensuring environmental management efforts. Lastly, challenges from implementing environmental certifications are discussed.

7.1. The environmental responsibility of companies

Nowadays Corporate Social Responsibility (henceforth CSR) is a major fact for hotels to increase their benefits, as well as maximizing their profit. Carroll (1979, p.500) defined CSR as “the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point of time”. In the early 60s CSR was identified as a sum of volunteer and philanthropic acts for companies aiming to mitigate social ills while meeting the economic and legal obligations. Over time, CSR became more of a core business activity that would remodel the company’s business and operations (Grosbois, 2012). CSR is in fact, triple bottom line (henceforth TBL), which is an approach to measure the success of an organization’s activities that considers the organization's social and environmental performance in addition to the traditional financial performance (Elkington, 1997). The TBL dimensions are also commonly called the three Ps or 3Ps: people, planet and profits. As we have seen, both concepts, CSR as well as TBL, reflect the growing importance to adopt responsible systems and behaviors in all organizations.

This thesis although acknowledging the TBL of CSR, will focus on environmental issues and how they can be managed. Environmental concern regarding the hospitality industry started growing significantly in the 1990s, which caused the beginning of new sustainable ideas and research related to green topics. Big hotel chains and well-known hospitality enterprises have

been implementing green practices to their businesses in order to obtain various benefits and contribute to being more responsible and eco-friendly (Atay, L; Dilek, E. and Yildirim, M; 2013). The most common employed CSR practices most studies coincide are cutting operation costs and minimizing resource consumption (Ayuso, 2006 in Garay, L. and Font, X; 2011). But, the survey undertaken by and Garay, L. and Font, X. (2011) reports that most enterprises go beyond simple operational eco-savings practices and perform other operational and organizational practices such as environmental accountability, use of alternative energy sources and ecological products, environmental promotional initiatives among customers and working with responsible suppliers. As Chung, L. and Parker, L. (2010) emphasize, the hotel's consumption, beyond just producing air, water, soil and noise pollution; causes impact on local communities, use of infrastructure and affects relationships with local business and governments too.

In addition to this growing environmental concern and increasing efforts to implement green practices, education and CSR communication play a key role for hotels in order to attract new employees, guests and demonstrate social responsibility (Hays, D. and Ozretic, D; 2014). Alongside, Bohdanowicz, P. and Martinac, I. (2003) also make clear that relevant education and the levels of eco-awareness need to be increased both in the industry and the public. Mackenzie, M. and Peters, M. (2014) highlight that hospitality companies emphasizing their values and ethical responsibilities were the most attractive when recruiting new employees. Although many benefits arise from applying CSR communication, some companies choose not to provide basic information for several reasons: they find the information is irrelevant for their stakeholders, they only use the CSR as a marketing tool and are not truly engaged in any initiative, their data performance would show them in poor light, or they do not track their performance data (Grosbois, 2012). This does not apply to Accor Hotels Group (2015) which conducted two different surveys related on the influence that CSR and sustainable practices causes to guest satisfaction and business performance, and proved the positive impact of CSR on the hotel's economic performance. One of the main findings was that CSR enables to gain turnover among Accor key B2B clients, highlighting that over 70% of customers say they have CSR expectations and 90% of customers value CSR performance when choosing a hotel.

In view of the potential benefits hotels can obtain from implementing CSR practices, it is therefore remarkable that not more hotel owners and operators, especially corporate ones, are considering sustainability to be central to their business or incorporating it more deeply into their operating philosophies (Bader, 2005). An important fact is that although customers worry about ecological problems, they are oftentimes not ready to change their lifestyles, entailing that they are not ready to sacrifice comfort, accept lower quality or pay a higher price for services with a green touch (Manaktola, K. and Jauhari, V; 2007, p.368). Adding environmentally practices and services into the product or purchasing process can facilitate the transition from an “effortless” lifestyle to a responsible one, helping hotels willing to pursue environmental management and green practices to overcome their adversities (Hays, D. and Ozretic, D; 2014).

Four main theories provide a wider overview about CSR practices. These four theories are the resource based view theory (henceforth RBV), the reputation and risk management theory (henceforth RRM), the legitimacy theory, and the stakeholder theory which is extended later in the stakeholder’s section (5.3.3).

7.2. Perspective of green hotel management

Environmental management can be defined as “the study of all technical and organizational activities aimed at reducing the environmental impact caused by a company’s business operations” (Cramer, 1998, p. 162). Bohdanowicz, P. and Martinac, I. (2003) state that the hospitality sector constitutes one of the most environmentally harmful branches of the tourism industry. It is important to highlight that hotel consumption is very high depending on the location and services offered. As Bohdanowicz, P. and Martinac, I. (2003, p. 5) emphasize, one of the most visible impacts that hotels have on the environment is waste generation. “A typical hotel guest produces 1 kg of waste per day, which leads to tons of waste disposed by hotels monthly.” As a consequence, nowadays, hoteliers are coming to understand that the only way to preserve their business is by preserving what is around them (Bader, 2005). The

industry increasingly promotes environmental management practices due to both external and internal factors (Álvarez, M; Burgos, J. and Céspedes, J; 2001).

External factors influencing the increase on environmental management practices in the hospitality industry range between competition, socio-economic, legal or ethical, political and technological aspects. Research (Atay, L; Dilek, E. And Yildirim, M; 2013) affirms that there are various reasons that direct accommodation establishments develop activities of green marketing and green hotel management. These reasons might include competitive pressure, attitudes of consumers, and non-governmental organizations towards the issue and the policies of many states regarding the protection of the environment. At the same time, the authors also assert the fact that local and central law-making governments by being stricter with regulations, will cause hotels to start establishing and implementing environmentally-sensitive practices which will help accelerate the development of environmental sensitivity consciousness among the hospitality industry.

Internal factors consist of factors within the organization that impact the approach and success of the company's operations and the business effectiveness. Internal factors include a wide range of benefits in the following aspects: environment, promotion, brand value, legitimacy, market and financial outcome. Green brands are addressing customers who perceive ecological problems as important. Regarding the environmental benefits, according to Hays, D. and Ozretic-Dosen, D. (2014) green hotel management provides long-term cost reduction, ecological sustainability and the satisfaction of needs of a presently growing segment of customers seeking green services. Grant (2008) also indicates that successful brands are usually based on ecologically conscious business practices. As a matter of fact, in view of the increasing "sensitivity to the environment", tourism establishments have adopted the understanding of green marketing in order to reduce environmental pollution and damage of the natural life (Atay, L; Dilek, E. and Yildirim, M; 2013). In terms of marketing and brand value, green management offers trustworthy marketing communication, contributes to the growth of brand value, displays a positive image, attracts more loyal customers and helps the company to differentiate from competitors (Hays, D. and Ozretic-Dosen, D; 2014). Green

marketing also increases consumer trends and competitive pressure (Atay, L; Dilek, E. and Yildirim, M; 2013). But, in order to prevent CSR reports from being perceived as pure marketing tools, it is important to provide stakeholders accurate, reliable and objective information verified by an independent third party (Jankovic, S. and Krivacic, D; 2014). In the same line, customers are looking for tangible elements that confirm the actual ecological commitment of the companies. Some of the tangible elements that play an important role are communication materials, certificates and visible elements such as solar panels, recycled paper and water saving faucets (Hays, D. and Ozretic, D; 2014). To conclude, financial benefits are also important when implementing environmental management practices in the service industry due to its high return on investment (Álvarez, M; Burgos, J. and Céspedes, J; 2001). Hotels are increasingly expected to be responsible not only for profit maximization for their owners but also to behave in a socially responsible manner (Hays, D. and Ozretic-Dosen, D; 2014).

Hoteliers implement environmental certifications to assist them in managing environmental impacts of the hotel's operations, which are further explained below.

7.3. Environmental certifications

The interest in green and environmentally friendly products and services increased notably in recent decades and led the hotel industry to recognize the benefits from undertaking proactive environmental efforts. There are many different types of environmental certifications for hotels to be engaged in order to be more sustainable and eco-friendly. Certification is a way of ensuring that an activity or product meets certain standards. Environmental certification sets standards and helps distinguish genuine ecotourism and sustainable tourism businesses from others that make empty claims. In other words, it is an important tool for motivating and reward businesses to improve their environmental, social and economic performance (Bien, 2008).

Environmental certification of tourism services began in Europe in 1987 with the Blue Flag Campaign for beaches in Denmark. Between the Earth Summit conference in 1992 and the International Year of Ecotourism in 2002, more than 60 environmental tourism certification programs were developed (Bien, 2008). In the following years, certified companies continued increasing and currently, tourism boasts more than 140 quality labels worldwide (Naturefriends International et al; 2014). High-quality sustainability labels are internationally recognised by the Global Sustainable Tourism Council (henceforth GSTC). To be recognised, labels need to take into account the three dimensions, ecological, economic and social, and carry out a transparent third party verification procedure (Naturefriends International et al; 2014). It is important to remark, that some companies, although not being verified by a third party, also serve as important tools to achieve improved results regarding sustainable management (Jovicic, 2011).

Therefore, there are different advantages and disadvantages from implementing and developing environmental certifications as it is shown in the Figure 1 below. The main advantages are summarized as reducing costs, attracting new guests, reducing negative impacts on the environment and adding brand value (Hays, D. and Ozretic, D; 2014). Other main advantages are employee commitment, continuous innovation and stakeholder integration (Garay, L. and Font, X; 2011). On the other hand, the main disadvantages are a lack of knowledge and staff skills, limited capital budgets, guest attitudes and high costs of implementation and maintenance (Eldemerdash, J. and Mohamed, L; 2013).

Figure 1: Environmental Certifications Advantages and Disadvantages

Environmental Certifications	
Advantages	Disadvantages
Environmental Aspects	Environmental Aspects
Provides ecological sustainability (Hays & Ozretic, 2014)	No negative environmental aspects were found regarding Environmental Certifications
Reduces hotel's expenses such as water and energy waste (Eldemerdash & Mohamed, 2013)	
Higher efficiency in resource use (Zhang, Joglekar, Verma & Heineke, 2014)	

Economical Aspects	Economical Aspects
Positive impact on financial performance (Álvarez, Burgos & Céspedes, 2003; Bohdanowicz & Martinac, 2003)	Requires a long-term investment (Ditlev-Simonsen & Middtun, 2010 in Mackenzie & Peters, 2014) Lack of capital resources (Mauforth & Munt, 1998 in Chan, 2010; Quazi, 1999 in Eldemerdash & Mohamed, 2013)
Long-term cost reduction (Hays & Ozretic, 2014; Garay & Font, 2011; & Bader, 2005)	Environmental measures are prohibitively expensive (Bohdanowicz & Martinac, 2003) Lower profits than anticipated (Rex and Baumann 2006 in Hays & Ozretic, 2014)
Business or Market Aspects	Business or Market Aspects
Increasing demand (Davis, 1991 in Hasan & Kit, 2014; & Zhang, Joglekar, Verma & Heineke, 2014)	Fear of environmental initiatives affecting negatively customer comfort and satisfaction (Bohdanowicz & Martinac, 2003)
Growth of brand value: positive reputation, consumer satisfaction, trust and company image (Garay & Font, 2011; & Hays & Ozretic, 2014; & Eldemerdash & Mohamed, 2013)	
New market opportunities (Garay & Font, 2011)	Lack of available information for consumers (Darnall, 2008)
Stakeholder integration (Garay & Font, 2011; & Zhang, Joglekar, Verma & Heineke, 2014)	
Companies are more attractive to new recruits (Murray & Ayoun, 2010 in Mackenzie & Peters, 2014)	
Forefront of technological innovation (Connolly, 2009 in Hays & Ozretic, 2014)	
Lower long-term risks and increase asset values (Bader, 2005)	Customers are averse to ecologically responsible decisions (Manaktola and Jauhari, 2007 in Hays & Ozretic, 2014; & Rex and Baumann 2006 in Hays & Ozretic, 2014)
Legitimization Aspects	Legitimization Aspects
Gain social legitimacy (Bansal & Roth, 2000 in Álvarez, Burgos & Céspedes, 2003)	Regulations are not fully adapted yet (Hays & Ozretic, 2014)
Altruistic Aspects	Altruistic Aspects
Sustainable practices can appear altruistic to the guests (Bader, 2005)	No negative altruistic aspects were found regarding Environmental Certifications
Hotel's concern is more than only making profits (Ayuso, 2007; & Eldemerdash & Mohamed, 2013)	
Positive changes in employee's mindset (Ho, Seoki & Chang, 2010 in Mackenzie & Peters, 2014)	
Knowledge and Skills	Knowledge and Skills
Continuous innovation and higher learning (Garay & Font, 2011)	Staff is unaware of the benefits (Jovicic, 2011)
	Lack of knowledge and staff skills (Levy & Dilwali, 2000 in Eldemerdash & Mohamed, 2013)
	Lack of performance measures (Levy & Dilwali, 2000 in Eldemerdash & Mohamed, 2013)
	Difficult to quantify environmental gains (Ayuso, 2007; & Levy & Dilwali, 2000 in Eldemerdash & Mohamed, 2013)

Source: Author compilation from literature review, 2016

Environmental certifications include standards and Environmental Management Systems (henceforth EMS). For the purpose of improving environmental and financial performance, and communicating the company environmental achievements to stakeholders and societies, companies are increasingly implementing environmental standards as well as EMS. Standard is a document approved by a recognized body that provides for common and repeated use of a prescribed set of rules, conditions, or requirements (Toth, 2000). Among the environmental standards, the ISO14001 is the most relevant standard regarding sustainability and will be further explained below. For instance, the EMS is a system based on different regulations which points out the sustainable standards that the hotel has to meet. As Chan (2010, p.4) points out, an EMS can be defined as “a management system that includes an organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing, and maintaining an environmental policy according to ISO14001 standards. Moreover, Jovicic (2011) also specifies that an EMS helps to identify and incorporate the management of environmental issues in order to determine and minimize risks to the environment. In order for companies to improve its effectiveness when adopting an EMS, attaining an ISO14000 certification causes positive impacts on the overall performance of the firm (Calantone, R; Melnyk, S; Montabon, F. and Sroufe, R; 2000). It is clear that a strong positive relationship exists between performing ISO14000 standards when implementing an EMS for the company to achieve its environmental goals.

