



VAASAN AMMATTIKORKEAKOULU
VASA YRKESHÖGSKOLA
UNIVERSITY OF APPLIED SCIENCES

Katja Koivusalo

ENVIRONMENTAL MANAGEMENT
IN FINNISH TOURISM COMPANIES

Business Economics and Tourism
2011

VAASAN AMMATTIKORKEAKOULU

UNIVERSITY OF APPLIED SCIENCES

Degree Programme of Hospitality Management

ABSTRACT

Author Katja Koivusalo

Title Environmental management in Finnish tourism companies

Year 2011

Language English

Pages 61 + 8 appendices

Name of Supervisor Peter Smeds

The aim of this thesis is to study the expectations and experiences from having an environmental management system (EMS) in a Finnish tourism company. Another aim is to look into what sorts of EMSs are operating in Finland and which ones seem to be more effective than others.

A quantitative research method is used in the study by having an online questionnaire sent to the respondents. The target group has been companies in which an EMS is already in use in the company in order to study their opinions on the performance and if the expectations have been met. There are different environmental management systems presented in the paper. The results show that some of them do not have any certified businesses at all in Finland, while others are more established and have showed positive results.

This thesis has been done in Barcelona during June-November 2010 and the supervisor has been Peter Smeds.

Keywords Environmental management, Environmental management systems

VASA YRKESHÖGSKOLA

Utbildningsprogrammet för företagsekonomi och turism

ABSTRAKT

Författare	Katja Koivusalo
Lärdomsprovets titel	Miljöledning i finländska turismföretag
År	2011
Språk	Engelska
Sidantal	61 + 8 bilagor
Handledare	Peter Smeds

Syftet med detta lärdomsprov var att studera finländska turismföretags förväntningar och erfarenheter av att ha i bruk ett miljöledningssystem. De miljöledningssystem som existerar i Finland studerades också och studien visade vilka som verkade vara effektivare än andra.

En kvantitativ undersökningsmetod genomfördes genom en online-enkät som skickades till respondenterna. Målgruppen för studien var sådana företag som redan hade ett miljöledningssystem i användning för att man skulle få fram åsikter om vilka miljöledningssystem som var i bruk, hur väl de hade fungerat samt om de hade uppnått tidigare förväntningar. Flera miljöledningssystem presenteras i arbetet och studien visade att några av dem inte alls var etablerade i Finland och därmed inte hade några finländska certifierade företag alls, medan andra väletablerade system har visat goda resultat.

Detta lärdomsprov genomfördes i Barcelona under tiden juni-november 2010 och handledaren för arbetet var Peter Smeds.

Nyckelord Miljöledning, miljöledningssystem

CONTENTS

LIST OF ACRONYMS AND ABBREVIATIONS.....	5
LIST OF FIGURES.....	6
LIST OF TABLES.....	7
LIST OF APPENDICES.....	8
1 INTRODUCTION.....	9
1.1 Aims and Objectives.....	9
2 ENVIRONMENTAL IMPACTS OF TOURISM.....	10
2.1 Positive environmental impacts.....	10
2.2 Negative environmental impacts.....	11
2.3 Sustainable development.....	12
2.3.1 Finland and sustainability.....	14
2.3.2 Sustainable tourism.....	14
3 ECOTOURISM.....	16
3.1 Definition.....	16
3.2 Costs and benefits of Ecotourism.....	18
3.3 Opinions.....	19
3.4 The future of Ecotourism.....	20
4 ENVIRONMENTAL CHALLENGES.....	21
4.1 The forest.....	21
4.2 Water.....	22
4.3 Energy.....	22
4.4 Waste.....	22
4.5 Climate change.....	23
5 ENVIRONMENTAL MANAGEMENT SYSTEMS & CERTIFICATION PROGRAMMES.....	25
5.1 ISO 14001.....	26
5.2 EMAS.....	27
5.3 Earthcheck.....	28
5.4 Green Globe.....	28

5.5 Green Tourism of Finland	29
5.6 Green Office (WWF Finland)	30
5.7 The European Ecolabel	31
5.8 The Nordic Ecolabelling	32
5.9 EcoCompass Environmental Management System	32
5.10 ECEAT	33
5.11 Comparing the EMSs	34
6 THE RESEARCH	37
6.1 Research methods.....	37
6.2 Validity and reliability in research.....	38
6.3 Questionnaire design.....	39
6.4 Selecting the sample group	40
6.5 Implementing the research	41
7 RESULTS	42
7.1 Question 1: Company size	42
7.2 Question 2: Sector of operation.....	43
7.3 Question 3. Environmental Management system in use in the company .	44
7.4 Question 4: How the EMS was encountered.....	46
7.5 Question 5: Implementation time of the EMS	48
7.6 Question 6: Factors that contributed to the adoption of the EMS.....	50
7.7 Question 7: Expectations on the EMS.	53
7.8 Question 8: Reregistering for an EMS, with achieved experiences.....	55
7.9 Limitations of the research.....	56
7.10 Conclusion.....	57
8 LIST OF REFERENCE:	58
APPENDICES	

LIST OF ACRONYMS AND ABBREVIATIONS

CSR	Corporate Social Responsibility
ECAP	Environmental Compliance Assistance Programme for SMEs
EMAS	Environmental Management and Audit Systems
EMS	Environmental Management System
ERDF	European Regional Development Fund
ESI	(World Economic Forum's) Environmental Sustainability Index
EU	European Union
ISO	International Standards Organisation
SFS	Suomen Standardisoimisliitto (the Finnish Standards Association)
SME	Small and Medium-sized Enterprises
TIES	The International Ecotourism Society
WPI	Water Poverty Index
WTTC	World Travel and Tourism Council
WWF	World Wide Fund for nature

LIST OF FIGURES

Figure 1. The traditional sustainability model. (Kane. 2010: 5)	12
Figure 2. “Fried egg” model of sustainability. (Kane. 2010: 6).....	13
Figure 3. Sustainable development and sustainability. (Kane. 2010: 5).....	13
Figure 4. Global carbon dioxide emissions from fossil fuel burning. (Marburger, J. 2008: 50)	23
Figure 5. The climate map of Europe 2071.....	24
Figure 6. The “Plan, Do, Check, Act” model. (Kane. 2010: 47)	27
Figure 7. The steps to EMAS (Environmental administration Finland)	29
Figure 8. Green Tourism of Finland logo	30
Figure 9. Green Office Finland logo	31
Figure 10. The European Ecolabel.....	32
Figure 11. The Nordic Ecolabelling logo.....	32
Figure 12. The Eco Compass logo	33
Figure 13. Question 1. Company sizes.....	43
Figure 14. Tourism categories.....	44
Figure 15. The EMS-systems in the research.....	45
Figure 16. Motivations for adopting an EMS	51

LIST OF TABLES

Table 1. Geographical areas of operation of the EMSs	35
Table 2. EMS sectors	35
Table 4. Cross-tabulation of company sizes and EMS	46
Table 5. Cross-tabulation of Q. 4 and EMS-system.....	47
Table 6. Cross-tabulation of 'Length of implementation' and 'Company size'	49
Table 7. Cross-tabulation of EMS and length of implementation	49
Table 8. Cross-tabulation of 'Decreased pollution' and company size.....	51
Table 9. Cross-tabulation: 'Improve relationships with stakeholders' and company sizes	52
Table 10. Cross-tabulation: 'Opportunities for better profit' and company sizes..	52
Table 11. Cross-tabulation: 'Increased environmental awareness among staff'	54
Table 12. Cross-tabulation: 'Better administration of environmental paperwork' and company sizes.....	55
Table 12. Cross-tabulation of question 8 and EMS	55
Table 14. Cross-tabulation of question 8 and company size.....	56

LIST OF APPENDICES

Appendix 1. The cover letter sent to the respondents

Appendix 2. The online questionnaire; questions 1-3

Appendix 3. The online questionnaire; questions 4-5

Appendix 4. The online questionnaire; question 6

Appendix 5. The online questionnaire; question 7

Appendix 6. The online questionnaire; question 8

Appendix 7. Answers to question 2 in questionnaire

Appendix 8. Answers to question 8 in questionnaire

1 INTRODUCTION

Environmental management has become an important part of the marketing and business administration today. The environmental issues are something that concerns everybody. The tourism industry as well as other industries are a big part of the problem and have a great deal of demand on them to take responsibility. By taking the environment into consideration in the daily life of the business, there are several benefits that come along besides saving the environment. Some examples are: reduction of waste, saving of costs when it comes to water, energy and raw materials, opportunities for attracting new clients, creating better relationships with stakeholders, improving the environmental reputation and compliance with regulations and laws. (Almgren, 2008: 12) Environmental management does not mean management of the environment itself, but is rather the process of developing, implementing and monitoring the environmental policy of an organization. (Businessdictionary 2010)

1.1 Aims and Objectives

The objective is to analyse the different systems that are operating in Finland, as well as internationally. The empirical part, however, will focus on Finnish tourism companies that have an environmental management system (EMS). The expectations companies have had before implementing an EMS, how well the expectations were met and also the reasons for choosing that particular EMS will be studied. A comparative analysis will be made to see if there are any similarities and difference between the small versus bigger companies that participated in the research. My own personal interest in environmental issues has had a great impact when choosing to write about this topic.

2 ENVIRONMENTAL IMPACTS OF TOURISM

The environmental impacts of tourism are difficult to measure. The sectors that have the greatest impact on the environment in Europe are transport, energy, industry and agriculture. However, even if tourism is not the main contributor, it is a sector that is highly affected by the environment. Tourism is dependent on transportation and thus the transport sector consists to a great deal of tourism activities. In that sense tourism does have a major impact on the environment. (Ellul. 2000: 9)

Nature-based tourism is greatly dependent on the environment, and without it the sector would not exist. Instead of putting the product out on the market, like other industries, the market travels to the product. (Tribe, Font, Griffiths, Vickery, Yale. 2000: 39)

It is not always the large-scale activities, which are more obvious, that contribute to the impacts. Also smaller groups can have negative (and positive) impacts on the nature in the long-term. The fast growing of nature-based tourism, the intense peak seasons, and a large concentration on just a few specific areas all have an impact on the environment. (Huybers & Bennett. 2002: 8)

2.1 Positive environmental impacts

If the local community recognizes the economical and social benefits of tourism, they are likely to promote the growth of tourism in the area. Consequently they would also prioritize the conservation of the environment. Thus, the positive environmental impacts can be beautification of the natural environment, restoring and survival of old, historical buildings, conservation and protection of natural areas. The key is to identify the problems, and then measure and evaluate them. The management needs to find a balance between the environmental, economical and social aspects and not expose the environment to excessive amounts of visitors and to consider the sort of activities that will take place there. Tourism and countryside can coexist but only if the both parts benefit from each other and the negative impacts are decreased and the positive impacts increased. The

outcome of that would be sustainability and environmentally responsible tourism. (Tribe, Font, Griffiths, Vickery, Yale. 2000: 40-44)

2.2 Negative environmental impacts

The negative environmental impacts can be divided into two groups; the physical and the social/cultural impacts. The negative impacts of tourism in the nature can be: erosion, pollution, disturbing animals in their natural habitat, changes in flora and fauna, noise, waste and litter. All of these issues affect the physical environment. The social/cultural impacts cannot be visualised but are perceived by the persons living in that environment. Some examples are crowding that creates a feeling of intruding of the locals' own space, excessive crowding in traffic caused by increased visitors and those factors can consequently lead to conflicts between locals and visitors. (Tribe, Font, Griffiths, Vickery, Yale. 2000: 40-42)

2.3 Sustainable development

Sustainability and Sustainable Development are two terms that are often mixed together.

Sustainability is the optimal result, as where a balance between the environment, the society and the economy is reached. This is the traditional way of looking at sustainability (see figure 8).

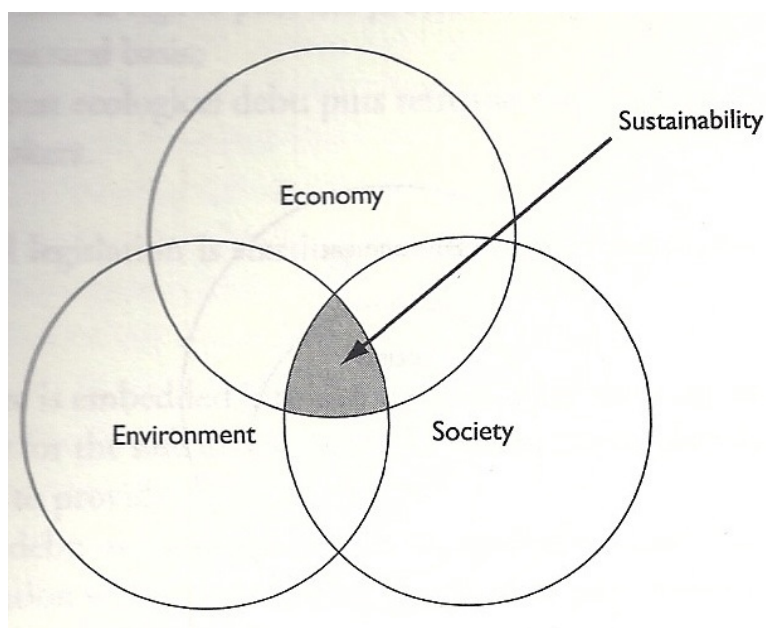


Figure 1. The traditional sustainability model. (Kane. 2010: 5)

The “fried egg” model illustrates how sustainability is reached in another way. Here the three are not equally balanced but instead economy is limited by the values of the society (such as justice, liberty, and honesty), and where the society on the other hand is limited by the environment and nature. (Kane. 2010: 4-6)

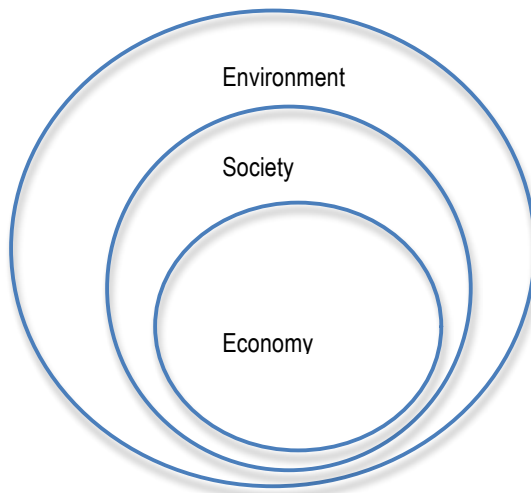


Figure 2. “Fried egg” model of sustainability. (Kane. 2010: 6)

Sustainable development is what is being done in order to achieve sustainability. Defined by Brundtland Commission (1987) as: *“Development that meets the needs of the present without compromising the abilities of future generations to meet their own needs”*. This is one of the most widely used definitions of sustainable development. (Kane. 2010: 4)

The following figure illustrates that sustainable development is the process that happens between the current situation and sustainability.



Figure 3. Sustainable development and sustainability. (Kane. 2010: 5)

2.3.1 Finland and sustainability

Since 2000, Finland has been one of the top-ranked countries in the World Economic Forum's "Environmental Sustainability Index" (ESI). Finland was in the lead in environmental sustainability in 2001, 2002 and 2005. This is due to the way of handling environmental problems, its innovative solutions when it comes to environmental sustainability, its clean air and water, initiatives from the private sector, and its science and technology. The downside is that the consumption is becoming more individual as the single households and single care use are increasing.

The Yale and Columbia universities made another similar comparison in 2005. The countries were compared based on 21 sustainability indicators such as: available natural resources, pollution levels, environmental management efforts, and the capacity to improve the environmental performance. The top-three ranked countries in the world were Finland, Norway and Uruguay. (Environment. 2005: 7)

A committee made up of several stakeholders have drawn up a long-term plan to make Finland one of the most eco-efficient countries in the world by 2025. The goal will be achieved through no less than 73 new policies. The programme addresses *sustainable consumption* and *production*. This means that raw materials and natural resources should be used carefully and the use of renewable resources should be a priority in the production chains. Finland is one of the first countries in the world to address these issues. (Finland's environmental administration 2010)

2.3.2 Sustainable tourism

Sustainable tourism is about conserving the economical, social and environmental resources so that the future generations are able to enjoy the same experiences in tourism as we do today. It is a responsible way of tourism and many times similar to ecotourism, which also seeks to conserve the resources. The difference is that ecotourism relies on the nature at all times, while sustainable

tourism is a broader concept that can involve any segment of tourism. (Eco India. 2008) An important aspect of reaching sustainability in tourism is the carrying capacity. However, calculating a number that is the limit of visitors in an area is very complex but still crucial in order to know how much a tourism product is allowed to grow without risking the sustainability of the area. (Tribe et.al. 2000: 44-54)

Sustainable tourism can be supported through three different management actions. The main idea of these actions is to minimize the negative impacts of tourism without minimizing the tourist experience.

1. Influence the behaviour of the visitor by e.g. education, interpretation, code of conduct or by controlling the visitor. If the visitor has a chance to learn not to be selfish or thoughtless the negative impacts can be avoided.
2. Redistribute visitor use, by looking if the demand is matching with the carrying capacity of a specific place. If not, the areas can be divided into different zones that enables different activities in each and one of them (e.g. bird watching, horse riding, mountain biking, hiking and running)
3. Rationing use means that different activities can be charged for in order to avoid over-use of the premises, pre-booking can be required, or visitors can be allowed to visit the areas only at certain times and for specific durations of time. This enables an even flow of people without peak hours. (Tribe et.al. 2000: 46-55)

3 ECOTOURISM

It was already between the late 1970s and the mid 1980s that ecotourism was coming to life. (Honey. 2008: 12). But it was not until the early 1990s that it started to become popular. Since then, it has been growing with over 20% every year. In 2004 ecotourism was growing 3 times faster than the general tourism industry, something that is also increasing every year.

One reason for the popularity of ecotourism, and other alternative forms of tourism as well, is that the traditional “sun and sand” holiday is losing its attractiveness. People are looking for natural beauty instead of overcrowded beaches, and also, more and more people begin to see the problems with mass tourism and try to travel by alternative means. (TIES Global Ecotourism fact sheet. 2006)

3.1 Definition

Ecotourism is something that always takes place in the nature or a peripheral area. But, in order to be called ecotourism, the actions that take place in that area also has to benefit the environment or the people living there. E.g. activities such as bird watching or camping that take place in the nature are not necessarily ecotourism activities. (Wearing. 2003: 5.)

There are several definitions of ecotourism. The International Ecotourism Society defines it as “*responsible travel to natural areas that conserves the environment and sustains the well-being of local people*”. The Australian Commission on National Ecotourism Strategy’s definition is “*nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable*”. (Untamed path. 2007) According to “Centre for Ecotourism in South Africa”. Ecotourism has to be sustainable from three aspects; environmentally, socio-culturally, and economically. The environment has to be sustainable as without nature ecotourism would not exist, but it also has to be socio-culturally sustainable and help the communities that rely on it, and last, the economic sustainability has to be assured in order to bring in money to the

country or region where ecotourism is operating. (Pérez de las Heras. 2004: 117-118)

M. Honey lists seven characteristics of ecotourism in her book *Ecotourism and Sustainable development*. These characteristics are widely used as a guideline for ensuring a sound ecotourism management.

- The travel takes place in a natural environment. It is often a protected and remote area.
- By using alternative methods of transportation, recycled materials, and making sure that the visitors' behaviour and manner are proper; the impact on the destination is minimized.
- Ecotourism educates both the visitors as well as the local communities. The tourists shall be provided with reading material about the destination and people they will visit. Locals and nationals shall be granted reduced fees to have a chance to visit and learn about the attractions near them.
- Funding from the airlines, hotels, tour companies, entrance fees or other contributors ensures conservation of the nature.
- The local people are involved and get a financial benefit from the tourism business. They also need to feel proud of what they have and appreciate it, or else ecotourism will not survive. The locals are the ones that shall run the restaurants and other businesses that benefit from tourism.
- The local culture is respected. It is important to learn about the culture that is visited and to understand what is acceptable behaviour and what is not.
- The human rights are taken into consideration. Visitors can get involved in what is happening in the politics in the country, and learn if the visit will actually benefit those who need it the most, in order to prevent the money from going to the wrong pockets. (Honey. 2008: 29-31)

However, due to the lack of a clear certification system basically anyone can go out and sell their products and label them as ecotourism. This means that the term is very often misused and many of the eco packages on the market do not benefit the locals or the environment at all. (Untamed path. 2007)

3.2 Costs and benefits of Ecotourism

According to The International Ecotourism Society, the typical eco-tourists have a higher education and thus higher income, they are experienced travellers and often middle-aged or elderly.

This often leads to that the tourist spends more at the destination than the average traveller. If ecotourism is managed correctly, the locals can benefit more from them than from resort tourism. (The International Ecotourism Society: ecotourism.org)

Tourism has usually economic, environmental, cultural and social impacts, which can be both positive and negative.