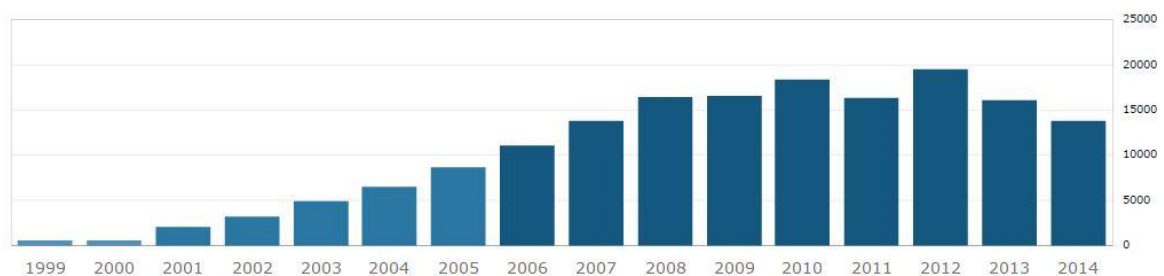
This thesis focuses on the ISO14001 and EMS among the overall environmental management certifications as they are seen to be more effective and efficient compared with the other environmental programs regarding their impact on performance (Calantone, R; Melnyk, S; Montabon, F. and Sroufe, R; 2000). Morrow, D. and Rondinelli, D. (2002) also state that the two most frequently used guidelines for EMS are the international standard, ISO14001, and the European standard, EMAS.

7.3.1. ISO 14001

The ISO14000 Standards is of great relevance for developing and implementing environmental management practices. Jovicic (2011, p. 379) defines the ISO14000 Standards as “a set of standards providing businesses and other organizations with a comprehensive systematic approach on how to manage impacts on environment”. The author also emphasize that meeting different standards such as the ISO14000 generates improvements in the management and increases the economic benefits. Within the series of ISO14000 standards, the most significant one is the ISO14001 standard as it sets out the criteria for an environmental management system and it specifies guidance for its use (Boiral, O. and Sala, J; 1998). This standard also provides the framework for the management system to improve the environmental and corporate performance of the organization (Hasan, M. and Kit, C; 2014).

The ISO14001 guidelines started growing in 1992 in the United Nations Conference on Environment & Development in Rio de Janeiro. Until 1996 the standards were not approved by technical committees and working groups nominated by national standards associations (Rondinelli, D. and Vastag, G; 2000). By the end of 1998, around 8,000 organizations in 72 countries had formally implemented an environmental management system under the ISO14001 standard (ISO, 1999). There is a clear evolution regarding the ISO14001 as the following graph shows the growing number of certificates in Spanish companies from 1999 to 2014. Nowadays, there are more than 300,000 certifications to ISO14001 in 171 different countries around the world (ISO, 2015). China, Japan, Italy, United Kingdom and Spain are the countries with a higher number of ISO14001 standards, reaching in 2014 a total of 13,869 valid certificates in Spain.

Figure 2: Evolution of ISO14001 certificates in Spain



Source: ISO (2014)

Regarding the ISO14001 standards within the tourism industry, the number of hotels certified in 1998 was very small, only 16 hotels including 13 in Germany, Portugal and Sweden and 3 in Hong Kong and Mauritius (Honey, 2002). At the end of the year 2000 only 66 certificates were obtained in hotels and restaurants companies, while a total of 22.897 ISO 14001 was achieved worldwide (Chan, E. and Wong, S; 2006).

The ISO14000 standards are not designed to increase the company's performance but to establish a set of processes. In other words, the standards will help organizations to accomplish its objectives and targets, not to improve its performance (Calantone, R; Melnyk, S; Montabon, F. and Sroufe, R; 2000). There are five core principles regarding the ISO14001 standard: environmental policy, planning, implementation and operation, checking and corrective action, and finally, management review (Chan, E. and Wong, S; 2006). What is more, there are two ways in which companies can use ISO14000 standards, either organizations declare that their EMSs meet ISO standards, or certify their EMS through a registered external auditor (Rondinelli, D. and Vastag, G; 2000). The authors also observed in their research that third party auditors were more effective than internal auditors, and that other companies only use the ISO14000 as a set of guidelines to improve their EMS without formally certifying.

Although the real purpose for hotels in gaining accreditation or complying for the standard is still not evident, some advantages and disadvantages can be identified as shown in the Figure 2 below. Most of the advantages and disadvantages correspond to the same ones described on the Figure 1 about environmental certifications. But, apart from the advantages already specified in the environmental certifications, the main advantages about ISO14001 are the following. ISO14001 helps developing new environmental products (Hasan, M and Kit, C; 2014) as well as improving employee environmental awareness and efficiency (Chan, 2010). Although some may adopt the standard for environmental improvements, others seek to gain a marketing advantage (Chan, E. and Wong, S; 2006). Chan (2010) also emphasize that ISO14001 raises employee motivation and serves as a guideline to implement other environmental programs. With regard to the disadvantages, most companies claimed the main

ones were costs and time (Hasan, M. and Kit, C; 2014). The author also identifies pressure as a main barrier of implementing the standard, mainly market, social and financial pressure.

Figure 3: ISO14001 Advantages and Disadvantages

ISO 14001	
Advantages	Disadvantages
Environmental Aspects	Environmental Aspects
Reduces greenhouse gas emissions and streamlines waste management (Hasan & Kit, 2014 & ISO, 2015)	No negative environmental aspects were found regarding ISO 14001
Develops new environmental products (Hasan & Kit, 2014)	
Environmental responsibility: increases awareness among employees (Sayre, 1996 in Hasan; Kit, 2014; & IISD, 1996 in Rondinelli & Vastag, 2000; & Donaldson, 1996 in Rondinelli & Vastag, 2000)	
Improves environmental performance: operational efficiency (Hasan & Kit, 2014; & IISD, 1996 in Rondinelli & Vastag, 2000)	
Reduces company's environmental incidents and liabilities (IISD, 1996 in Rondinelli & Vastag, 2000)	
Economical Aspects	Economical Aspects
Reducing costs due to improvement of operations (Hasan & Kit, 2014)	Cost impediments: training, consultation, process, registration, and maintenance (Hasan & Kit, 2014)
	Limited capital budget (Dilwali, 2000 in Eldemerdash & Mohamed, 2013)
Business or Market Aspects	Business or Market Aspects
Differentiating company's products and image (Calantone, Melnyk, Montabon & Sroufe, 2000)	Employee's uncertainty of outcomes (Eldemerdash & Mohamed, 2013)
Enhances products to meet the requirement of customers (Holt, 1998 in Hasan & Kit, 2014)	
Delivers commercial value: increases market share (ISO, 2015; Hasan & Kit, 2014; & Walker, 2000 in Hasan & Kit, 2014)	Time requirement: audits, paper work and improvement (Hasan & Kit, 2014)
Enhances relationships with consumer groups (Chan, 2010)	
Portrays an environmentally friendly image (Pouliot, 1991 in Hasan & Kit, 2014)	Not evident customer impact (Rondinelli & Vastag, 2000)
Improves relationships between the company and the stakeholders (Boiral and Sala, 1998 in Hasan & Kit, 2014 & Polonsky, 1995 in Hasan & Kit, 2014)	
Better handle on business risks (ISO, 2015)	Required maintaining work (Rondinelli & Vastag, 2000)
Raises employee motivation (Chan, 2010)	
Legitimization Aspects	Legitimization Aspects
Ensures that a firm complies with all environmental legislation (Chan, 2010)	Lack of performance measures (Dilwali, 2000 in Eldemerdash & Mohamed, 2013)

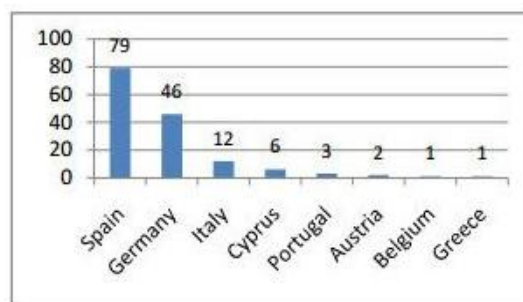
Develops an effective and systematic structure to implement environmental programs (Chan, 2010)	Difficulty in quantifying environmental gains (Dilwali, 2000 in Eldemerdash & Mohamed, 2013)
Reduces the need for multiple registrations (Casco, 1994 in Rondinelli & Vastag, 2000)	Pressures from customers to ensure all laws are obeyed (Hasan & Kit, 2014)
Altruistic Aspects	Altruistic Aspects
Company and employee's desire to be moral and ethical in the environment (Hasan & Kit, 2014)	No negative altruistic aspects were found regarding ISO 14001
Knowledge and Skills	Knowledge and Skills
Provides the framework for the management system to improve the corporate and environmental performance (Hasan & Kit, 2014)	Poor communication (Eldemerdash & Mohamed, 2013)
	Lack of training (Eldemerdash & Mohamed, 2013)

Source: Author compilation from literature review, 2016

7.3.2. The environmental management systems and EMAS

Various voluntary tools for managing environmental programs are available to companies willing to engage in sustainability, such as Eco-Management and Audit Scheme (henceforth EMAS). According to Darnall (2008) there are two kinds of green services brand management: unilateral commitment and participation in voluntary environmental programs. For environmental or other reasons, some hotels have voluntarily adopted self-regulatory initiatives such as an EMS to improve their environmental performance (Chan, 2010). The EMAS is a voluntary tool available for any kind of organization aiming to improve its environmental and financial performance, and communicate its environmental achievements to stakeholders and society in general (Jankovic, S. and Krivacic, D; 2014). Currently, more than 4.500 organizations are EMAS registered and of that number only 150 (3%) refers on hotels (Jankovic, S. and Krivacic, D; 2014). Those 150 hotels are placed in 8 European countries, mostly in Spain and Germany as represented below.

Figure 4: Number of hotels with EMAS registration

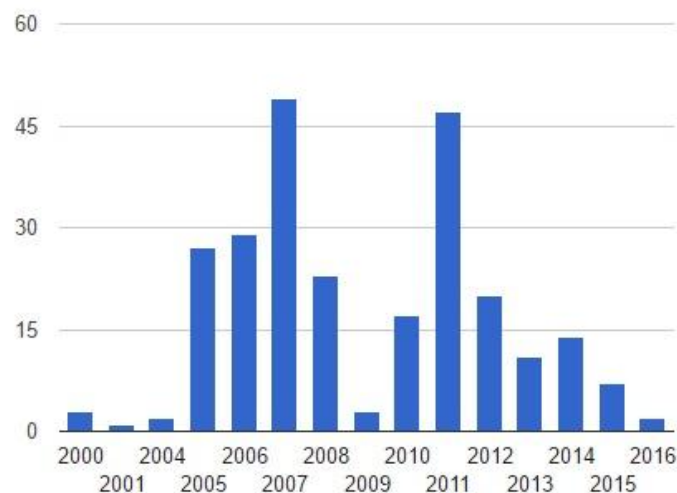


Source: European Commission EMAS, (2014)

EMAS certificates have also played an important role in the region of Catalonia. The main indicators regarding the importance of EMAS in Catalonia are the following: the region consists of 274 organizations, 458 centers, and 38.336 workers involved in performing the certificate requirements (EMAS a Catalunya, n.d.).