Some **economic benefits** can be that the local economy is benefited and gets new money, people are encouraged to start up new businesses, and the local economy gets a better structure and balance.

The **costs** can be that the economy becomes too dependent on one specific activity only, land prices increase in the initial stage of the tourism development, imported goods, services and work force can be preferred rather than the local, seasonality in tourism lead to people being laid-off during low season, start-up expenses, and other ongoing costs (such as wages and maintenance). (Page & Dowling. 2002: 152)

The **environmental benefits** are that environment is protected, habitats are restored, and tourists assist by donations or maintenance in order to enhance habitats.

The **costs** can be an over exceeding of carrying capacity as this is very difficult to estimate, pollution, wildlife being disturbed (animals get stressed, breeding season being distracted), overdevelopment in small places that cannot handle it. (Page & Dowling. 2002: 177-178)

The **socio-cultural benefits** are more opportunities for employment among the locals, ecotourism brings an aesthetic and spiritual experience, and the cultural heritage is protected.

- The **costs** are that the local and remote cultures might be distracted, the locals lose control of the business; they risk to not get the jobs due to foreigners in-migrate to seek the same jobs, tourists do not understand the local cultures and traditions, the tourists can start to irritate the locals and that creates a bad and non-friendly atmosphere in the destination. (Ecotourism policy and planning. 2003: 214)

3.3 Opinions

Not everyone has a positive opinion about neither ecotourism nor the growth of it. There has been a great deal of scepticism and frightening observations in the nature. Biologists have observed that animals that have been exposed to ecotourism have changed their behaviour and have become more stressed. Dolphins along New Zealand's northeast coast do not rest enough because they get hyper active in the presence of people. This can have a serious effect on their population. The same kind of behaviour has been observed on dolphins in Scotland.

Polar bears in Canada are also in more stress and cannot rest as much as they should. The presence of humans can have an effect on the animals' heart rates and they cannot preserve enough energy due to the stress. As a result the animals do not have enough body fat. This has happened to penguins and their chicks in New Zealand. As humans are on the beach the penguins do not come up from the water. Instead of using their extra food for feeding their chicks, they start digesting it whilst in the water.

The reasons for such effects are that there are no guidelines that address these kinds of issues. The animals and the environment are not studied carefully enough and in many cases there just is not enough knowledge about it. (New Scientist 2004)

One of the assumptions is that ecotourism should not harm or disrupt the host communities at all, or at least very little. But according to Butler (1990), tourism *always* has an impact on its environment. Many times the plans for ecotourism are too positive and naive and the negative effects are not considered at all. The

challenge will be to ensure that the tourism practices are sound and with positive effects. (Weaver. 2003: 14)

3.4 The future of Ecotourism

There are different opinions about what is the accurate size of an ecotourism product for it to be sustainable. Some say that ecotourism will have to be small-scale also in the future in order to have any chance of being sustainable. Today, it is impossible for a mass tourism product to be sustainable. Eco and rural tourism is one of the future trends in tourism and will grow even bigger. (Tourism; principles and practice. Cooper, C. p. 232-233, 674. 2008).

Others, on the other hand, claim that there are indeed many ecotourism resorts that use responsible management practices such as saving water and energy, as well as involving the local communities in their activities. (Botanic Gardens Conservation International)

If ecotourism is to grow in the future, it is important to remember that it always relies on the nature and thus it has to be cared for. More tourists should consequently lead to more ecotourism destinations and bigger areas. However, today the masses are crowded into smaller area and as a result the environment in these areas are under more stress. (Weaver. 2003: 214)

4 ENVIRONMENTAL CHALLENGES

The situation in the nature and environment in the Nordic countries is in many cases alarming. The biodiversity has been declining for decades and main reason for this is human actions. The Nordic Council of Ministers presented a fact sheet in 2009 about the on-going issues in our environment that will have a significant impact on the future natural habitats for many species. Due to the building of holiday homes near to lakes and seas the shore habitats are being disturbed. New roads and transportation routes separates animals from each other. Due to an increase in transport, travel and other human activities animals and plants are being introduced to places they actually do not belong to. That can result in a decline, or change of behaviour, of the species originally living there. (The Nordic Council of Ministers. 2009)

4.1 The forest

The forest is one of Finland's most important resources. Two thirds of the whole country is covered with forests. Due to the changes that have happened in them recently it is crucial to protect them. Many of the forest types have become rare and many of the species living in them have become endangered. (Natur och Miljö 2010)

The forest is an important part of the tourism sector. They are visited for recreation or for carrying out different activities. The forest can also be an important part of the scenery of a destination. (Forest tourism and recreation, 2000: 1)

National parks are protected areas where the majority of the land is forested. In Finland, there are 35 national parks that protect endangered or vulnerable species, and the main idea of the parks is to protect the diversity of Finnish nature. They are open to everyone and are free of charge but the rules have to be followed in order not to interfere with the animals living there or interrupt the nature conversation. Campers, hikers and others that want to experience outdoor recreation in undisturbed nature visit the parks. (Outdoors Finland 2009)

4.2 Water

Finland is rich in inland lakes and many rivers. Most of them are very shallow and that makes them vulnerable to pollution. Also the Baltic Sea is, which is like an inland sea surrounded by over 80 million people, is easily polluted. (Finland's environmental administration 2010).

The presence of agriculture and the paper and pulp industry contributes in a big way to the pollution of the lakes, rivers and seas in Finland. However, according to the Water Poverty Index (WPI), Finland was the highest water ranking country (2004). The points were given based on resources, access, capacity, use and environmental impact. The maximum amount of points was 100 and Finland received 77.9. (Watertime. 2004)

4.3 Energy

The use of energy per person in Finland is among the highest in the world. That affects the environment in the country as well as in the rest of the world. Even if a great deal of persons are interested in cutting down on their energy consumption it is worsened due to the lack of simple and forthcoming alternatives and principles. (Natur och Miljö)

4.4 Waste

Finland produces around 70 million tonnes of waste every year. The biggest part arises from the construction industry and mineral mining. By recycling the material and energy in waste the natural resources are saved. It is also important to cut down the use of material in the production process and to adopt an effective consumption management. Every business that operates in Finland is obliged by law to be aware and responsible of the impacts of its operations on the environment. They have to sort their waste and make sure it is processed in an appropriate way. (Finland's environmental administration 2010)

4.5 Climate change

It is likely that one of the major reasons for the climate change in the world is the great amount of greenhouse gases caused by energy production. The emissions started to rise with the industrial revolution and the increased use of fossil fuels since the beginning of the 20th century (see fig. 12). In his article, John Marburger states: “*All countries that have economies, or aspire to economies, and contribute to greenhouse gases bear responsibility for their emissions.*” The key will be international co-operation and a steady goal towards reduced greenhouse gas emissions. However, the economical benefits/losses will always play an important role when setting the pace for achieving those goals. The problem with the climate change issue is that there are no other technologies available that would be affordable enough to adopt. Marburger explains that “affordability” in this case means the difference in cost it would mean to take in use more sustainable alternatives, and that today’s options are thus too costly. (Marburger. 2008: 50)



Figure 4. Global carbon dioxide emissions from fossil fuel burning. (Marburger, J. 2008: 50)

It is therefore a fact that the climate is changing and the tourism sector is affected by it. Tourism is an important economic component in the world and will

continue to be so. The tourism sector plays a big part in the climate change and therefore needs to take actions in order to slow down the rapid change. Four crucial things to be done are to cut down the emissions from transport, become more energy efficient, adjust existing tourism destinations to fit the new climate conditions, and to assist regions and countries that are not able to manage everything themselves. (Climate change and tourism. 2008: 13).

The climate change will have some consequences in the future; the mean winter temperatures are going to rise in Finland as well as in the rest of Northern Europe. It is expected to rain more, both daily and annually. The snow season will continue to become shorter, and the average snow depth will decrease. In the Mediterranean area, the summers will be warmer and drier, with a greater risk of draught. Figure 8.1 (Climate change and tourism. 2008: 55) Already now the endangered Saimaa ringed seal in Finland is having trouble in the warm winters. Normally they build nests for their pups above the ice. When the weather is getting warmer and there is no ice, and as an effect the seal population will decrease.

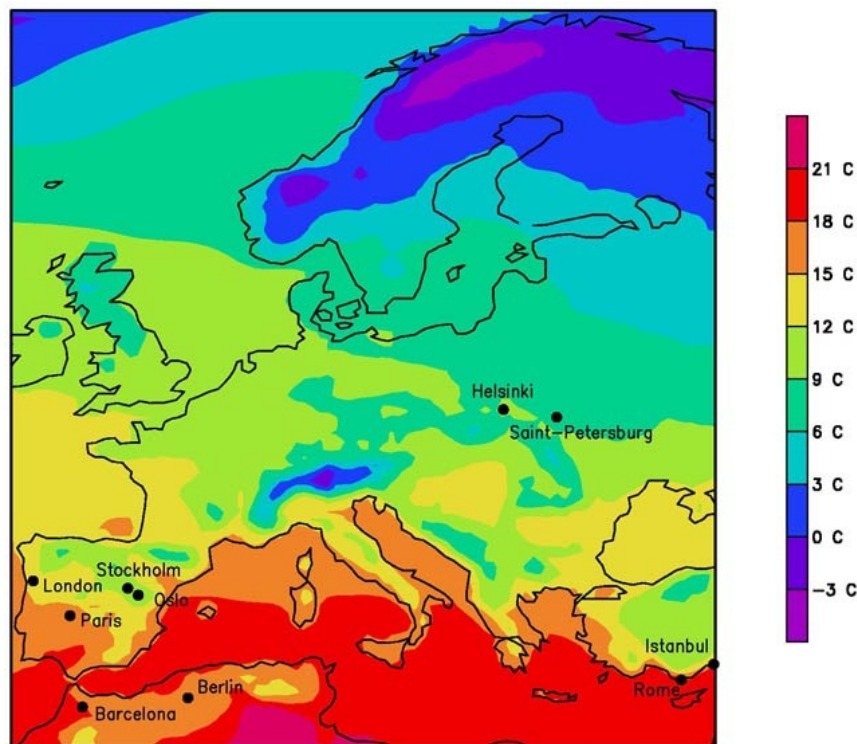


Figure 5. The climate map of Europe 2071

5 ENVIRONMENTAL MANAGEMENT SYSTEMS & CERTIFICATION PROGRAMMES

In 1992 the UN held a conference on the environment in Rio de Janeiro. As a result, Agenda 21 came to life, which is an action plan for sustainable development. This, in turn, resulted in the creation of plenty of new certification programmes in order to respond to the need of sustainable development. (Goodstein, C. 2006)

Since the slow start in the late 1990s, more and more organisations around the world have started to implement some form of EMS. (Your home planet)

Martha Honey defines certification as “*a procedure that assesses, audits, and gives written assurance that a facility, product, process, or service meets specific standards*”. (Honey, M. 2006: 10)

It is essential to have great deal of knowledge and organisational skills to deal with the environmental demands that clients, the staff and the society require from a business. Therefore, an Environmental Management system (EMS) is a useful tool for a tourism business that wants to measure the environmental impacts of its products or services. The EMS is a plan with objectives and targets, it develops and implements action plans, monitors the results and improves the environmental performance of the business. (Kane. 2010: 45)

As people are becoming more aware of the impacts on the environment there is a demand for responsible hotels, airlines and other tourism organisations. By implementing an EMS the clients can be assured of a sound environmental policy as well as it gives the business a competitive advantage. (Hotel-online. Monaco & Meade. 1999)

Furthermore, having an EMS can come along with several benefits:

- The work is organised and it becomes easier to discover leakages in the management of resources.

- The company is in compliance with laws and regulations and can guarantee that things are done correctly.
- Due to the big interest in environmental matters among clients, it is easier to prove the business to be environmental conscious by having an environmental management system.
- A “green business” will certainly attract many responsible and environmentally interested persons that would like to contribute to the good job by becoming part of the company.

The systems can also be perceived as time consuming and that it brings an excessive amount of paperwork, and the management can lose its interest for it. But in the end, the company can independently design the system according to its needs. Therefore, the negative sides of having an EMS can many times be adjusted so that the company is able to manage it without difficulties. (Almgren, 2008: 19-20)

5.1 ISO 14001

In 1996 The International Standards Organisation (ISO) published the first Environmental Management Systems standard, the ISO 14001. It is an international standard that describes the requirements of an EMS. (North Carolina Division of Pollution, Prevention and Environmental Assistance). This is also the most popular and most widely used EMS. Today it exists in 140 countries, and in 2007 there were at least 130 000 companies and organisations around the world that had adopted the ISO 14001. (Almgren, 2008: 18)

Most of the EMSs are built on the “Plan, Do, Check, Act” model that works as a cycle. The main components of the ISO 14001 are:

1. To have a policy: this will work as a foundation of the system that states the organisations commitment to the environment. The other steps follow:
2. Planning. In the planning stage the legal requirements and environmental impacts are identified, and the objectives and goals are set.

3. Implementation and Operation: the different roles are documented, who is responsible of what, operation procedures, procedures for emergency, document control, training of staff.
4. Checking and Corrective Action: procedures for monitoring and measuring impacts, the system is revised
5. Management Review of the EMS to ensure that it is effective despite of internal or external changes, and identification of the changes that are required to maintain that effectiveness. (Kane. 2010: 46)

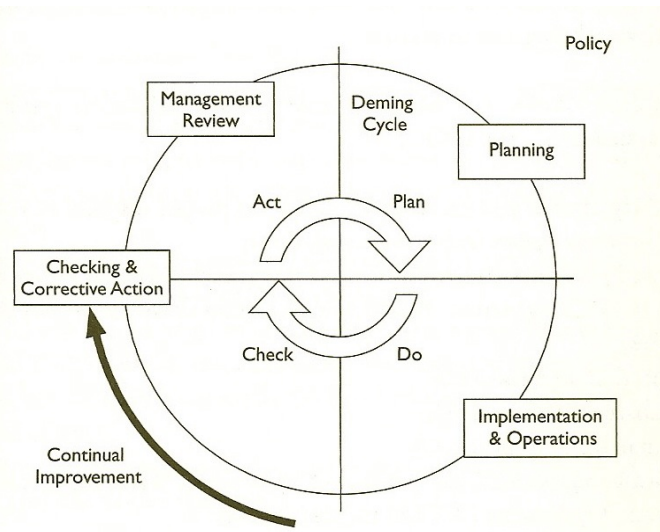


Figure 6. The “Plan, Do, Check, Act” model. (Kane. 2010: 47)

5.2 EMAS

The Environmental Management and Audit Systems (EMAS) is an EMS aimed for organisations and businesses in the EU, both in the private sector and public administration. EMAS is designed accordingly with the ISO 14001 standards. The difference between the two is that EMAS goes further as it requires an environmental statement available to the public, and following of environmental legislation. With ISO 14001 the public statement is volunteer, but not required. Both of the two systems require evidence of the environmental performance and that it is being improved every year. (Finland’s environmental administration 2010) (Kane. 2010: 46) The latest revision of the system (EMAS III) was finished in January 2010 in order to make it easier to obtain for SMEs. Some examples of

the changes are reduction of bureaucracy and the launching of Global EMAS that is available for countries outside EU. However, studies that were made among registered organisations in Catalonia, Spain, show that EMAS still has a few downsides. EMAS is not well known by the market, or by the local administrators. When comparing EMAS with ISO 14001 the general public cannot recognize the added value of EMAS. Environmental statements also tend to be hard to interpret for the public. (ECAP on-the-job-training 2010)



Figure 7. The steps to EMAS (Environmental administration Finland)

5.3 Earthcheck

Earthcheck by EC3 Global is the largest certification program for the travel and tourism industry. It has more than 700 certifications in 60 countries worldwide. Many of the world's biggest hotel chains and travel groups are using Earthcheck to improve their environmental management. Earlier, Earthcheck was used to hold up and support the similar program Green Globe, but today they are two independent programs. (EC3 Global. 2010) Earthcheck does not have any certified businesses in Finland.

5.4 Green Globe

Green Globe is an international EMS certification system that is, just like Earthcheck, especially planned for the tourism and hospitality industry. It is a

member of the United Nations World Tourism Organisation (UNWTO), and the Caribbean Alliance for Sustainable Tourism (CAST). The World Travel and Tourism Council (WTTC) with its 5% shareholding is also an owner. The program is being used by for example: hotels, conference centres, spas, cruises and other transportation and travel businesses. (Green Globe Certification. 2010) The components of an EMS defined by Green Globe is similar to the ones of the ISO 14001 standard:

There has to be a policy that states the organisation's commitment to maintaining the environment, an action plan to manage the use of resources, implementation of the EMS e.g. training of staff, procedures and incentive programmes, actions that corrects failures, monitoring and management review. (Hotel-online. Monaco & Meade. 1999). There are no Green Globe certified businesses in Finland.

5.5 Green Tourism of Finland

Green tourism of Finland is an organisation especially made for Finnish nature tourism companies within the restaurant, tourism and program services sectors that focus on socially, culturally as well as ecologically sustainable development. The products are totally dependent on the nature and have access to the Finnish natural parks and wilderness. There is a list of criteria that the companies need to follow in order to be able to use the trademark (see logo in picture 3.3).

1. An EMS is made for the organisation. Initially a self-evaluation is done and based on that follows an EMS that is later controlled and audited. The requirements are then made stricter on a regular basis.
2. A safety plan is made for the organisation.
3. Local produce and services are always emphasised.
4. The communication and marketing is responsible, sincere and does not conflict with the nature.
5. Customer satisfaction is followed and chances for improvement are recognized.

6. The use of local transportation such as trains, buses or even carpools are supported and the customers are always informed and assisted whenever they want to travel in an environmental friendly manner.
7. One of the main aims is to emphasize the movement during the travel to be done in an environmental friendly way, e.g.: walking, biking, rowing, paddling, skiing, or horseback riding.
8. Natural environments and animals living in them are respected, groups are kept small and are not been brought to fragile areas, no litter is left anywhere, and hygiene products that are being used are always environmental friendly in order to minimize the negative impact on the nature.
9. The participants are educated in responsible manners regarding nature and environment.
10. The local culture is an important part that strikes through the whole experience.
(Green Tourism of Finland 2010)



Figure 8. Green Tourism of Finland logo

5.6 Green Office (WWF Finland)

Green Office WWF is a simple environmental program aimed at offices that want to reduce their impact on the environment, make savings of their operations and

contribute to a slower climate change. The staffs working at the offices are encouraged to work with the environment in mind when doing their daily tasks. The objectives are to reduce the greenhouse gas effect and the offices' ecological footprints as well as coming up with new, sustainable operational solutions for the office. In Finland, there are now 152 offices that have been granted the use of the Green Office logo (see picture 3.4). Additionally to Finland, the Green Office is operating in the following countries: Indonesia, India, Latvia, Lithuania, Estonia, Nepal, Pakistan, Romania, Turkey and Vietnam. (World Wide Fund for Nature; Green office 2010)



Figure 9. Green Office Finland logo

5.7 The European Ecolabel

The Ecolabel was formerly known as the EU-flower. It is awarded to companies that want to market their products and services as environmental friendly. The standards are high and it is not easy to attain the EU Ecolabel. The consumers can easily identify the products thanks to the logo, which ensures the very best product from an environmental point of view. Not only products are entitled to carry the logo, also tourism services such as accommodation facilities can use it. The criteria are strict and based on the products' or services' environmental impacts throughout the whole life cycle. (European Commission Environment. 2010)



Figure 10. The European Ecolabel

5.8 The Nordic Ecolabelling

This label was formerly known as the Nordic-Swan. Today it is called the Nordic Ecolabelling and remains with the same logo; a white swan with green background. The labelling system is in cooperation with the European Ecolabelling and was introduced in 1989 by the Nordic council of ministers. In Finland it is the Finnish Standards Association (SFS) that sets the criteria and grants the licence to the companies. Once granted the label, it is valid for three years. Then the criteria are revised and the company will have to apply again for having the label. That ensures constant improvement and development of the products and services. (SFS-ympäristömerkintä 2010)



Figure 11. The Nordic Ecolabelling logo

5.9 Eco Compass Environmental Management System

The Eco Compass environmental management system is aimed for small and medium sized businesses operating in the Helsinki area. The focus has especially been on the travel and printing sector. The 3-year project was launched in 2008 by

the City of Helsinki Environmental Centre and receives funding from European Regional Development Fund (ERDF). The idea is to make the environmental management as easy as possible with ready-made tools for the companies to use, strengthen the competitiveness of the region as well as improve the environment. The Eco Compass system is less expensive and easier than the bigger and well-established ISO 14001 and EMAS systems.