The following graph shows the evolution of EMAS obtained each year from the 2000 to the 2015 in Catalonia (EMAS a Catalunya, n.d.). Organizations implementing EMAS certification is a recent phenomenon that increased considerably at the beginning of the century. As the Figure 5 shows, 2007 and 2011 were the years with a higher number of EMAS certificates obtained in Catalonia.

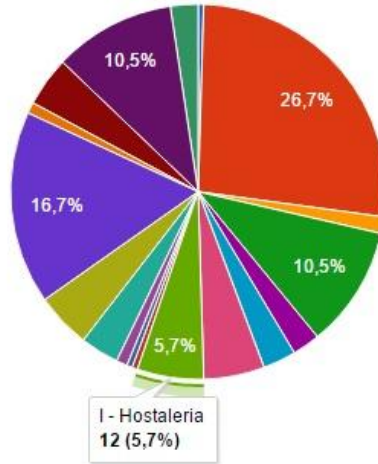
Figure 5: EMAS evolution in Catalonia



Source: EMAS a Catalunya, (n.d.)

The Figure 6 below represents the different economic sectors in which organizations with EMAS certification are adopted in Catalonia. From 274 EMAS certified organizations in Catalonia, only 12 come from the hospitality industry, representing a 5'7%. The sector which has a higher number of organizations certified is the manufacturing industries, comprising a total of 56 organizations which represents the 26'7% of the total organizations with EMAS in Catalonia (EMAS a Catalunya, n.d.).

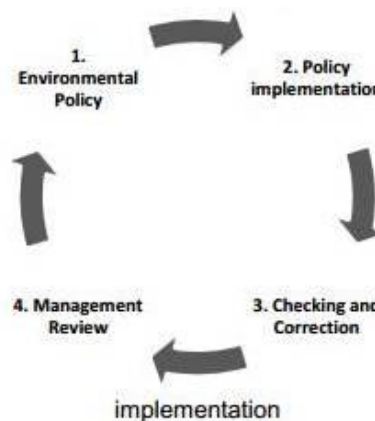
Figure 6: EMAS organizations regarding the economic activity



Source: EMAS a Catalunya, (n.d.)

Having provided a general overview of EMAS certifications in the industry, a more in-depth explanation of its use and requirements is developed in this part. Management of environmental impacts is a key requisite to achieve sustainable tourism, and EMS provide the framework to assess, plan, act upon, control and monitor environmental management and performance (Jovicic, 2011). In the same line, Collins (2000) in Jovicic (2011) states that EMS requirements are based on the management philosophy known as the Deming Cycle, consisting of four points of sound management practice summarized as: Plan-Do-Check-Act.

Figure 7: Plan-Do-Check-Act concept as base for EMS



Source: Jovicic (2011, p. 378)

Rondinelli, D. and Vastag, G. (2000) also indicate that the Deming Cycle is based on some requirements which are focused on five major components. The first step of the cycle is the development and adoption of an environmental policy. A planning process which encompasses clearly defined objectives and targets that help improve the environmental operations and management of the organization is what follows. The next component is acquiring a system of implementation that includes a clear structure, programs for training, awareness among employees, internal and external communication, a control system, and emergency response. The fourth step is to check, monitor and correct all EMS actions through audits and information records. Finally, the last step is to adopt a management review system in which the suitability, effectiveness and adequacy of the EMS is reviewed to provide continuous improvements.

Regarding the compliance of EMAS, participants are obliged to meet some requirements. An environmental statement is needed in order to verify that an organization meets the requirements from implementing EMAS certifications. The environmental statement aim is to provide the required information regarding environmental impacts and constant improvements for the organization. A quality check of the statement is performed by an independent or accredited environmental verifier, who is responsible for validating that the information in the environmental statement is accurate and reliable (Jankovic, S. and Krivacic, D; 2014). Calantone et al. (2000) also add that owning an external certification can lead to beneficial situations such as government influence, to demonstrate stakeholders an environmental excellence or to reduce the number of audits, which are further contemplated below.

As determined above, an adequate application of EMS can significantly contribute in many advantages. As Hamschmidt, J. and Dyllick, T. (2001) highlight, EMSs are not instruments serving only for a specific purpose, but much rather as general instruments serving a wide array of purposes. In other words, different companies can implement EMS in order to achieve its goals and manage the advantages and disadvantages resulting from the implementation, which are examined below.

To start with, costs of implementing an EMS seem very expensive regarding the different aspects they cover, from costs of verification and inspection, until costs to invest in modern and high-quality technology. Apart from this main barrier, it is important to mention that the advantages of EMS application are by far more important and numerous than their costs. One remarkable advantage that Jovicic (2011) explores is that EMS helps to improve the company image in the eyes of the public. Moreover, another advantage is that state authorities can make a positive discrimination in favor of the enterprises with an EMS certified, and finally, EMS serves as a kind of guarantee to third parties that there are no hidden environmental risks in the company.

Although a large number of advantages exist from implementing EMS in an organization, only 3% of the total organizations that have EMAS registered are hotels (Jankovic, S. and Krivacic, D; 2014). This is a very low percentage considering the total amount of hotels that provide their services damaging the environment and not being responsible because of their lack of commitment and engagement with performing sustainable practices. Jovicic (2011) suggest that owner-managers of micro and small tourism enterprises are implementing low levels of environmental management and have limited knowledge of what implementation of environmental management specifically involves, such as, how long it takes and how much it costs.

The following authors also claim that disadvantages from implementing an EMS are basically based on time-consuming and expensive costs. As Chan (2010) affirms, there are two main barriers to be confronted. The first barrier is the implementation and maintenance of costs when adopting an EMS. It is necessary for a company to invest in the technical measures and provide regular training to employees to guarantee better environmental performance. The second most common barrier is the lack of knowledge and skills. To sum up, understanding, interpreting and applying EMS standards to a company is not an easy task, and requires a certain level of technical knowledge and skill (Ferreira, Lopes, & Morais 2006).

The Figure 8 represented below, consists of a summary of the main advantages and disadvantages regarding the implementation and performance of an EMS.

Figure 8: EMS and EMAS Advantages and Disadvantages

EMS and EMAS	
Advantages	Disadvantages
Environmental Aspects	Environmental Aspects
Reduces energy expenditure, decreases usage of raw materials, reduces waste and lower-level pollution (Jovicic, 2011 & Anton et al. 2002 in Chan, 2010)	Not sufficient for effective ecological improvements in companies (Hamschmidt & Dyllick, 2001)
Economical Aspects	Economical Aspects
Improve financial considerations (Chan & Wong, 2006)	Expensive costs: implementation, maintenance, verification, inspection and investment (Jovicic, 2011; Chan, 2010; Carraro and Leveque, 1999 in Rondinelli & Vastag, 2000; & Ayuso, 2007)
Positive effect on the company's profitability (Jovicic, 2011)	Lack of incentives (Quazi, 1999 in Chan, 2010)
Business or Market Aspects	Business or Market Aspects
Improve the image and reputation in the eyes of the public and stakeholders (Jovicic, 2011; Hemenway & Hale, 1995 in Chan & Wong, 2006; & Hamschmidt & Dyllick, 2001)	Competitive pressures (Altman, 1994 in Chan, 2010)
Enhance relationships with consumer groups, communities & investors (Roy et al. 2001 and Stenzel, 2000 in Chan, 2010; & Jovicic, 2011)	Only use EMS to attract so-called "green travellers" (Miles and Munilla, 1995 in Chan & Wong, 2006)
Guarantee no significant or hidden environmental risks to third parties (Jovicic, 2011)	Lack of collaboration with public authorities, suppliers and subcontractors (Ayuso, 2007)
Multiplication effect: contributes to supplier's environmental concern (Jovicic, 2011)	Important change of routines and management style (Ayuso, 2007)
	Lack of management commitment and lack of total employee involvement (Quazi, 1999 in Chan, 2010; & Altman, 1994 in Chan, 2010)
Legitimization Aspects	Legitimization Aspects
Positive discrimination in favor to enterprises by the state authorities (Jovicic, 2011)	Industry regulations (Altman, 1994 in Chan, 2010)
	Complexity of ISO standards and its legal ramifications (Quazi, 1999 in Chan, 2010)
Periodical evaluation corrects measures before problems are detected (Jovicic, 2011)	Lack of qualified verifiers or consultants (Chan, 2010)
Altruistic Aspects	Altruistic Aspects
No positive altruistic aspects were found regarding EMS and EMAS	No negative altruistic aspects were found regarding EMS and EMAS

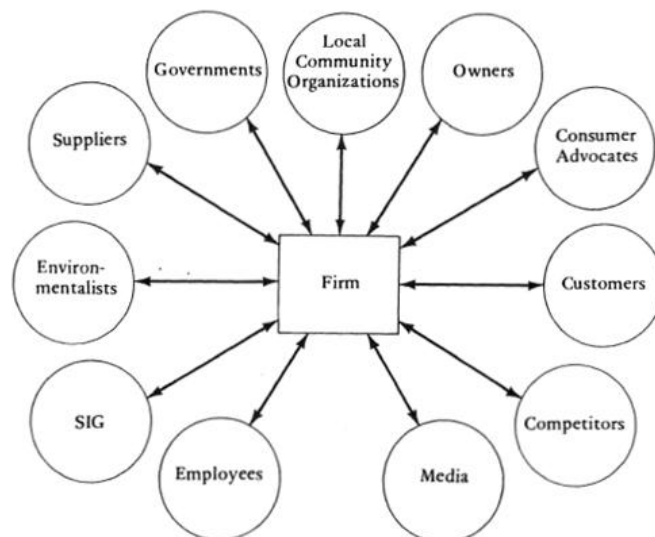
Knowledge and Skills	Knowledge and Skills
Helps making relevant decisions about the environment (Jovicic, 2011)	Requires a certain level of technical knowledge and skill (Ferreira, Lopes, & Morais 2006; & Chan, 2010)
	Lack of a sense of urgency and ambiguity (Chan, 2010)
Sets up a framework for accurate definition of objectives (Jovicic, 2011)	Unclear employee responsibilities (Quazi, 1999 in Chan, 2010)
	Conflicting guidance: problems in understanding and evaluating environmental aspects (Chan, 2010 & Jovicic, 2011)

Source: Author compilation from literature review, 2016

7.3.3. Stakeholder’s role in ensuring environmental management efforts

Stakeholders play a crucial role in developing sustainable strategies in the hospitality sector. Freeman (1984, p.46) defines stakeholders as “any group or individual who can affect or is affected by the achievement of the firm’s objectives”. The stakeholder theory is based on the following categories of stakeholders represented in the Figure 9 below.

Figure 9: Stakeholder view of a firm



Source: Freeman (1984)

Stakeholder theory has also been studied by different authors throughout the years by its importance for organizations in making profits while having good practices. As Bohdanowicz, P. & Martinac, I. (2003) highlight, the successful implementation of more sustainable practices in the hotel industry is highly dependent on the active support and cooperation of all stakeholders involved. Hays, D. and Ozretic, D. (2014) also indicate that hotels can increase benefits from going green, if the implementation of green practices involve all stakeholders (the board, employees, guests and the community). According to Álvarez, M; Burgos, J. and Céspedes, J. (2003) three main reasons exist for organizations adopting environmental protection activities from a stakeholder perspective: to gain legitimacy, as a response to stakeholder pressure, and as a response to stakeholder's strategies to influence the environmental protection activities of firms.

At the same time, the previous research indicates that stakeholders are not only demanding that businesses implement responsible practices, but also that they provide access to information about the scope and effectiveness of CSR efforts they undertake (Grosbois, 2012). Zhang et al; (2014) indicate that in order to accomplish the goal of informing outside stakeholders, environmental certifications need to meet certain conditions such as broad acceptance, openness, communication and the opportunity to perform an independent audit. Jankovic, J. and Krivacic, D. (2014) also assert that information provided to stakeholders needs to be accurate, reliable and objective in order to avoid CSR reports from being perceived as pure marketing tools.