Initially, the situation of the company is analysed, then, the environmental impacts are evaluated and finally a tailor-made environmental program is created for the company. The companies receive environmental training, counselling and support when developing their environmental management system. After twelve months of implementation the business receives the Eco Compass certificate, which is valid for three years. Then the Eco Compass logo (figure 5.3) may be used in the web pages and marketing products. (Eco Compass 2010)



Figure 12. The Eco Compass logo

5.10 ECEAT

The European Centre for Ecological and Agricultural Tourism (ECEAT) is a programme launched in 1990 that supports agricultural and ecological tourism. The programme especially focuses on small-scale tourism services and accommodation establishments. It includes bed & breakfasts, organic farms, eco-villages, guesthouses, or other forms of accommodation. The main point is that supporting of the local culture and protecting of nature is always encouraged.

ECEAT Finland started in 2005 and has now 32 members from different parts of the country. The ECEAT network lists ten guidelines that should always be attempted:

- The farming is environmentally friendly
- Reduced water and energy use
- Reduced waste production
- Environmentally responsible building procedures
- Educating customers on sustainability and ecological sustainability
- Green travel and transportation
- Help grow diversity in nature and environment
- Care for the cultural heritage
- Support the local community and economy
- Make constant improvements to the environmental performance

The ECEAT works with a quality system, which gives the members a chance to reach different levels of quality and thus receive a specialisation label in four fields: sustainable agriculture, nature protection, efficient use of natural resources and socio-economic responsibility. (ECEAT Finland. 2010)

5.11 Comparing the EMSs

There are several features that all the previous EMSs share.

- a) The enrolment is always voluntary
- b) The businesses must follow certain criteria and are being measured on a regular basis
- c) The certification assessment is done by the company itself and audited, often by a third party auditor that does not have any connection to the company or the certification
- d) Every EMS has a logo that is given to the certified members. The companies can then freely use this logo in e.g. their marketing.
- e) The member fees for environmental management systems tend to be higher than other certification programs since they require outside consulting. (Honey. 2003: 15)

Table 1. Geographical areas of operation of the EMSs

International	ISO 14001, (Green Office), Earthcheck, Green Globe
International (restricted to Europe or parts of Europe)	EMAS, (ECEAT), Nordic Ecolabelling, The European Ecolabelling
National (operates only in Finland)	ECEAT, Green Office, Green tourism of Finland
Regional	Eco compass

There are also a few differences between the programmes. First are the geographical areas of operation. There are programs that work on international, national and regional levels.

Another difference is the sectors that the EMS is aimed for. Some of them are designed especially for the tourism sector while others are applicable to any business sector.

Table 2. EMS sectors

Tourism sectors only	ECEAT, Green tourism of Finland, Green globe, Earthcheck
Every business sector	ISO 14001, EMAS, European Ecolabelling, Nordic Ecolabelling, Eco compass, Green Office

Furthermore, the EMSs that are designed for the tourism sectors can be broken down into sub sectors:

1. Companies working within nature tourism – Green tourism of Finland
2. Rural and agricultural tourism companies – ECEAT
3. The general tourism and hospitality industry – Green globe and Earthcheck.

There are two methodologies that can further distinguish the certification programs. An EMS can be process-based or performance-based.

The process-based methodology is especially well suited for larger hotel chains to set-up monitoring systems, and training of staff. This methodology does not allow comparison with other businesses in the same field and concerns mainly on how the company operates.

The performance-based programs on the other hand sets targets and goals on things that need to be achieved in order to receive the logo. With this methodology it is possible to compare businesses and their performance. (Honey. 2003: 15-16)

6 THE RESEARCH

When conducting a research there are two ways of approaching; there is the Qualitative and the Quantitative research method.

The qualitative method is flexible in the way that the respondents are allowed to describe their feelings and experiences in their own terms, i.e. there are no ready-made options to choose from. The methodology is unstructured and the sample groups are small. The objective is to provide insight and understanding through in-depth interviewing. When analysing the results the data can include words, pictures or objects, in other words, it cannot be summarised in numbers.

The quantitative method is structured and has a large sample group. The questions are asked in a prearranged order with fixed response alternatives, which means that the research can be conducted in different ways such as through questionnaires, phone interviews, or personal interviews. The results can be shown in numerical calculations. This is the most common form of collecting primary data in marketing research. (Lecture. Marketing research. 2009)

6.1 Research methods

The quantitative research method was chosen for collecting the primary data. The motivations for the choice was that as it allows a bigger sample group, and since the idea was to study as many tourism companies that have an EMS as possible, this method was better adaptable than the qualitative method. Also, the data gathered from a quantitative research allows a comparison in a numerical and statistical way, which in turn can be more easily interpreted for the audience. The study looked into the expectations and experiences from having an EMS, and therefore there were room for the respondents' own comments in the end. The responses reflected some personal thoughts, feelings and opinions about EMS, and thus the research questions were also qualitative, but presented in a quantitative way. For instance, qualitative questions can be those where the respondents give scores on how well or bad their expectations have been met, and questions about satisfaction and experiences. (Brace. 2008)

The primary data has been gathered from an empirical research that was conducted through an online survey aimed at different kind of tourism companies around Finland. There are several benefits of choosing this method. An online questionnaire allows the respondents to fill it out whenever they like to. It is also a very quick way of responding since it is done on the computer, and no effort is needed for returning the answers as this is done automatically when the questionnaire is finished. This method was also more practical since the author was not in the same country as the respondents when conducting the research.

The disadvantage with this method is that some persons are not reached due to non-functioning e-mail addresses, or the contact information is not updated. Also, companies often receive loads of e-mails daily and therefore some of those mails are overlooked or not prioritized.

The secondary data has been gathered from literature on environmental management, corporate social responsibility (CSR), sustainable development, ecotourism and research methodology in order to gain more knowledge of these fields. Also a great deal of Internet pages have been used.

On October 4th 2010 I had the opportunity to participate in the “ECAP on the job training session” aimed at Small and Medium-sized enterprises (SME) and SME support organisations from the whole Europe. The event was held in Barcelona and consisted of guest speakers, work shops and networking in order to exchange best practices. It was a useful experience since I had become acquainted with the subject in theory, and could refer to that when hearing about the practical examples on how it is to work with an EMS in real life.

6.2 Validity and reliability in research

For the validity to be good in research it requires that the reliability is good as well. Validity means that the research results actually reflect what has been studied, or, that it measures what is intended to measure. According to Veal (2006) it is difficult to achieve total validity in tourism and leisure research, as the information relies on personal attitudes. Therefore, the results can never be as

certain as in natural sciences. In order to achieve reliable results in a research, the group of respondents should be as big as possible. *Reliability* means that the results would be consistent, even if conducting the research later on or with a different group of respondents. However, there are some circumstances that can endanger the reliability in research. Personal factors such as stress, illness, misinterpretation and tiredness due to a long questionnaire can affect the answers. Also, information that is based on personal experiences and attitudes may change over time. A situational factor can be lack of time, or being in a disturbing environment when answering. (Veal. 2006: 41) (Marketing research kit for dummies. 2009). One way of testing the reliability in a research is by the test-retest method, done at two different times. If the results are similar, the measure is stable, and that indicates high reliability. But again, the situational circumstances or personal factors can affect the results also in a retest and hence give an unstable measure. (Golafshani. 2003)

The conclusions drawn from doing this research has been objective as all the results have been based on the facts that have derived from the data collected. No subjective values by the researcher have been included in the results.

6.3 Questionnaire design

Creating a questionnaire requires good planning in order to give accurate information. The first step is to find out what questions to ask, i.e.; what we want to find out with the questionnaire. The questionnaire used in this study consisted of eight different types of questions. It was an “e-mail URL embedded questionnaire”, which means that the participant has to be invited to the webpage in order to fill it in. This was done with an email including a covering letter and the link to the survey.

The advantage of having an online questionnaire is that it gives flexibility to the respondents as they can choose when to answer it. It can make it easier to receive more honest answers, especially if the question is of a sensitive nature. The risk of having a “don’t know” option often leads to more “don’t know” answers. Online

questionnaires are often completed faster than other types of questionnaires (e.g. face to face or telephone interviews) and this makes it attractive to respondents.

Additional questions such as company size were asked in order to identify any differences in expectations and experience between small and big companies. The main data the survey intended to achieve was the following: size of the company, name of the EMS that they are using, and the two main questions were expectations and received results from having the EMS. The two latter ones were interval scale questions, with different factors listed. Also the time of the implementation of the EMS was asked for, as a long and time-consuming process may affect the satisfaction.

The idea was to keep it short, to keep the respondents interested and willing to answer. The response was more than satisfying; almost all the respondents answered every question except for some that could not give a clear answer to the experiences of having an EMS, since they were still in the middle of the implementation. Especially the options in question number 7 had several blank answers.

6.4 Selecting the sample group

The survey has been restricted to those companies that already have adopted an EMS for their business. The methods for selecting the respondents have been through searching through registers of companies that have some sort of EMS in their use. The registers have been found on the different certification systems' home pages but this has not always been available as not every certification system provides this. Consequently, the alternative way of selecting respondents was plainly by browsing the web and finding companies that stated they were environmentally responsible in some way. When choosing the appropriate person for answering the questions it was not always easy to find the right contact information. In a bigger company I wanted to approach the management level as they are usually in charge of the implementation of such matters. In the smaller companies it was easier and more straightforward as there were usually only one or a couple of persons in charge of everything.

6.5 Implementing the research

All the respondents were contacted by e-mail and asked to fill out a questionnaire. The questionnaire was created online on www.kwiksurveys.com. (http://www.kwiksurveys.com/online-survey.php?surveyID=HIOMGG_eb9f4893) It is a free online survey service where the results are easily manageable and can also be downloaded for quick analysing.

The covering letter was written in Finnish, English and Swedish whereas the questionnaire was made in English only. The reason for this was explained in the covering letter. (See appendix 1)

The majority of the respondents answered and returned the questionnaire within one week after receiving it.

7 RESULTS

In this chapter the collected data from the research will be studied and analysed. In total, 92 online questionnaires were sent by e-mail to different kinds and sizes of tourism companies around Finland. Three of those e-mails did not work and therefore 89 e-mails reached the recipients. There were all in all 21 respondents and the response rate was 23%. Parts of the results were received straight from the online questionnaire's result page on www.kwiksurvey.com, while the cross-tabulations and diagrams were done with Microsoft Excel. For creating the cross-tabulations pivot tables have been used.

7.1 Question 1: Company size

“What is the size of your company?”