Focusing on internal stakeholders, the employees group consist of great importance for their role within the organization. Eldemerdash, J. and Mohamed, L. (2013) state that Environmental Champions are needed at all levels from owners to line staff in order to overcome barriers to change. The EMS Champion is responsible for ensuring that all department managers are updated about legal and other requirements, and ensure that the employees are properly trained (Pataki, G. and Crotty, E; 2002). The EMS Champion has also the responsibility to coordinate that the Environmental Management Program (henceforth EMP) is being implemented, monitored and maintained. The most current requirements along

with the EMP are reviewed at least annually by the EMS Champion and the EMS Team in order to evaluate its progress and consider new recommendations. A Communications Plan (henceforth CP) is also developed to ensure that information about environmental aspects and EMS is communicated in a proper way both to internal personnel and external stakeholders (Pataki, G. and Crotty, E; 2002). To sum up, implementing and meeting the EMS Champion requirements, as well as the requirements from other stakeholders, will lead the company to achieve a large number of CSR and environmental benefits which are contemplated below.

Benefits from stakeholder groups are usually seen as revenue generating from consumers and employees, but another perspective to consider is that not only their revenue is important, but also caring on the stakeholders wellbeing generate CSR and environmental benefits (Glavas, A. and Kelley, K; 2014). In order to drive companies in the direction of environmental sustainability, companies not only need to increase awareness of their CSR activities among employees and customers but also encourage CSR-based communication between frontline employees and customers so that the company becomes aware about the customer support on CSR activities (Korschun, D; Bhattacharya, C. and Swain, S; 2014). What is more, companies willing to achieve environmental sustainability also need stronger incentives from different stakeholders, such as market participants or state authorities (Hamschmidt, J. and Dyllick, T; 2001). Regarding stakeholder's interests on environmental sustainability, the Global Reporting Initiative (2013) undertook a report showing a list of relevant topics for stakeholders within hotels, restaurants and leisure and tourism services. Inside the environmental category, stakeholders emphasize important topics such as materials sourcing, plastic use and management, energy consumption and efficiency, water withdrawal, ecosystem and habitat protection, emissions to air, and waste management.

To sum up, the firm's stakeholders play an important role in order to assure the company's environmental commitment. As Álvarez, M; Burgos, J. and Céspedes, J. (2003) reinforce, the power of stakeholders through a variety of strategies has a positive relation with the adoption of environmental management practices within an organization.

7.3.4. Challenges of introducing ISO14001 standards and EMAS

It is a fact that only few small tourism and recreation companies are using ISO 14000 and EMAS to develop their full potential. As Jovicic (2011) states, many of the environmental certification systems for tourism require companies to apply EMS to their operations, but only some of those companies have completely implemented these green practices to their management program. Hamschmidt, J. and Dyllick, T. (2001) also emphasize that the “eco-efficiency revolution” has not yet reached most of the companies with an EMS. Sustainable tourism has existed for less than 20 years. Therefore, although a clear interest exists among the travelling public in choosing environmentally and socially responsible businesses, there is still not enough recognition of credible environmental certifications (Bien, 2008). The same author also asserts that certifications cannot substitute good business practice. This means that organizations cannot think that their business will prosper if they offer environmental and social sustainability, without giving their clients the basic needs and the quality experience required. The Figure 10 below represents the Evolving Tourists Expectation Model (henceforth ETEM). The ETEM shows that what customers expect in the first place are basic products and cheap prices, and when their basic needs are satisfied, their concern and contribution to the environment grow (Srilal, M; Chandana, J. and Dileep, M; 2013).

Figure 10: The Evolving Tourists Expectation Model



Source: Srilal, M; Chandana, J. and Dileep, M. (2013)

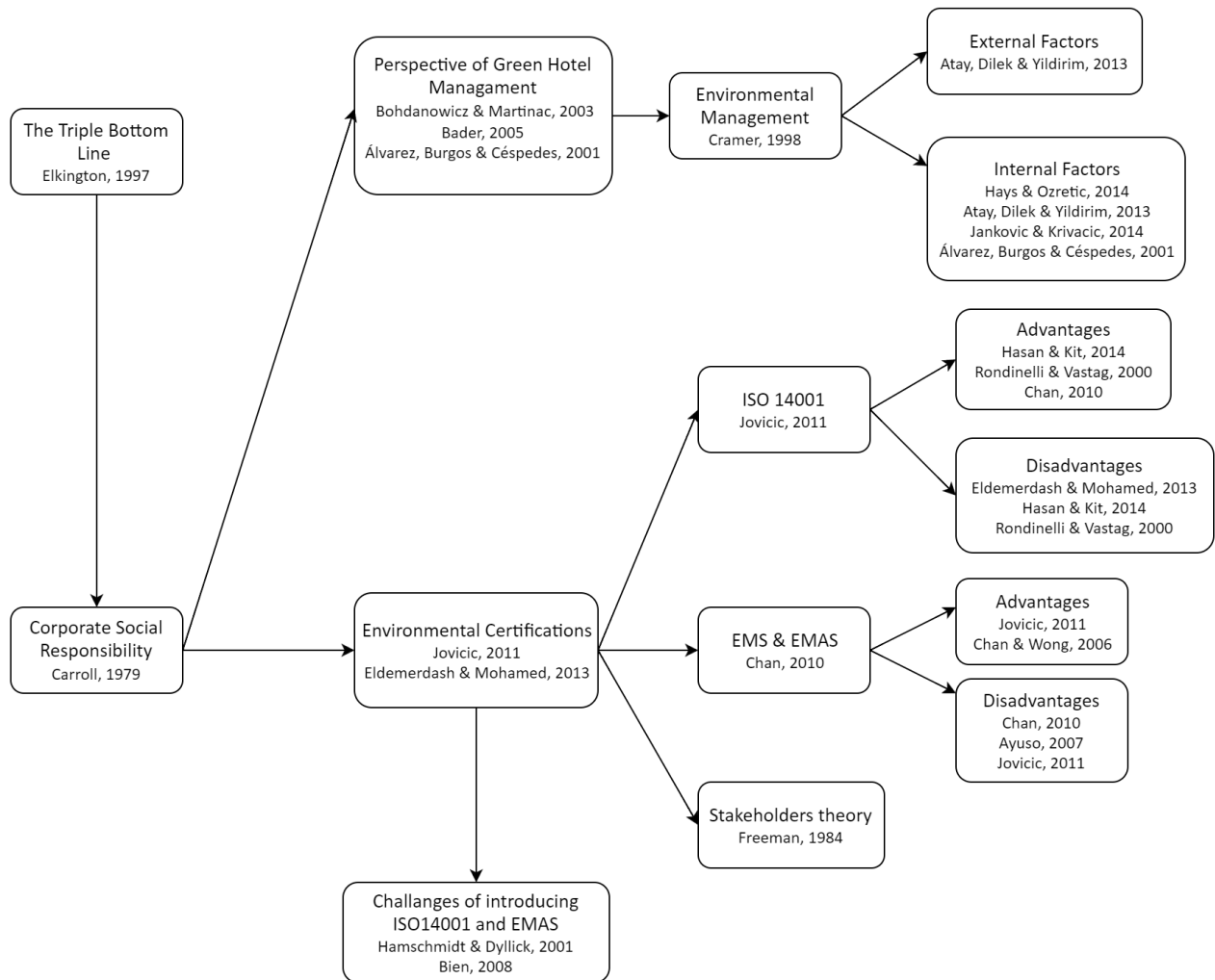
As the previous figure demonstrates, environmental-friendly interests exist among customers. But, this customer's awareness and contribution is difficult to achieve. There are different challenges that companies need to bear in mind which are explained below.

To start with, companies should understand that a certification does not always guarantee the business to be filled with new clients, although it can provide many benefits (Bien, 2008). What is more, Hamschmidt, J. and Dyllick, T. (2001) refers to the achievement of innovations and improvements as another challenge to be faced when applying an EMS. The same authors also specify that improvements could be identified by integrating the EMSs into the core processes of companies, performing a more strategic application of the system and introducing further measures such as greater transparency. The last challenge most companies identify when implementing environmental certifications are costs. Eldemerdash, J. and Mohamed, L. (2013) assert that the introduction of environmental practices and policies does not always need to involve capital. Instead, low-cost projects can be developed with simple procedures that can be implemented by the employees. An example to overcome this challenge is the idea of converting old guest-room bed linens and turning them into aprons for the kitchen (Eldemerdash, J. and Mohamed, L; 2013).

To conclude, despite the challenges presented above, any hotel can decide to become environmentally and socially responsible to the extent possible, considering each hotel's characteristics. Additionally, environmental certifications although providing a large amount of benefits, also generate some challenges which have been identified mainly as lack of knowledge and commitment by organizations, lack of awareness and recognition by customers, lack of innovation and improvements, and finally costs. These challenges should be faced in order to start encouraging more green businesses and offering sustainable alternatives for this emerging trend of eco-friendly customers.

Literature Map

Figure 11: Literature Map

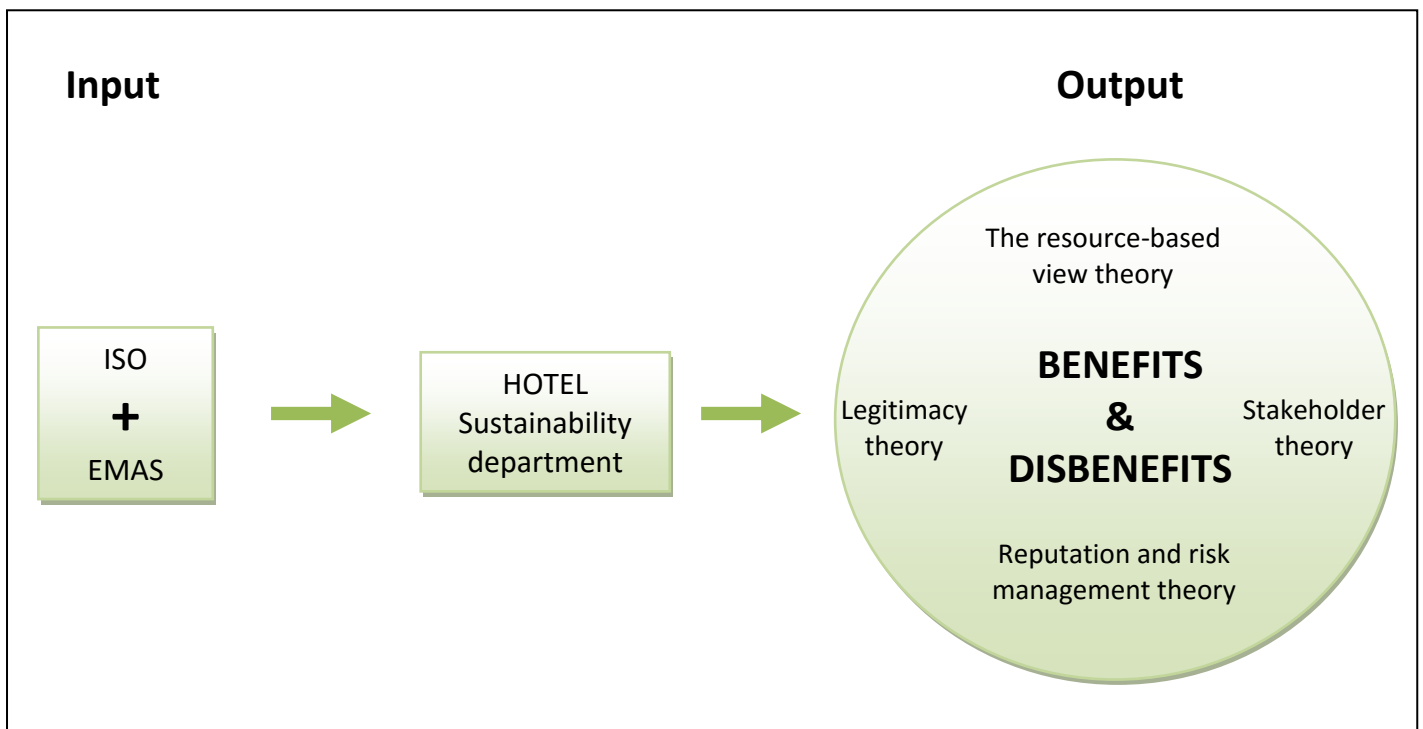


Source: Author's own development (2016)

8. Conceptual framework

Figure 12: Conceptual Framework

Environmental responsibility of companies



Source: Author's own development (2016)

9. Methods used for a case study in the hospitality industry

Having already established the basis of the theoretical outlook of this dissertation, it is now necessary to reflect upon how evidence will be collected to support the arguments adopted.