This was a nominal question with the restriction of one choice of answer. The answer options were made based on the number of employees at the company where 1-9 employees is a micro company, 10-49 employees is a small company, 50-249 is medium sized and 250+ is a big company. The different company sizes were distributed as follows:

1. Micro-sized companies, 48% (10 out of 21)
2. Small companies, 33% (7 out of 21)
3. Middle-sized companies, 14% (3 out of 21)
4. Big company, 5% (1 out of 21)

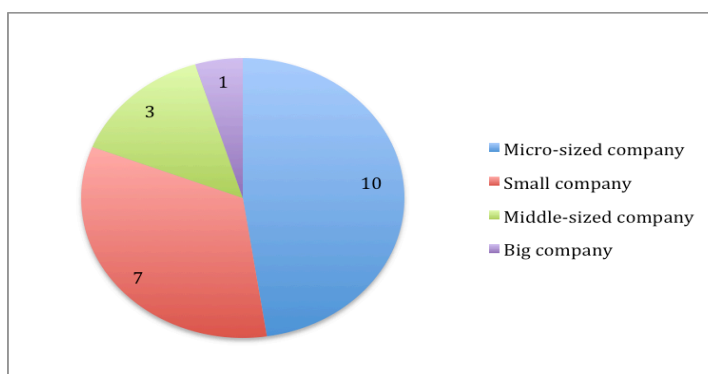


Figure 13. Question 1. Company sizes

7.2 Question 2: Sector of operation

“In what sector does your company operate?”

The second question was an open-ended question so that the respondents could name their sector in their own words. Subsequently, the answers were grouped into the tourism sectors classified by Goeldner & Ritchie (2002).

Tourism sectors (Goeldner & Ritchie, 2002: 122)

1. Travel trade sector: travel agents, tour operators
2. Accommodation Sector: hotels, hostels, B&B, guesthouses, campgrounds, cottages
3. Tourism services: government, research, marketing services
4. Transportation sector: air-, rail-, ground-, and water transport
5. Entertainment sector: media, music, performance, literary and visual arts
6. Food services sector: restaurants, bars
7. Adventure & Outdoor recreation: ecotourism, ski resorts, parks, golf & tennis
8. Attraction sector: museums, art galleries, cultural attractions

Accommodation is the biggest group with 7 out of 21 respondents. An extra group was made for the combined Accommodation/Food Services sector since there were 4 combinations of the two. The second biggest group with 5 respondents was the Adventure/outdoor recreation, followed by Tourism services (2), Travel trade (2) and Food services (1). There were no respondents from the four other sectors listed in Table 1 (Entertainment, Events, Attraction and Transportation sector). The respondents' own answers are listed in Appendix 7.

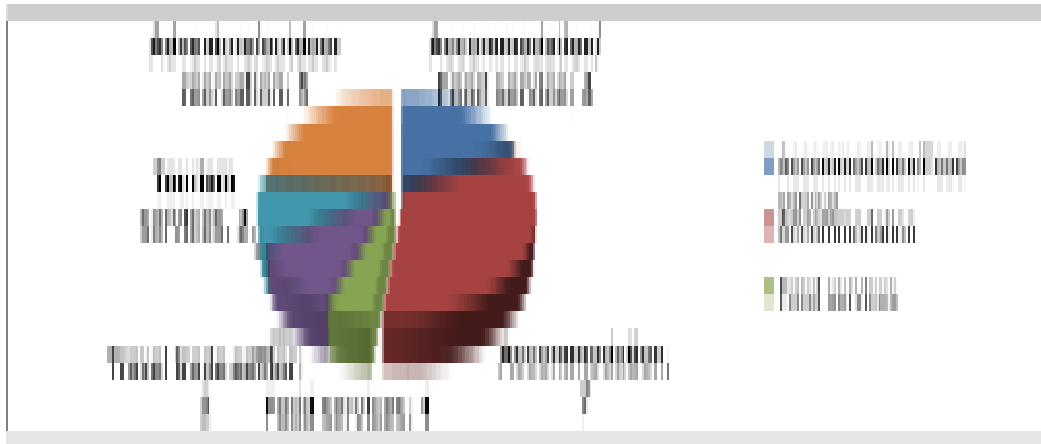


Figure 14. Tourism sectors

7.3 Question 3. Environmental Management system in use in the company

“Does your company have one (or several) of the following Environmental Management Systems (EMS) or certification programs?”

The alternatives to the questions were the 10 different EMSs that were presented earlier in this paper. It was possible to choose more than one option. The final option was an open answer, which was needed in case there happened to be any other EMSs in use.

There were five EMSs that did not have any representatives in this survey and the reason for that will be explained here.

- 1) The European Ecolabelling is in cooperation with the Nordic Ecolabelling, the latter, which is aimed for the Nordic countries. Thus, any Finnish company that would like to get certified with the European Ecolabel would consequently be directed to the Nordic Ecolabelling.
- 2) Both Earthcheck and Green Globe are operating internationally in different countries and continents with focus on the tourism and hospitality industry, but have not yet established themselves on the Finnish market.

3) The main sector for the EMAS-registered companies is the pulp and paper industry. There are no EMAS-registered Finnish tourism companies as of today. Possible reasons for this is that EMAS is basically too expensive or not that well known in Finland (EMAS. 2010).

4) Although ISO 14001 is the biggest EMS and operating worldwide there were no companies with this EMS participating in this survey. No ISO 14001-registered companies are listed officially and that has made it difficult to approach them in this research. Like EMAS, the ISO 14001 certification system is rather costly and best aimed at big companies.

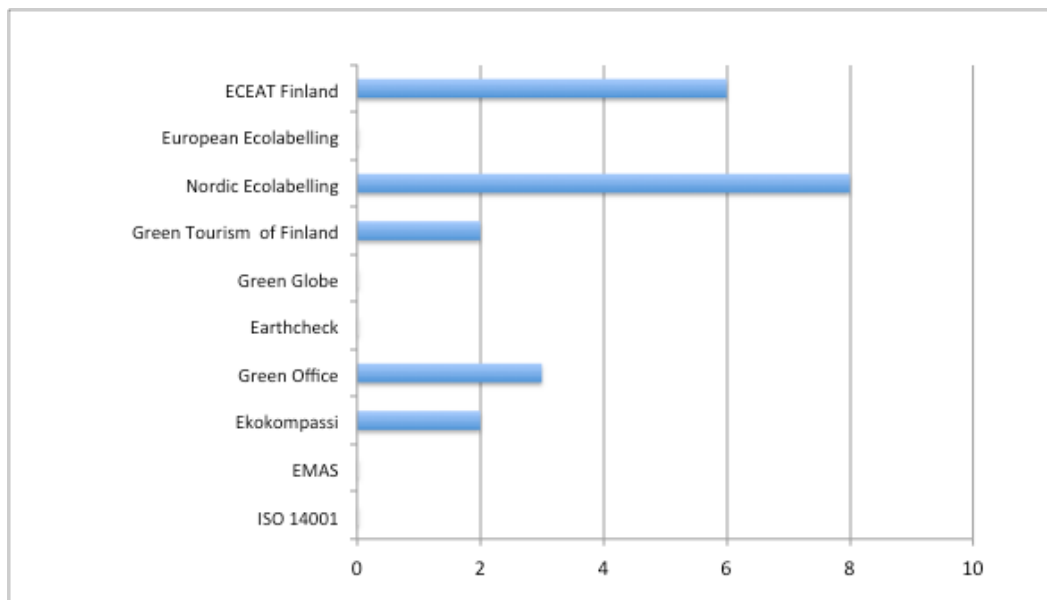


Figure 15. The EMS-systems in the research

The majority, with 8 respondents, are using the Nordic Ecolabelling in their companies. The second biggest group is the ECEAT Finland with 6 respondents, followed by Green office (3) and Green Tourism of Finland and Eco Compass (2 respondents each).

The companies were then compared with the systems by doing a cross-tabulation, in order to investigate how they systems were distributed among the different company sizes. It was clear that the ECEAT-system was very popular among the micro companies, 6 of 21 (28%) of all respondents were micro companies with

ECEAT. Green Tourism of Finland was also one system that got only respondents (2) from the micro companies. The remaining systems had respondents from an even range of company sizes. (See Table 2)

Table 3. Cross-tabulation of company sizes and EMS

Row Labels	ECEAT	Ekokompassi	Green Office	Green tourism	Nordic Ecolabel	Grand Total
Micro company	6	1		2	1	10
Small company		1	2		4	7
Middle-sized company					3	3
Big company			1			1
Grand Total	6	2	3	2	8	21

7.4 Question 4: How the EMS was encountered

“How did you find out about the EMS that your company has?”

This was an open-ended question where the respondents could mention how they found out about the EMS they are using. Then, the answers were categorized into five different groups to see if there were some similarities or differences in the way the eco-labels had marketed themselves:

- a) Well-known & established eco-label. This means that the brand is so well known and appears in various places that the companies could not mention exactly *how* they found out about it.
- b) Company was contacted by the EMS.
- c) EMS recommended by friend or others

- d) Internet/media. By doing a research through Internet, media and magazines the companies have found the best possible EMS for their business.
- e) Company policy. There are a couple of e.g. hotel chains that have a policy that one certain eco-label has to be used in the hotels.

This question became restricted to five of the ten EMSs that the questionnaire covered since the remaining five EMSs did not have any respondents (explained in chapter 8.3).

The conclusion drawn from this cross-tabulation is that the most common way of reaching new certified members (from the EMS-systems point of view) is by personally contacting them. Four out of five certification programs did make an approach towards the companies. The other common way was marketing through Internet, media and in magazines. In this case it was the companies themselves that was the active part and approached the certification programs.

Table 4. Cross-tabulation of Q. 4 and EMS-system

Row Labels	ECEAT	Ekokompassi	Green Office	Green tourism	Nordic Ecolabel	Grand Total
Company policy					2	2
Company was contacted by EMS	1	2		2	2	7
Internet/media	4		2		1	7
Other					1	1
Recommended by friend/other	1		1			2
Well known & established					2	2
Grand Total	6	2	3	2	8	21

7.5 Question 5: Implementation time of the EMS

“How long did it take to reach the implementation of the EMS?”

This was a nominal question with five options:

- a) Less than 6 months
- b) 6 months to 1 year
- c) 1-2 years
- d) More than 2 years
- e) Not yet implemented,
- f) As a final option was an additional text field to answer the sub-question related to the last option: “If it is not yet implemented; when did the implementation start?”

A positive result here was that the majority (14 out of 21) had been able to finish the implementation in less than one year: 38% in less than 6 months and 29% within 6 months to 1 year after the start.