9.1. Overall research design

This research uses a deductive approach as it has first a theoretical position prior to the collection of the data and then it examines through the findings the specific outcome of the inquiry. The research philosophies and approaches are directly linked with the different methods used to collect data in the research project (Altinay, L. and Paraskevas, A; 2008).

The paper is based on a mixed strategy of quantitative and qualitative research. Quantitative research and qualitative research have both advantages and disadvantages (Altinay, L. and Paraskevas, A; 2008). Quantitative research determines how a variable affects another in a population and the relationship between the different variables. In quantitative research a descriptive study is undertaken as it measures the sample as it is without any modification on the conditions. On the other hand, qualitative research develops an understanding of the context in which phenomena and behaviors take place. This thesis is using mixed methods because both quantitative and qualitative approaches provide added value and deeper answers to the research question, as it is further explained in section 7.2.

The research strategy in this thesis is a single case study. The case study has been used for many researches in the hospitality field investigating different areas in tourism firms and destinations. Robson (2002, p.178) defined a case study as 'a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence'. The case study strategy has the following benefits: it generates new knowledge about the topic when the existing one is incomplete (Otley and Berry, 1994 in Altinay, L. and Paraskevas, A; 2008), and it allows exploring the real life complexities of managing organizations and destinations (Altinay, L. and Paraskevas, A; 2008). Yin (1994) highlights that a single-case study is appropriate when the case study employ multiple sources of evidence and is focused on exploring a specific situation. This is the case of

the study selected, the Hotel Princess Barcelona, which provides useful information for the research question as well as new opportunities for learning regarding the implementation of environmental certifications. This study is an exploratory case study as it explores what is happening, it seeks new insights and it examines phenomena in a new light (Robson, 2002, p.59). Exploratory case studies also focus on “what” questions as it occurs in this case study. The topic of environmental management in the hotel industry has previously been studied in through case studies, examples are Eldemerdash, J. and Mohamed, L. (2013), Atay, L; Dilek, E. and Yildirim, M. (2013), Álvarez, M; Burgos, J. and Céspedes, J. (2003) and Hays, D. and Ozretic, D. (2014). To sum up, the single case study method demands deep and rigorous evidence in order to support the conclusions reached in the study.

9.2. Data collection techniques and research instruments

This case study uses a triangulation approach based on multiple sources of evidence. The triangulation approach is important because as Yin (2009, p.118) highlights “without multiple sources, an invaluable advantage of the case study strategy will have been lost. Worse, what started out as a case study may turn into something else.” Triangulation is also used in this field of study for example in Álvarez, M; Burgos, J. and Céspedes, J. (2003) and Korschun, D; Bhattacharya, C. and Swain, S. (2014). The main advantage of a triangulation approach is that the research addresses a broader range of attitudinal and behavioral issues, and it develops converging lines of the inquiry. The methods used are semi-structured interviews, questionnaires and document analysis.

The first data collection technique used is interviews, which are based on asking questions, then carefully listening to and recording or noting the responses concerning the research topic. Semi-structured interviews are composed by unstructured interviews on one hand, and a descriptive structured approach on the other (Altinay, L. and Paraskevas, A; 2008). Although being designed with a set of questions in advance, the main advantage is great freedom in making changes and modifications during the interview. The interviews build from the previous literature review which includes Álvarez, M; Burgos, J. and Céspedes, J. (2003), Atay, L; Dilek, E. and Yildirim, M. (2013), Hays, D. and Ozretic, D. (2014), Mackenzie, M. and Peters, M. (2014), and Rondinelli, D. and Vastag, G. (2000). The interview lasts for one hour. It starts

with general questions regarding sustainability and environmental friendly initiatives, it continues with questions regarding environmental certifications within the hotel and it finishes with consumers satisfaction, perception and online reputation. See the interview in the Appendix 2.

Figure 13: Interview with the General Manager topics and references

Topics	References
Environmentally friendly values and initiatives	Hays, D. and Ozretic, D. (2014), Bader (2005)
Company internal objectives and practices related on sustainability	Hays, D. and Ozretic, D. (2014), Garay, L. and Font, X. (2011)
Environmental certifications and its benefits	Rondinelli, D. and Vastag, G. (2000)
Customer awareness and satisfaction	Darnall (2008)
Environmental initiatives and certifications barriers	Eldemerdash, J. and Mohamed, L. (2013), Ayuso (2007), Meade, B. and Pringle, J. (2001)
Employee's perception and training	Mackenzie, M. and Peters, M. (2014), Glavas, A. and Kelley, K. (2014), Korschun, D; Bhattacharya, C. and Swain, S. (2014)
Environmental marketing and online reputation	Atay, L; Dilek, E. and Yildirim, M. (2013)

Source: Author compilation from literature review, 2016

Secondly, this study also uses questionnaires. A questionnaire is based on pre-determined and structured questions in order to obtain information from a sample of respondents and record it (Altinay, L. and Paraskevas, A; 2008). Saunders, M; Lewis, P. and Thornhill, A. (2003) sustain that different types of data exist when using questionnaires. In this study, opinions, behaviors and attitudes are collected as the questionnaire ask respondents how they feel, what do they think, as well as what do they do and what their intentions are. Questionnaires have been previously used by academics researching this field, for instance Bohdanowicz, P. and Martinac, I. (2003), Hasan, M. and Kit, C. (2014), Garay, L. and Font, X. (2011), and Chan, E. and Wong, S. (2006). Specifically, Likert-scale questionnaires were used by Álvarez, M; Burgos, J. and Céspedes, J. (2003), and Eldemerdash, J. and Mohamed, L. (2013). The questionnaire format used is a 6-point Likert scale. The Likert scale design was developed by Likert (1932) attempting to measure attitudes, values and opinions. It functions by having a person indicating in which extent he or she agrees or disagrees with a series of statements, with 6

being strongly agree and 1 being strongly disagree. The questionnaire build from previous literature review is divided in three parts: the employee behaviors, knowledge and processes; the economic and social legitimacy; and the marketing and changes on consumers. The questionnaire sample is attached in the Appendix 4.

Figure 14: Questionnaires to employees topics and references

Topic	Reference
Employee behaviors, knowledge and processes	Eldemerdash, J. and Mohamed, L. (2013), Glavas, A. and Kelley, K. (2014)
Economic and social legitimacy	Eldemerdash, J. and Mohamed, L. (2013), Álvarez, M; Burgos, J. and Céspedes, J. (2003)
Marketing and changes on consumers	Hasan, M. and Kit, C. (2014), Álvarez, M; Burgos, J. and Céspedes, J. (2003)

Source: Author compilation from literature review, 2016

The last technique used is content analysis of documents, which consists on analyzing meanings and relationships of certain words or concepts within texts, and interpreting the messages (Altinay, L. and Paraskevas, A; 2008). This information provides further knowledge on this dissertation regarding environmental indicators and intern results and behaviors from the Hotel Barcelona Princess. The main benefits from using this data collection technique is that is very useful to analyze material and documents, is a very reliable technique and from all the research methods, it is positioned in the first places regarding ease of replication (Altinay, L. and Paraskevas, A; 2008).

9.3. Research context and participants

The research context and participants is explained for the three data collection techniques. Two semi-structured interviews were agreed to be conducted for this research, but due to primary reasons, only one interview is finally conducted in the study. In order to obtain satisfactory findings, it is essential to obtain data from people who are as representative as possible for the study. Sampling is the process in which researchers use a representative subset which is relevant to study the topic and draw appropriate conclusions (Altinay, L. and Paraskevas, A; 2008). The sampling profile for the interviews is people that have the

knowledge and manage the sustainable practices the hotel undertakes and they have access to all the key information related on sustainable certifications, improvements and changes. Therefore, the interviewee is the General Manager of the Hotel Princess Barcelona, which has been selected by the researcher with the purposeful sampling technique. Purposeful sampling is a technique used in order to identify and select the individuals or group of individuals that are especially knowledgeable about a phenomenon of interest (Creswell, J. and Clark, V; 2007). The interview help answer the study objectives of analyzing the ways the hotel manages and implements EMAS and ISO14001, as well as the advantages and disadvantages the hotel obtains from implementing them, from a managerial perspective.

Regarding the survey, random structured questionnaires are developed to 48 employees of different positions and departments in the Hotel Princess Barcelona. Three questionnaires have not been used as they were not answered. The total number of employees in the Hotel Barcelona Princess is 133, from which 45 questionnaires have been answered. Therefore, the sampling size represents the 33,83% of the total population. From the 45 questionnaires, 8 questionnaires were partially answered, which leads the questionnaires to be analyzed by the average result of each question regarding the total answers each question has received. For example, the participant 13 did not answer the question 7, which in this case the average result of the question 8 is made over a total of 44 participants, not 45. The questionnaires are directed to the employees as they study employee behaviors and practices, employee's perception about economical aspects, and employee's perception on customers. The questionnaires help answer the study objectives of analyzing the ways the hotel manages and implements EMAS and ISO14001, as well as the advantages and disadvantages the hotel obtains from implementing them, all from an employee perspective. The employees chosen for the sample are from all the departments within the hotel as each member in the hotel is involved in performing sustainable initiatives and in assuring the completion of the environmental program. Again, the sampling technique used is purposeful sampling. The distribution of the questionnaires is made via email to all the employees.

Finally, the content analysis selects the hotel internal documentation that supports the implementation of the environmental practices along with environmental results reports, supplier information and financial reports. Moreover, guiding documents from EMAS and

ISO14001 are also evaluated as they provide key information about their use, the implementation processes and the benefits.

9.4. Data analysis

The qualitative data of this study is mainly analysed from interview transcripts and document analysis. Qualitative data analysis allows converting the raw data into a logical description and explanation of the phenomenon being studied (Altinay, L. and Paraskevas, A; 2008).

The quantitative data analysis of the study comes from the questionnaire. In quantitative analysis variables are measured using scales which generate data coded and analysed through statistical methods. In this study, the Likert scale uses continuous data that is analysed using an average method. Continuous scales quantify each set of intervals as equal points along a continuum (Allen, E. and Seaman, C; 2007). In continuous scales, a mean, a standard deviation and confidence interval is often reported for each of the Likert-scale questions, but in this study only the average is applied as the statistical data has not been proved with all statistical tests, which is further explained in the section limitations.

9.5. Ethical considerations

There are some ethical principles taken into account when developing this thesis. As Yin (2003) states, findings should be generalized to theory in order for other cases to use the findings as a vehicle for their studies. The author calls this role of theory “analytic generalization” (Yin, 2003, p.38), which is the theory that may have much wider applicability than the particular case studied. In analytic generalization the study assumes that their results contribute to a general theory of the phenomenon. This is the case of this study which on one hand, sampling the Hotel Barcelona Princess is dangerous to assume that it represents all hotels. However, on the other hand, it is reasonable to assume that the results should apply to a similar category hotel within the same location, Barcelona.

What is more, researchers need to consider validity and reliability measures. Validity consists on thinking about if the methods used will actually measure what the research intends to measure. In other words, validity is the extent to which the methods used are able to produce

accurate findings and results. In regard to reliability, it consists on getting similar results if the methods used (questionnaires and interview) are repeated soon after and conditions have not changed. To sum up, although you can never prove reliability or validity conclusively, results are more accurate if the measures used are as reliable and valid as possible (Institute for Work & Health, 2016).

Finally, as a researcher an informed consent form needs to be obtained from potential research participants in order to protect their anonymity and confidentiality. The Informed consent form means that participants understand that they are taking part in a research study and what the research requires of them. The consent form used in this study is attached in the Appendix 1.

10. Findings and discussion

In this section the findings are presented and discussed by comparing the gathered data with the theoretical framework, and are structured as follow. Firstly, an overview of the company selected for this case study, the Barcelona Princess Hotel (henceforth BPH), is developed in order to provide a more specific understanding of its environmental efforts and features. Then the analysis starts with a section on behaviors, knowledge and processes, followed by a section on economic and social legitimacy aspects and ending with marketing and changes on consumers section. Each part examines first the managerial (GM interview) and second, the employee perspective (employee questionnaires), and it finally compares and discusses both perspectives linking the results with the literature review. At the end, some recommendations obtained from the findings are also established.