A cross-tabulation was done and the companies were compared to see if the micro companies seemed to implement the EMS faster than the bigger companies. The difference was almost insignificant. 5 out of 8 were micro companies that had implemented the EMS in less than 6 months, but 4 of 6 were bigger companies that had done it within 6 months to 1 year. If adding the two groups together; ‘Less than 6 months’ and ‘6 months – 1 year’, the results were equal with 50% for micro companies and 50% for the bigger ones.

Table 5. Cross-tabulation of 'Length of implementation' and 'Company size'

Row Labels	Micro company	Small company	Middle-sized company	Big company	Grand Total
Less than 6 months	5	1	2		8
6 months - 1 year	2	3		1	6
1 - 2 years	2	1	1		4
2 + years	1				1
Not yet implemented		2			2
Grand Total	10	7	3	1	21

When cross-tabulating question 3 (which systems are in use) and question 5 (length of implementation) to investigate if any system it does not show that any of the systems would be faster or take more time to implement than the other.

Table 6. Cross-tabulation of EMS and length of implementation

Row Labels	ECEAT	Ekokompassi	Green Office	Green tourism	Nordic Ecolabel
Less than 6 months	4			1	3
6 months - 1 year	1		3		2
1 - 2 years	1	1			2
2 + years				1	
Not yet implemented		1*			1**
Grand Total	6	2	3	2	8

* The implementation started in 2009

** The implementation started in summer 2009

7.6 Question 6: Factors that contributed to the adoption of the EMS.

“How important were the following factors when adopting an EMS for your company?”

This was an interval scale question with different factors that could play a role when adopting an EMS. The factors were ranked in a 5-step scale from ‘Very important’ to ‘Very unimportant’. As additional options were ‘Don’t know’ and an open-ended question; ‘Other, what?’.

An interesting result is that the options regarding saving of costs and opportunities for better profits were not very important but rather “neutral”. Neither was the competitive advantage it could bring to the company. On the other hand, the options that were truly important were issues such as decrease pollution, slow down climate change, increase environmental responsibility, environmental reputation, and also, to increase the awareness among staff.

These results go well in hand with the environmental challenges discussed in chapter 4. The main issues there were also the climate change, pollution of waters, saving the natural resources (in question 6 it can be mirrored in the ‘Establishment of green purchasing procedures) and in general to become more environmentally conscious (in this case ‘Increase environmental responsibility’ and ‘Increase awareness among staff’.

	Very Important	Important	Neutral	Unimportant	Very Unimportant	Don't know
Decrease pollution	9	8	3	0	1	0
Slow down climate change	5	12	3	0	1	0
Regulations and laws	6	7	6	1	0	1
Establishment of green purchasing procedures	9	8	3	0	1	0
Increase environmental responsibility	17	4	0	0	0	0
Increase awareness among staff	12	8	1	0	0	0
Competitors have EMS	3	2	9	4	3	0
Corporate social responsibility (CSR)	8	7	4	0	1	1
Environmental reputation	11	7	2	0	0	1
Save costs	7	6	7	0	1	0
Opportunities for better profit	2	9	9	1	0	0
Improve relationships with stakeholders	7	2	6	1	4	1

Other, what?
Getting big multinational companies to our customers.
curiosity
It is just the way we live.
Konkurrensfördelar

Figure 16. Motivations for adopting an EMS

In order to investigate if there were any differences in attitudes regarding the question ‘Decreased pollution’ in question 6 a cross-tabulation was done between the micro-companies and the bigger companies.

Table 6 shows that 6 of the micro companies (60%) answered Very important while only 3 of the rest (27%) did the same. On the other hand, 5 of the bigger companies (45%) and 3 of the micro companies (30%) answered ‘Important’.

Table 7. Cross-tabulation of 'Decreased pollution' and company size

Row Labels	Important	Neutral	Very important	Very unimportant	Grand Total
Micro company	3		6	1	10
Bigger company	5	3	3		11
Grand Total	8	3	9	1	21

Another cross-tabulation was done with the question “Improve relationships with stakeholders” and the different company sizes. The aim was to see if there seems to be a difference in prioritizing stakeholders in big vs. small companies. Here, it can be seen that 50% of the micro companies think it is Very unimportant whereas 40% of the rest of the companies believe it is Very important. (Table 7)

Table 8. Cross-tabulation: 'Improve relationships with stakeholders' and company sizes

Row Labels	Very important	Important	Neutral	Unimport.	Very unimportant	Don't know
Micro company	2	1	2		4	1
Small company	1	1	3	1	1	
Middle-sized company	3					
Big company	1					
Grand Total	7	2	5	1	5	1

A third cross-tabulation was done with the question 'Opportunities for better profit' and the company sizes. There were some small differences between the company sizes and the motivation. 40% of the micro companies and 36% of the bigger companies were neutral. 50% of the micro companies answered it was 'Important' and 36% of the bigger companies said the same. Only one micro company said it was 'Very unimportant' and none from the bigger companies.

Table 9. Cross-tabulation: 'Opportunities for better profit' and company sizes

Row Labels	Very important	Very unimportant	Important	Neutral	Unimportant
Micro company		1	5	4	
Small company	1		3	2	1
Middle-sized company	1		1	1	
Big company				1	
Grand Total	2	1	9	8	1

7.7 Question 7: Expectations on the EMS.

This question was a combination of two. First was asked: “Did you have any of the following expectations on benefits of getting an EMS for your company? Mark Yes or No”

And then: “If Yes, how well/bad did the EMS meet the expectations?”

There was an additional ‘don’t know’ option as well as an open-ended text field for other comments.

This was the battery question that had the most ‘blanks’ in the whole questionnaire.

In the introduction of this thesis was presented several benefits of having an EMS. The results mirrors quite well the expectations that companies have on an EMS. The most expected results (where most of the respondent answered ‘yes’) were ‘cost savings on energy use’, ‘improved relationships with customers and the local community’, ‘new customers and competitive advantage’, ‘increased environmental awareness in management’ and the most expected was ‘Increased environmental awareness among staff’ (with 16 out of 20 respondents).

A cross-tabulation was used to compare the micro-sized with the bigger companies with the question ‘Increased environmental awareness among staff. The figure shows that 7 of 10 (70%) in the micro companies received the expected results of increased awareness and the rest did not expect any at all. Also the majority (5 of 11) of the bigger companies answered ‘Expected results’ on this question. (Table 9)

Table 10. Cross-tabulation: 'Increased environmental awareness among staff'

Row Labels	Beyond expectations	Expected results	Neutral	Don't know	No expectation	Blank
Micro company		7			3	
Small company	1	2	1	1	1	1
Middle-sized company		2				1
Big company		1				1
Grand Total	1	12	1	1	4	2

I.e.: the main objective was to see if the expectations existed at all, and later if they did, the level of satisfaction was studied. In all, the expectations were neither beyond expectations nor below expectations. The majority of the respondents received a general positive result with the expectations met.

The least expected things were cost savings on use of raw material (mainly since the majority of the respondents operate in the service business and are not dependent on raw material) and avoiding of penalties and fines. The figure with the answers is shown in appendix 8.

Another cross-tabulation was done for the question 'Better administration of environmental paperwork' where the micro and the bigger companies were compared. Half of the micro companies did not have any expectation at all on this, while 3 of 11 from the bigger companies answered 'Expected results' and 'Beyond expectation'.

Table 11. Cross-tabulation: ‘Better administration of environmental paperwork’ and company sizes

Row Labels	Beyond expectations	Expected results	Neutral	Disappointing	No exp.	Blank
Micro company		3	2		5	
Bigger company	1	2	3	1	2	2
Grand Total	1	5	5	1	7	2

7.8 Question 8: Reregistering for an EMS, with achieved experiences.

“If you consider the past experience you have had, would you register for an EMS again?”

Finally, the last question in the survey analyses if the impression of having registered for an EMS is positive or negative. 86% (18 respondents) said they would do it again, 1 respondent (5%) said no and 10% said they don’t know (2 respondents). Everyone that has the Nordic Ecolabel answered that they would register again, one that has Eco Compass answered no, and one each from ECEAT and Green Tourism did not know.

Table 12. Cross-tabulation of question 8 and EMS

EMS	EMS			Grand Total
	Yes	No	I don't know	
ECEAT	5		1	6
Ekokompassi	1	1		2
Green Office	3			3
Green tourism	1		1	2
Nordic Ecolabel	8			8
Grand Total	18	1	2	21

When comparing the difference between the company sizes and the answers 7 of 10 of the micro companies answered 'yes' while the remaining 3 answered 'no' or 'I don't know'. Based on the answers a small hint of skepticism for registering again can be noticed among the micro companies.

Table 13. Cross-tabulation of question 8 and company size

Row Labels	Yes	No	I don't know	Grand Total
Micro company	7	1	2	10
Small company	7			7
Middle-sized company	3			3
Big company	1			1
Grand Total	18	1	2	21

7.9 Limitations of the research

Reliability in a research means that the research can be done over again, with a similar target group, and still it would show the same results. Normally, a big respondent group indicates better reliability.

When it comes to the reliability of this research it can be questioned if it was satisfying. The survey only got 21 responses from 92 sent questionnaires. Furthermore, not every environmental management system that was included in the survey had a representative among the respondents. If the research would be done again, the results would presumably look different. A recommendation for the future is to have a bigger sample group, and to mix the research with both a quantitative and qualitative approach. In that way it would show aspects that otherwise risk to be ignored in a quantitative research only.

When it comes to question 7 it had many blank fields. The reason for that was that the battery actually included two questions and therefore might have looked unclear and the respondents lost the willingness to answer. This question could have been done in another way to make it easier to interpret.

Also the validity of the research is questionable, as it normally requires that the reliability is good as well. Since we wanted to study the expectations and experiences of having an EMS, it is not valid enough because not more opinions on some of the systems are represented. (Lecture. 2009)

When it comes to the analysis of the thesis another method such as the SPSS programme could have been preferred rather than Microsoft Excel. In that way, the reliability could have been tested with e.g. the Cronbach's alpha analysis.

7.10 Conclusion

The conclusion is that having an EMS is beneficial in many ways. The implementation does normally not take longer than one year and the expectations are often met. The majority of the companies that have an EMS are motivated by environmentally friendly reasons rather than their own profits. The companies prefer to have a well-known EMS that is recognized on the market and in the own country rather than a big, internationally well known EMS. Since it is costly to have an EMS it is preferred to choose a smaller, more affordable one but that still gives the expected results.

The Finnish tourism companies are responsible and understand to take care of resources. The majority do what is in their hands to be more environmentally friendly and to offer sustainable tourism services and products to the market.