10.1. *Company profile*

The BPH is a 4-star urban and business hotel located in the beachfront, featuring 363 well-equipped bedrooms (Barcelona Princess Hotel, n.d.). The BPH is selected for this case study as it promotes a sustainable business and is one of the few hotels in this region implementing environmental certifications. A study accomplished to four-star hotels in Barcelona, shows that from 156 hotels, a total of 57 hotels perform CSR tasks representing the 36%, and from these CSR tasks, the 65% are environmental actions (Observatori de Turisme Responsable, 2015). The same study also mentions that the BPH being part of the Sercotel hotel chain, which consists of 161 hotels and apart-hotels (Sercotel Hotels, n.d.), is the only one explaining its responsible practices in Barcelona, as well as its mission, vision and values (Observatori de Turisme Responsable, 2015). Within its values, the hotel incorporates sustainability and social responsibility enhancing its importance and diffusion. From the General Manager point of view, being environmentally friendly means trying to optimize the resources and taking management decisions with respect to the environment. But, it is important to keep in mind as the General Manager reinforces, that although sustainable initiatives are very important for the company, the main core business is the accommodation and the gastronomy. The level in which CSR is embedded throughout the organization can contribute to significant benefits

(Glavas, A. and Kelley, K; 2014) such as employee commitment, increasing reputation and improving the company's image. As Mackenzie, M. and Peters, M. (2014) state, an effective CSR needs its recognition in hotel's mission statements and core values, hotel's strategy and hotel's operations.

The BPH with its strong commitment to sustainability and respect for the environment established the following five main principles (BCN Resorts SL, 2013), which are later discussed in the case study findings:

1. Determine own environmental aspects of the company, and assess its extent and impacts. Review them periodically and incorporate new activities.
2. Ensure compliance with applicable legal requirements.
3. Preventing pollution and saving natural resources, maintaining the quality standards.
4. Define sustainable objectives and goals, and demonstrate the continuous improvements.
5. Raise staff and customer awareness regarding sustainability

Evidence obtained from interview specifies that CSR management within the hotel involves implementing activities that are environmentally friendly, socially responsible and also are keen on developing cultural initiatives. From the team, all departments have to implement the saving measures and environmental policies the hotel establishes, by following the sustainable conducts and rules the maintenance department settles. Therefore, since 2012, all operations look for the economical efficiency, sustainability and include social responsibility criteria, which are the bases of the Princess and You 360° Program (360° circle). More data from the interview show that although the energetic efficiency results are the most significant in the income statement, the social responsibility results are the ones that produce higher pride to the BPH team. As Chan, E. and Wong, S. (2006) stress, company's motivation for adopting environmental standards is determined more by internal forces than by external ones, which includes attracting good potential employees who are proud of working for an environmentally friendly company and enhance their company's competitive position by portraying a better image.

The program Princess and You 360° involves being environmentally and socially responsible, and is focused on providing a good quality customer service as shown in the figure below (Barcelona Princess Hotel, n.d.). The General Manager explains that the Princess 360° program apart from performing environmentally friendly initiatives, it also emphasizes social responsibility mainly by incorporating people at risk of social exclusion in the team, collaborating with social entities and performing different social activities. In the same line, the Princess and You 360° Program acts in the following areas assuring energy saving, sustainability and CSR: gastronomy, reception, public areas, rooms, water areas and general areas (Barcelona Princess Hotel, n.d.).

Figure 15: Princess and You 360 Circle



Source: Barcelona Princess Hotel, n.d.

Regarding the benefits the BPH has from being environmentally friendly, the General Manager explains in the interview that two main reasons exist for the company for being sustainable: consumption and energy savings in terms of their impact in the environment and contribution towards climate change; and economic savings derived from the eco-efficiency.

Internal and external communication is also a key factor for ensuring the sustainable principles of the company; and involving all the organization team in the communication process is important in order to assure a proper maintenance of the EMS system fulfillment (BCN Resorts SL, 2013). In terms of internal communication, meetings are held regularly between the General Manager and the heads of departments to discuss about environmental topics. In the same line, annually meetings are scheduled with all the employees. Regarding external communication, the main objective of the company this year is to communicate its social and environmental initiatives to the customers, and the BPH plan to achieve it is through the Princess 360º program.

Apart from establishing these principles to raise awareness and communicate its commitment among the staff and public, the hotel is also part of the Barcelona Forum District (henceforth BFD). The BFD is a non-profit association which brings together companies, institutions and associations located in the Barcelona Forum area for developing their activities considering the following values: social responsibility, environmental commitment and cultural development (Barcelona Forum District, n.d.). As the General Manager of the BPH remarks on the interview, being part of the Barcelona Forum District gives the company recognition, prestige and better relation with other institutions, basically the city government. Each of those benefits could relate to two theories from the literature; recognition and prestige related to the reputation and risk management theory by which benefits such as improved loyalty from employees, greater decision-making and potential for value creation are obtained (Little, P. and Little, B; 2000); and better relations relates to stakeholder theory which emphasize that a respectful and proactive attitude towards stakeholders provides success and creates value (Porter, M. and Kramer, M; 2006).

Figure 16: Barcelona Forum District



Source: Barcelona Princess Hotel, n.d.

Moving to online reputation benefits which are also part of the reputation and risk management theory mentioned above, the BPH also outstands with its sustainable practices in social networks. Tripadvisor granted the Gold Greenleader Label to the hotel thanks to its great impact on establishing green practices by implementing eco-friendly measures like recycling and using local and fair-trade food (Barcelona Princess Hotel, n.d.). As Cunningham et al. (2010) assert, the influence of social media in tourism has been the subject of extensive research, and some interesting findings have been reported. For instance, the electronic word-of-mouth (henceforth eWOM) is much more efficient than the old fashioned one, so positive and negative comments on TripAdvisor have much greater impact on customers. Regarding the BPH, it is difficult to measure which are the positive impacts caused by online reputation regarding sustainability as the level of customer's awareness on the hotel's environmental certifications is not clear.

Figure 17: Tripadvisor Gold Greenleaders



Source: Tripadvisor, 2016

To conclude, the BPH environmental commitment is reflected on the implementation of the ISO14001 standard in 2006 and the registration to EMAS certification in 2013 (Barcelona Princess Hotel, n.d.). Both environmental certifications cause impacts on the hotel which will be reflected on the following sections from two different perspectives, the managerial and the employee perspective.

10.2. Behaviors, knowledge and processes

In this section, behaviors, knowledge and processes, which encompass the study of environmental aspects, knowledge and skills, and altruistic aspects regarding the implementation of environmental certifications are presented from two different perspectives,

the managerial and the employee perspective. Later, the results are discussed integrating both perspectives and the literature review.

10.2.1. Managerial perspective on behaviors, knowledge and processes

The General Manager highlighted several advantages and disadvantages regarding the implementation of environmental certifications, which are displayed on the Figure 18.

To start with, the main advantages are the following. First, Environmental Certifications help the company to achieve environmental improvements such as energy saving or reduction of waste, which was one of the main reasons the GM declared to be engaging with CSR. Secondly, Environmental Certifications (in this case ISO14001 and EMAS) serve as a guide and action protocol for the company to implement its sustainable initiatives and improve its environmental results. Finally, the General Manager indicates that employees are happy and proud to work in a company with a strong CSR commitment. Regarding the disadvantages, the General Manager remarks the lack of resources to consolidate a higher number of environmentally-friendly initiatives, and employee's initial difficulties to be involved and adapted on the company's environmental initiatives.

Figure 18: Advantages and disadvantages on behaviors, knowledge and processes from implementing Environmental Certifications - the managerial perspective

Advantages	Disadvantages
ISO14001 serves as a guide and pattern to develop the company initiatives	At the beginning it was difficult to involve employees to pursue environmental initiatives and to adapt them to changes
EMAS is also an action protocol that helps the hotel improve its consumptions and the management implemented	
Having implemented an environmental certification from 2004 since now, has caused more than 30% in energy saving	There is lack of resources to develop as much actions as the hotel would like to (environmental training...)
The employees are happy and proud to work in a company implementing environmental initiatives and cooperate with social entities	

Source: author's own development (2016)

10.2.2. Employee perspective on behaviors, knowledge and processes

Figure 19 shows the results of the employee questionnaire, which evidence that employees somewhat agree on their interest in contributing with sustainable initiatives and so they apply the initiatives in their daily life. Employees also somewhat coincide on being more motivated and committed working in an environmentally-friendly hotel. What is more, although the company somewhat communicates its green initiatives to employees, and these considerably agree on being aware of the hotel environmental certifications, employees disagree on being rewarded for performing environmental initiatives. Finally, results evince the important fact that while employees somewhat agree on having received some training about sustainability, they still feel they could improve their knowledge and practice to perform in a sustainable way.

Figure 19: Employee perspectives on behaviors, knowledge and processes

Questions	Average Result
Q5 - I am aware of the environmental certifications the hotel has achieved	4,5
Q4 - I am interested in contributing with sustainable initiatives	4,5
Q6 - I have received some training about sustainability	4,4
Q8 - The company communicates in a clear way which green initiatives the employees should implement	4,3
Q1 - I have applied the environmental initiatives at my home (recycling, energy saving...)	4,3
Q3 - I am motivated and I feel more committed working in an environmentally-friendly hotel	4,2
Q2 - I feel I need more knowledge and practice to perform in a sustainable way	3,7
Q7 - I needed to change my tasks in order to meet the environmental standards	3,6
Q9 - The hotel rewards the employees with the best environmental initiatives	2,8

Source: author's own development (2016)

10.2.3. Discussion and comparison of both perspectives

To start with, the General Manager asserts that the implementation of environmental certifications causes an increase in energy savings and improvements in environmental

aspects, which has been previously highlighted in the literature (Hasan, M. and Kit, C; 2014; Jovicic, 2011; Eldemerdash, J. and Mohamed, L; 2013; and Chan, 2010). The principle 4 the BPH established is to define sustainable objectives and goals, and demonstrate the continuous improvements (BCN Resorts SL, 2013). These objectives and goals refers to keeping gas consumption, reducing electricity consumption, reducing water consumption, residue consumption, and management and recovery of residues (BCN Resorts SL, 2013). In fact, Eldemerdash, J. and Mohamed, L. (2013) stress that certifications help reduce hotel's expenses such as water and energy waste. Also, Hasan, M. and Kit, C. (2014) indicate that ISO14001 helps reducing greenhouse gas emissions and streamlines waste management. From these objectives, its compliance has been mostly achieved in its whole in all the set goals (see Figure 20), which shows that the implementation of environmental certifications has originated some environmental improvements in the BPH (BCN Resorts SL, 2013).

Figure 20: Environmental improvements in the BPH in 2013

EMAS Indicators	Performance in 2013
Electricity consumption	Reduced by 17,22% from 2013 to 2012
Water consumption	Reduced by 2,49% from 2013 to 2012 (saving of 3,77%)
Vegetable products	85% are seasonal cuisine and proximity vegetable products
Paper consumption	Reduced by 40% from the maintenance department by delivering welcome manuals and training agendas all by email

Source: author's own development (2016)

Moving to the analysis of behaviors and motivations perceived in the working environment, both employees and managers agree on the fact that employees are happier, more committed and more proud to work in an environmentally-friendly hotel. This has been previously acknowledged by Chan (2010) who indicates that ISO14001 raises employee motivation; by Mackenzie, M. and Peters, M. (2014) who states that Environmental Certifications causes positive changes in employee's mindset, and by Hasan, M. and Kit, C. (2014) who mentions that ISO14001 increases employee's desire to be moral and ethical in the environment.

Employee commitment is also reflected on the employee's participation to the Hotel Blog (Princess Hotels & Resorts, 2016) sharing ideas about environmental and CSR aspects (BCN Resorts SL, 2014).

Regarding the knowledge and skills aspects, the General Manager asserts that both ISO14001 and EMAS serve as a guide for the company to develop its environmental initiatives and act as an action protocol to improve the hotel's environmental performance. Authors such as Hasan, M. and Kit, C. (2014); Jovicic (2011); and Garay, L. and Font, X. (2011) also emphasize that Environmental Certifications provides the framework to improve the company's environmental performance and objectives, and to achieve continuous innovation and higher learning. What is more, while employees somewhat agree on having received some environmental training, the General Manager argues that a lack of resources exist as the hotel would like to develop more environmental actions and increase training activities. As Ferreira, A; Lopes, M. and Morais, J. (2006) emphasize, understanding and applying an EMS requires a certain level of technical knowledge and skill which Small and Medium Hotels (henceforth SMH) managers do not have. Eldemerdash, J. and Mohamed, L. (2013) also affirm that a lack of training exist regarding the ISO14001.

To sum up, it is important to highlight that environmental improvements are easier to detect and measure, while the other improvements from implementing environmental certifications which are explained in the following sections, such as gaining online recognition or enhancing employee commitment, are more difficult to measure but equally relevant for the company.

10.3. Economic and social legitimacy aspects

In this section, the economic and social legitimacy aspects are analyzed from two different perspectives, the managerial and the employee perspective. Firms acquire legitimacy by conforming to institutional or customers pressures, by regulatory compliance and by linking social responsibility practices to financial performance (Álvarez, M; Burgos, J. and Céspedes, J; 2003), which are further contemplated below.

10.3.1. Managerial perspective on economic and social legitimacy aspects

The General Manager's perception on economic and social legitimacy aspects is represented among advantages and disadvantages on the Figure 21.

The main advantages include continual improvements from performing Environmental Certifications thanks to periodical audits and reviews, and economical benefits in a long-term perspective. Regarding the disadvantages one of the main barriers are costs from implementing environmental initiatives, which are mainly high in a short-term period. These costs are not only monetarily, but also consist of costs in resources.

Figure 21: Advantages and disadvantages on economic and social legitimacy aspects from implementing Environmental Certifications – the managerial perspective

Advantages	Disadvantages
ISO14001 helps us improve year over year through annually audits that review the fulfillment of the requirements established	Costs exist when implementing environmental initiatives, but if the cost is assumed and compensated within a short and medium time period (max 3 years) the company accepts the cost
In the long-term perspective the company can amortize most of the inversions and even save money	In a short term perspective, the initial inversion to get a certification is considerably high in resources as well as in monetarily aspects

Source: author's own development (2016)

10.3.2. Employee perspective on economic and social legitimacy aspects

Figure 22 shows the results of the employee questionnaire, which evidence that most of the employees are sustainable in order to contribute to the environment in spite of obtaining other benefits, such as reducing costs or obtaining better image. Moreover, employees somewhat agree on the fact that regardless of the costs the hotel has to face from being sustainable, benefits are achieved as well. The results also evidence that employees somewhat disagree on the point that the hotel is being rewarded from improving its environmental behavior. Finally, employees are not very aware of its competitor's environmental initiatives, but they somewhat disagree on the fact that sanctions are imposed to hotels that do not protect the environment by implementing environmental certifications.

Figure 22: Employee perspectives on economic and social legitimacy aspects

Questions	Average Result
Q15 - I value more being sustainable in order to contribute with the environment than other possible benefits (image, economical...)	4,5
Q13 - I know the hotel has to face some costs from being sustainable	4,3
Q14 - I know the hotel has some benefits from being sustainable	4,0
Q12 - I know that other hotels from the area are being sustainable too	3,9
Q10 - Sanctions are imposed if the hotel does not protect the environment	3,7
Q11 - The hotel is being rewarded if it improves its environmental behavior	3,7

Source: author's own development (2016)

10.3.3. Discussion and comparison of both perspectives

Having evaluated both perspectives, the economic aspects are analyzed beforehand. To begin with, the General Manager and employees coincide that an important barrier is the costs the hotel needs to face from implementing and performing Environmental Certifications, which has been previously highlighted in the literature (Jovicic, 2011; Ayuso, 2007; Chan, 2010; Bohdanowicz, P. and Martinac, I; 2003; and Hasan, M. and Kit, C; 2014). While costs are of great concern for companies, economical savings and other benefits play an important role in order to counteract costs. Both the General Manager and employees report that economical benefits are obtained from being sustainable. Hasan, M. and Kit, C. (2014) expose that ISO14001 standard helps reducing costs due to improvements on the hotel's operations. As remarked on the interview, the BPH in order to obtain larger savings, intends to acquire the most economical and the most energy efficient devices, while meeting the quality standards. This is also remarked on the principle 3 of the BPH (BCN Resorts SL, 2013) which is about preventing pollution and saving natural resources, while maintaining the quality standards. An example obtained from a first-hand source of the BPH, details that the total annually savings from replacing old TVs for more efficient ones is over 3.000€. Another relevant example from the same source outlines that changing the hotel old lightning system to light-emitting diode (henceforth LED) has generated huge savings. As the previous examples show, performing environmental initiatives leads to economical savings. Equally, Jovicic (2011) emphasize that implementing EMAS cause a positive effect on the company's profitability.

The study completed by BCN Resorts SL (2014) shows that the 75% of company's actions are based on environmental aspects, while only the 4% are related to economical aspects. From the economic field, the 100% of the actions performed are focused on helping the local economy and not for the company's own profits. One of the examples the BPH is doing is the Micro Donations of 1€ to "El Banc d'Aliments" (Barcelona food bank association), which raised a total of 1.722€ between the Hotel and workers. These philanthropic actions are studied by Glavas, A. and Kelley, K. (2014) who mention that effects of CSR exist when employees perceive that organizations are caring for the well-being of others through actions such as embedding societal and environmental benefits. The author also emphasize that employees find meaningfulness at work when the organization is working towards higher purposes, such as being involved in social and humanitarian activities.

Moving to legitimization aspects, the General Manager asserts that ISO14001 helps the company to fulfill all the requirements established through annual audits. The same is affirmed by Chan (2010) expressing that ISO14001 ensures that a firm complies with all environmental legislation, and Jovicic (2011) who states that EMS periodical evaluations corrects measures before problems are detected. The principle 2 of the BPH mentioned before (BCN Resorts SL, 2013) is about ensuring compliance with applicable legal requirements. An example of the legal requirements of the BPH is the fulfillment of the Law 20/2009, of December 4, which governs the environmental prevention and control of the activities (BCN Resorts SL, 2014). What is more, while authors (Chan, 2010; and Hays, D. and Ozretic, D; 2014) assert that a lack of qualified verifiers or consultants regarding environmental certifications and limitations on the industry regulations exist, the General Manager has not provided any clarification on this topic, but only mentioned that external verifiers help the organization to continually improve its environmental performance.

To conclude, the General Manager states that being part of the BFD provides better relation with other institutions, basically the city government. Theory linked on this fact is represented by Jovicic (2011) who pronounces that a positive discrimination in favor to enterprises that implement EMAS exists by the state authorities.

10.4. Marketing and changes on consumers

In this section, the marketing and changes on consumer's aspects are analyzed from two different perspectives, the managerial and the employee perspective. The hotel industry is somehow characterized by achieving customer satisfaction, which can be increased by providing a good marketing strategy. For this reason, this section analyzes marketing and customers regarding its relation with the implementation of environmental certifications.

10.4.1. Managerial perspective on marketing and changes on consumers

The General Manager highlighted several advantages and disadvantages on marketing and changes on consumers regarding the implementation of environmental certifications, which are displayed on the Figure 23.

To begin with, the main advantages are obtaining good recognition, being more competitive and increasing online reputation. Regarding the disadvantages, the General Manager indicated the following. Firstly, consumer engagement to behave in a sustainable way is still low and they still not include environmental aspects to their purchasing decisions. And lastly, customers tend to associate an environmentally-friendly hotel to a decrease on the quality of services and products.

Figure 23: Advantages and disadvantages on marketing and changes on consumers from implementing Environmental Certifications - the managerial perspective

Advantages	Disadvantages
The ISO14001 gives us recognition of good practices (one of the few hotels in Catalonia with the certification)	There is still very few customers concerned and willing to choose a hotel by its environmental practices: importance of communication
ISO4001 helps us being more competitive	The customer associates environmental initiatives as a decrease of quality on the products and services
The hotel gains online recognition for being ecofriendly (Tripadvisor)	There is still lack of commitment and education by customers regarding environmental practices

Source: author's own development (2016)

10.4.2. Employee perspective on marketing and changes on consumers

Figure 24 shows the results of the employee questionnaire, which evidence that employees agree on the fact that the hotel organizes green activities and events. The results also show that while customer's perception on sustainable practices is mainly positive, employees somewhat disagree on customers behaving in a sustainable way and being satisfied from performing sustainable practices. Finally, results evince that employees somewhat disagree on customer's being attracted to the hotel because of its green practices and somehow disagree on the fact that the BPH is promoting its green initiatives.

Figure 24: Employee perspectives on marketing and changes on consumers

Questions regarding marketing and changes on consumers	Average Result
Q21 - The hotel organizes green activities and events	4,4
Q20 - Customer's perception on sustainable practices is positive	4,2
Q18 - Customers are attracted to the hotel because it is green	4,0
Q19 - The hotel is promoting its green initiatives	3,9
Q16 - Customers behave in a sustainable way	3,2
Q17 - Customers are not satisfied by performing sustainable practices	2,7

Source: author's own development (2016)

10.4.3. Discussion and comparison of both perspectives

To start with, the General Manager asserts that the implementation of environmental certifications causes some marketing improvements to the hotel, mainly increasing its recognition and competitiveness. Data from the interview show that the ISO14001 standard and other environmental initiatives give the BPH recognition of its good practices and help the company to be more competitive. This has been previously highlighted in the literature (Jovicic, 2011; Hamschmidt, J. and Dyllick, T; 2001; Garay, L. and Font, X; 2011; and Hays, D. and Ozretic, D; 2014).

What is more, both the General Manager and employees agree on the importance of communicating the environmental efforts to customers, as results from the questionnaire and data from the managerial perspective show, promotion of green initiatives need to be increased. The main objective of the BPH in 2016 is to communicate its social and

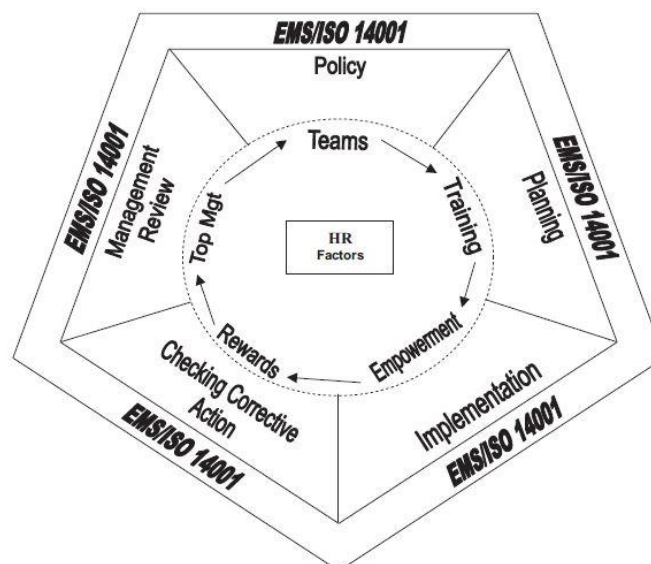
environmental initiatives through the Princess 360^o program, although as remarked by the General Manager, a lack of commitment and education by employees and low concern and engagement from customers regarding sustainable initiatives still exist. The importance of communicating the environmental initiatives to customers and employees lies on the principle 5 of the BPH (BCN Resorts SL, 2013) based on raising staff and customer awareness regarding sustainability. But, it is important to bear in mind, as the General Manager emphasizes, that customers and employees are still quite unaware of the environmentally-friendly initiatives of the hotel. Consequently, an effective communication is needed to increase their awareness and the next step would be to measure their perceptions in order to know the benefits obtained from the implementation of environmental initiatives.

In relation to online reputation, although the manager assumes the hotel gains online recognition from being ecofriendly (mostly in Tripadvisor), he also points out that the majority of customers do not publish online opinions about sustainable aspects, which is emphasized by Rondinelli, D. and Vastag, J. (2000) who state that ISO14001 does not cause an evident customer impact. The report (BCN Resorts SL, 2014) indicates that the BPH uses the digital media to engage all their customers and the community about environmental aspects. This engagement is done consistently through social networks, the hotel's website and the official blog of the BPH. An example is the achievement of the hotel objective in 2014 on gaining online visibility which was to create a whole section about sustainability in the hotel's website (BCN Resorts SL, 2014). As Noone, B; McGuire, K. and Rohlf, K. (2011) state, an effective social media requires an understanding of the consumer's purchasing habits. This means that organizations need to comprehend what customers value when making a purchase decision. Cunningham et al. (2010) also show in their study that social media sites feature prominently in travel search results, being Tripadvisor as the most outstanding site in this regard. This indicates that search engines link travelers directly to social media sites, so hotels implementing a strong strategy on communicating its green values and initiatives will increase the impact on potential customers.