8 LIST OF REFERENCE:

1. Printed material:

Almgren, R., Brorson, T. 2008. Miljöarbetet stärker affärerna! Uppsala: Uppsala Publishing House

Brace, I., 2008. Questionnaire design, how to plan, structure and write survey material for effective market research

Climate change and tourism – responding to global challenges. 2008. Madrid: World Tourism Organisation and United Nations Environment Programme.

Cooper, C., et. al. 2008. Tourism; principles and practice. 4th ed. England: Pearson Education Ltd.

Ellul, A. 2000. Tourism and the Environment in European countries. Nature and environment, no. 166. Strasbourg: Council of Europe publishing.

Ecotourism policy and planning. 2003. Edited by Fennell, D., Dowling, R. London: CABI publishing

Forest tourism and recreation. 2000. Font, X., Tribe, J. London: CABI publishing

Goeldner, C. R. and J. R. B. Ritchie. 2002. Tourism: Principles, Practices & Philosophies, 9th ed. New Jersey: John Wiley

Honey, M. 2010. Ecotourism and sustainable development – who owns paradise? 2nd ed. Washington: Island Press

Huybers, T, Bennett, J. 2002. Environmental management and the competitiveness of nature-based tourism destinations. Cheltenham: Edward Elgar Publishing ltd.

Hyman, M., Sierra, J. 2009. Marketing research kit for dummies. Hoboken: Wiley Publishing, Inc.

Kane, G. 2010. The three secrets of green business; unlocking competitive advantage in a low carbon economy. Earthscan publications Ltd.

Page, S., Dowling, R. 2002 Ecotourism. England: Prentice Hall.

Pérez de las Heras, M. 2004. Manual del Turismo sostenible. Madrid: Mundi-prensa libros s.a.

Tribe, J., Font, X., Griffiths, N., Vickery, R., Yale, K. 2000. Environmental management for rural tourism and recreation. London: Cassell

Veal, J. 2006. Research methods for leisure and tourism: a practical guide. 3rd ed. Essex: Pearson Education Limited.

Weaver, D.B. 2003. Ecotourism in the less developed world.

2. Articles

Environment. 2005. Ranking Sustainability. Vol. 47, no 2, p7-7.

Golafshani, N. 2003. Understanding reliability and validity in qualitative research. The qualitative report. Vol. 8, no 4, p 597-607.

Goodstein, C. 2006. Travelling Green. Natural History. Vol. 115 no 6, p 16-19.

Honey, M. 2003. Environment. Vol. 45. no 6, p 1-21.

Marburger, J. 2008. A global framework – International aspects of climate change. Harvard International Review, Vol. 30. no 2, p 48-51.

3. Electronic publications

Botanic Gardens Conservation International. 1999. Morgan, D: “Ecotourism – Fad or Future for Tourism?” [online] July 1999 [referenced 6.7.2010] Available online: <URL:<http://www.bgci.org/education/article/371/>>

Businessdictionary. 2010. Definition of ‘Environmental management’ [online] [referenced 17.11.2010] Available online: <URL:<http://www.businessdictionary.com/definition/environmental-management.html>>

Businesslink. 2010. Environmental Management systems – the basics [online] [referenced 4.7.2010] Available online: <URL:<http://www.businesslink.gov.uk/bdotg/action/layer?topicId=1079422683>>

Eco India. 2008. Sustainable tourism [online] [referenced 5.7.2010] Available online: <URL:<http://www.ecoindia.com/sustainable-tourism/>>

Eco compass. 2010 [online] [referenced 9.10.2010] Available online: <URL:<http://www.ekokompassi.fi/eng/about%20the%20project.htm>>

ECEAT Finland. 2010 [online] [referenced 2.9.2010] Available online: <URL:<http://www.eecat.fi/en/index.html>>

EC3 Global. 2010 [online] [referenced 17.9.2010] Available online: <URL:<http://www.ec3global.com/>>

Finland's environmental administration. 2010. What is EMAS? [online] [referenced 4.7.2010] Available online: <URL: <http://www.environment.fi/default.asp?node=7678&lan=en>>

Finland's environmental administration 2010. Surface waters. [online] [referenced 12.7.2010] Available online: <URL: <http://www.ymparisto.fi/default.asp?node=6084&lan=en>>

European Commission Environment. 2010. What is the Ecolabel? [online] [referenced 25.9.2010] Available online: <URL: http://ec.europa.eu/environment/ecolabel/about_ecolabel/what_is_ecolabel_en.htm>

European commission EMAS. EMAS-registered companies. 2010 [online] [referenced 17.11.2010] Available online: <URL: <http://www.emas-register.eu/search.php?base=base>>

Green Globe Certification. 2010 [online] [referenced 17.9.2010] Available online: <URL: <http://www.greenglobecertification.com/about.html>>

Green Office. 2010 [online] [referenced 16.8.2010] Available online: <URL: http://www.wwf.fi/yrikykset/green_office/>

Green Tourism of Finland. 2010 [online] [referenced 16.8.2010] Available online: <URL: <http://www.greentourism.fi/>>

The Guardian. 2010. The climate map of Europe 2071. [online] [referenced 16.8.2010] Available online: <URL: <http://environment.guardian.co.uk/flash/page/0,,2079347,00.html>>

Hotel-online. 1999. Meade, B. & Monaco, A. Environmental Management: the key to successful operation. [online] [referenced 4.7.2010] Available online: <URL: <http://www.hotel-online.com/Trends/PanAmerProceedingsMay99/EnviroManagmt.html>>

Natur och Miljö. 2010. Hållbar konsumtion och production. [online] [referenced 16.8.2010] Available online: <URL: <http://www.naturochmiljo.fi/sve/temahelheter/hpk/>>

New Scientist. 2004. Ananthaswamy, A. Massive growth of ecotourism worries biologists. [online] [referenced 24.7.2010] Available online: <URL: <http://www.newscientist.com/article/dn4733-massive-growth-of-ecotourism-worries-biologists.html>>

Nordic Council of Ministers 2009. Nordic nature – trends towards 2010. Fact sheet: Threats to biodiversity in the Nordic Countries. 10/2009 (pdf). [online] [referenced 24.10.2010] Available online:

<URL:www.environment.fi/nordicnature> (Fact sheets > Threats to biodiversity in the Nordic Countries)

North Carolina Division of Pollution Prevention and Environmental Assistance. 2010. EMS & ISO 14001 FAQ. [online] [referenced 24.7.2010] Available online: <URL:http://www.p2pays.org/iso/emsisofaq.asp#faq6>

Outdoors Finland. 2009. National Parks. [online] [referenced 15.9.2010] Available online: <URL:http://www.luontoon.fi/page.asp?Section=4984>

SFS-ympäristömerkintä. 2010. Joutsenmerkki. [online] [referenced 9.10.2010] Available online: <URL: http://www.ymparistomerkki.fi/>

The International Ecotourism Society. 2006. TIES Global Ecotourism fact sheet. [online] [referenced 15.7.2010] Available online: <URL:http://www.ecotourism.org/atf/cf/{82a87c8d-0b56-4149-8b0a-c4aaced1cd38}/TIES%20GLOBAL%20ECOTOURISM%20FACT%20SHEET.PDF>

Untamed path. 2007. Defining ecotourism. [online] [referenced 15.7.2010] Available online: <URL:http://www.untamedpath.com/Ecotourism/what_is_ecotourism.html> <URL:http://www.untamedpath.com/Ecotourism/defining.html>

Watertime. 2004 Watertime National Context report – Finland. [online] [referenced 12.9.2010] Available online: <URL:http://www.watertime.net/wt_cs_cit_ncr.asp#Finland>

Your home planet. [online] [referenced 4.7.2010] Available online: <URL:http://www.yourhomeplanet.com/ecological/index_ems.php>

4. Event

ECAP “on-the-job-training session” 4.10.2010. Club EMAS. Barcelona.

5. Lecture

Sabel, Thomas. September 2009. Marketing Research (lectures). Vaasa University of Applied Sciences.

APPENDIX 1

Hei,

nimeni on Katja Koivusalo ja olen kolmannen vuoden matkailualan opiskelija Vaasan ammattikorkeakoulusta. Osana opiskeluitani tulee suorittaa opinnäytetyö. Valitsemani tutkimusaihe on ympäristöasioiden hallinta suomalaisissa matkailuyrityksissä. Ideana on tutkia motivaatioita ympäristöjärjestelmän valintaan, sekä kokemuksia sen pitämiseen. Kysely koostuu 8 kysymyksestä ja niihin vastaaminen kestää muutaman minuutin. Opiskelen englanninkielisellä linjalla, siksi kysymyksetkin ovat englanniksi. Kaikki vastaukset käsitellään luottamuksellisesti eikä yksittäisiä vastauksia julkaista loppuraportissa.

Olisin hyvin kiitollinen, jos vastaisitte tähän kyselyyn. Kiitos ajastanne!

Klikkaa alla olevaa linkkiä, jotta pääsette kyselyyn:

http://www.kwiksurveys.com/online-survey.php?surveyID=HIOMGG_eb9f4893

Hi,

My name is Katja Koivusalo and I am a final year student at Vaasa University of Applied Sciences in Vaasa, Finland. As part of my program Tourism Management I am required to write a thesis. The research topic I have chosen is Environmental Management in Finnish tourism companies. This survey includes the motivations for choosing an environmental management system, and the experiences from having one. The questionnaire consists of 8 questions and will take just a few minutes to answer. All answers will be handled confidentially, and no particular answers will be shown in the results!

If you would take the time to answer these questions I would greatly appreciate it. Thank you for your time!

Please click on the link below in order to start the questionnaire:

http://www.kwiksurveys.com/online-survey.php?surveyID=HIOMGG_eb9f4893

Hej,

Mitt namn är Katja Koivusalo och jag studerar turism tredje året vid Vasa yrkeshögskola. I mina studier ingår att skriva ett lärdomsprov. Som tema har jag valt att skriva om miljöledning i finländska turismföretag. Denna enkät undersöker skälen till att välja ett miljöledningssystem samt erfarenheterna från att ha ett sådant. Enkäten innehåller 8 frågor och tar endast några minuter att svara på. Alla svar behandlas konfidentiellt och inga enskilda svar kommer att synas i resultatredovisningen! Programmet jag studerar går på engelska, därför är också frågorna på engelska.

Om ni kunde ta er tid att svara på dessa frågor vore jag väldigt tacksam! Tack för er tid!

Klicka på länken för att komma till enkäten:

http://www.kwiksurveys.com/online-survey.php?surveyID=HIOMGG_eb9f4893

Katja Koivusalo

koivusalo.katja@gmail.com

+34 62 204 7421

(+358 44 343 2776)