Regarding changes on consumers, employees somewhat disagree on customer's being attracted to the hotel because of its green practices, and the main reason might be, as the General Manager points out, that customer associates environmental initiatives as a decrease

of quality on the products and services. This has been previously mentioned by Bohdanowicz, P. and Martinac, I. (2003) who assert that the fear of environmental initiatives affects negatively customer comfort and satisfaction. An example explained by the General Manager is that by changing the way yoghurts are provided in order to reduce waste (instead of offering individual packs, using a bulk) customers perceive it as a decrease of quality. This is the reason why communication is essential, so employees and customers would be aware of the reasons of change. An objective of the BPH in 2014 was to inform customers in the buffet about proximity products and with eco-label, but this was not achieved (BCN Resorts SL, 2014). Results from the interview reflect that customer and employee satisfaction is still not measured regarding the environmental initiatives the hotel implements. In this regard, Daily, B. and Huang, S. (2001) stress that the interaction of Human Resources (henceforth HR) factors such as top management support, training, employee empowerment, teamwork, and rewards integrated in the EMS and ISO14001 five basic elements: policy, planning, implementation, checking corrective action and management review, can provide improvements on the organization's environmental performance; as it is represented on the EMS-HR factors model below.

Figure 25: The EMS-HR factors model



Source: Daily, B. and Huang, S. (2001)

10.5. Recommendations on environmental certifications for hoteliers

This section offers some recommendations drawn from the findings in order for hoteliers to improve their performance when implementing environmental certifications.

To start with, findings from the interview and questionnaires revealed that a lack of training exist in the BPH regarding sustainability. Consequently, an increase on training activities should be established in hotels in order to improve employee's knowledge and practice to perform in a sustainable way. But, as the General Manager argues, that lack of training is basically caused by a lack of resources which keep the hotel from being able to develop training activities. In this case, the recommendation is that results from implementing environmental training activities should be analyzed and if positive outcomes outweigh the negative ones, mainly identified as resources investments (such as time or economical aspects), then the training should be implemented. Based on the above recommendation, Morrow, D. and Rondinelli, D. (2002) also emphasize that training can bring great benefits, as it serves not only to remind employees about environmental issues, but also to encourage improvements.

The second recommendation is about increasing rewards to the employees who perform the best environmental initiatives, as results from the questionnaires show that employees disagree on being rewarded for performing environmentally friendly actions. Mackenzie, M. and Peters, M. (2014) assert that incentives and rewards to employees that participate in CSR projects are important to share success, and encourage employees to voice their complaints and ideas. In this regard, the recommendation would be to implement employee reward systems, such as reward and recognition programs, to motivate employees and reward their performance.

Finally, the last recommendation is to measure the results that the environmental certifications cause to employees and customers. In this case, perceptions of employees and customers on taking part in environmental initiatives should be analyzed in order to study how the company can improve its environmental initiatives to achieve a better performance and adjust them to meet the requirements and expectations of the employees and customers.

11. Conclusions and implications

After conducting this undergraduate dissertation I am able now to draw the conclusions about the advantages and disadvantages from implementing Environmental Certifications in the hotel industry, concretely at the Barcelona Princess Hotel. In this section, conclusions are structured by each of the study objectives, as well as a general conclusion from the aim of the research is provided at the end.

11.1. Conclusion Objective 1

The first objective of the study was to research the theoretical framework containing the data collected from previous research studies related to green practices, sustainable policies and environmental certifications implemented in hotels. The theoretical research being structured in different sections has showed the following results.

Environmental concern started growing significantly in the 1990s (Atay, L; Dilek, E. and Yildirim, M; 2013) which caused the appearance of environmental management by implementing EMS and standards for companies to regulate their environmental performance. The two most frequently used guidelines for EMS are the international standard, ISO14001, and the European standard, EMAS (Morrow, D. and Rondinelli, D; 2002). Whilst EMS help companies to achieve advantages in reducing costs, attract new customers, reduce negative impacts on the environment, add brand value, increase employee commitment, achieve continuous innovations and gain stakeholder integration (Hays, D. and Ozretic, D; 2014; and Garay, L. and Font, X; 2011), they also entail several disadvantages and challenges such as lack of knowledge and staff skills, lack of commitment by organizations, limited capital budgets, lack of innovation, poor guest attitudes, lack of awareness and recognition by customers and high costs of implementation and maintenance, which need to be faced in order to achieve a sustainable and responsible business (Hamschmidt, J. and Dyllick, T; 2001; Eldemerdash, J. and Mohamed, L; 2013; Jovicic, 2011; and Bien, 2008). To conclude, previous theoretical research also proved that stakeholders play a crucial role in implementing sustainable strategies in the hotel industry as they provide an active support and cooperation to the organizations (Bohdanowicz, P. & Martinac, I; 2003).

11.2. Conclusion Objective 2

The second objective of the study was to analyze the benefits of implementing EMAS and ISO14001 in the BPH. The managerial and the employee perspective from the interview and the questionnaires showed that benefits from implementing EMAS and ISO14001 can be obtained at a wide range of areas such as the environmental, employee behaviors and skills, economic, legitimacy, and marketing and reputation.

Environmental benefits are mainly related to energy savings, and water, gas, and residues reduction as also highlighted on the previous literature (Hasan, M. and Kit, C; 2014; Jovicic, 2011; Eldemerdash, J. and Mohamed, L; 2013; and Chan, 2010). The EMS in the case study also impacts behaviors and motivations, contributing to more committed, happier and proud employees to work on an environmentally-friendly hotel, as well as changes in employee's mindset to be moral and ethical with the environment as previous literature (Mackenzie, M. and Peters, M; 2014; Chan, 2010; and Hasan, M. and Kit, C; 2014). The hotel also benefits from the tools as they provide guidance to improve the environmental performance of the organization, and they help achieve continuous innovation and higher learning, previously seen in the literature (Hasan, M. and Kit, C; 2014; Jovicic, 2011; and Garay, L. and Font, X; 2011). Economical benefits are mainly economical savings and reducing costs due to improvements on the hotel's operations as asserted in the literature (Jovicic, 2011; Ayuso, 2007; Chan, 2010; Bohdanowicz, P. and Martinac, I; 2003; and Hasan, M. and Kit, C; 2014). Moving to legitimization benefits, they help the hotel to comply with the environmental legislation and to have a better relation with other institutions, as previous literature shows (Chan, 2010; and Jovicic, 2011). Finally, the main marketing benefits are increasing the hotel's recognition and competitiveness, as well as engaging customers about environmental aspects through social media, as seen in the literature (Jovicic, 2011; Hamschmidt, J. and Dyllick, T; 2001; Garay, L. and Font, X; 2011; and Hays, D. and Ozretic, D; 2014).

At last, a main difference between the managerial and the employee perspective is found in the findings results. While employees agree on having received some environmental training, the General Manager argues that a lack of resources exist as the hotel would like to perform environmental training activities, which proves a controversial perception on training aspects.

11.3. Conclusion Objective 3

The third objective of the study was to explore the disadvantages of implementing environmental management systems in the BPH. The disadvantages founded regarding perspectives, the managerial and the employee, comprise the following areas: employee knowledge and skills, economic, marketing and reputation, and changes on employees and consumers.

Knowledge and skills disadvantages are mainly a lack of resources to develop more environmental actions and increase training activities in the hotel, and lack of technical knowledge from the managerial side, as also highlighted on the previous literature (Ferreira, A; Lopes, M. and Morais, J; 2006; and Eldemerdash, J. and Mohamed, L; 2013). Economical costs are also an important barrier for implementing and performing Environmental Certifications, as previously seen in the literature (Jovicic, 2011; Ayuso, 2007; Chan, 2010; Bohdanowicz, P. and Martinac, I; 2003; and Hasan, M. and Kit, C; 2014). Moving to marketing and reputation disadvantages, promotion of green initiatives need to be increased, and the majority of customers still do not publish online opinions about sustainable aspects, as asserted in the literature (Rondinelli, D. and Vastag, J; 2000). Finally, the main employees and consumers disadvantages on performing environmental initiatives are lack of commitment and education by employees and low concern and engagement from customers. Also, lack of awareness and lack of measures on customers and employees perceptions exist, as seen in the literature (Daily, B. and Huang, S; 2001). At last, customers are not attracted to green hotels as they associate environmental initiatives as a decrease of quality on the products and services, also mentioned by the authors (Bohdanowicz, P. and Martinac, I; 2003).

To conclude, neither the General Manager nor the employees have mentioned any disadvantage regarding environmental and legitimacy aspects, although in the literature some environmental and legitimacy disadvantages were established (see figures 1, 3 and 8).

11.4. Conclusion Objective 4

The fourth objective of the study was to draw conclusions and suggestions for the hoteliers in order to improve the management of environmental impacts. From the data collected during the research and the recommendations presented before in the findings, the following conclusions and suggestions are obtained.

To begin with, the first suggestion is to increase the number of training activities the hotels implement in order to improve employee's knowledge and practice to perform in a sustainable way. Establish rewarding initiatives to employees is what follows. Increasing rewards to those employees who perform in the best sustainable way by implementing an employee reward system and recognition programs in order to increase employee's motivation and reward their environmental performance. Last but not least, another suggestion is to measure the results obtained from employees and customers who develop environmental certifications by analyzing their perceptions, behaviors and improvements from developing environmental initiatives.

To conclude, these suggestions intend to provide recommendations to hoteliers in order to perform more efficiently their management on implementing Environmental Certifications.

11.5. Conclusion Aim

The last conclusion is based on fulfilling the aim of this research study, which is to explore the implementation of green practices in the Hotel Princess and investigate the benefits that the hotel can obtain from implementing certifications such as the ISO14001 and EMAS.

The aim is accomplished by the interview and questionnaires that compare both perceptions at a managerial and operational level on behaviors, knowledge and processes, economic and social legitimacy aspects, and marketing and changes on consumers.

It is important to remark, that results show that benefits from implementing environmental certifications in the BPH are more seen at a managerial level than at an operational level, which causes a gap in some aspects, such as environmental training or communication, between what the managers implement and what the employees perceive.

12. Limitations and further research

12.1. *Limitations*

When conducting the research study, the limitations found are in data accessibility, sample size, methods used and validity. The first obstacle the researcher encountered was not being able to undertake the second interview with the Sustainability Manager that was planned from the beginning, since the manager was on sick leave. Failing to conduct the interview caused the loss opportunity to obtain more specific information on environmental management, since that manager was the one coordinating the EMAS and ISO14001, and he would have provided another point of view about the environmental aspects applied in the hotel.

Another limitation confronted was the size of the study sample. Being a single case study in which only the study of the BPH is analyzed can cause very specific and limited results, which may only be applied to the specific hotel analysed. Due to time limitations, other hotels implementing environmental initiatives were not studied, which could have expanded the single case study into a multiple case study research by comparing different organizations providing wider points of view and results. Generalization is when the study assumes that their results contribute to a general theory of the phenomenon (Yin, 2003), and in this case it is dangerous to assume that results obtained from the study of the BPH can represent all hotels.

Furthermore, the way the method used for the questionnaires was analyzed, the Likert-scale, was also perceived as a limitation. In the study, only the average was applied in analyzing the data obtained. While in continuous scales a mean, a standard deviation and confidence interval is often reported for each of the questions, in this study only the average was contemplated. What is more, Likert-scales treat the ordinal data as interval data and when doing the average an implicit assumption that the scale items are evenly spaced might not be totally correct (Allen, I. and Seaman, C; 2007).

The last element found as a limitation was the validity of the findings. When analyzing the results from the questionnaires, a standard deviation which provides an indication of how far the individual responses to a question vary from the mean was not contemplated (Institute for Work & Health, 2016), which may induce to some errors.

Finally, the researcher expects that although some limitations and inconvenience were faced, these would not have affected unduly the findings and conclusions.

12.2. Further research

Implementing Environmental Certifications in a hotel offers a wide range of benefits as it is showed in the literature research, findings and conclusions. However, some challenges were appreciated that can be improved.

First of all, the field of sustainable practices in the hospitality industry could be deepened by looking at more cases of hotels studying the benefits from implementing environmental certifications. In this regard, comparisons between the benefits and challenges according to the size of hotels (large, medium or small) could provide new insights within the research in the field of EMAS and ISO14001 in the hospitality industry.

Also, other studies could contemplate the variation of benefits and challenges of implementing environmental certifications depending on which continent the hotel is located. The research could focus on if continents with more EMS implemented have higher benefits, or on the contrary, if continents with less EMS implemented have lower benefits and more challenges to confront.

Finally, this study was focused mainly on the managerial and employee perspective. Other perspectives such as the customer or stakeholder perspective could also be further studied in order to analyze their attitudes, behaviors and context in regard to the environmental field.

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