

**UNIVERSITY OF EASTERN FINLAND**  
**Faculty of Social Sciences and Business Studies**  
**Department of Business**

**FLUCTUATION AND MANIFESTATION  
OF GREEN MARKETING IN CAR ADVERTISEMENTS  
IN 1995-2010  
- A CONTENT ANALYSIS**

**Master's Thesis, Marketing**  
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ABSTRACT  
UNIVERSITY OF EASTERN FINLAND  
Faculty of Social Sciences and Business Studies  
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KORTETMÄKI, HELI: Fluctuation and Manifestation of Green Marketing in Car Advertisements in 1995-2010 – A Content Analysis. Vihreän markkinoinnin vaihtelu ja ilmeneminen automainoksissa 1995-2010 – sisällönanalyysi.

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Environmental issues have gained a lot in importance on different fields during the past decades. This change has been significant also in marketing where especially during the last two decades green marketing has reared its head. Green issues have become more visible notably in the car industry and car advertisements which are in focus of this study.

The purpose of this study was to find out what kind of a role does green marketing have in car advertisements. The aim was two-fold: 1) to find out how big a part of car advertisements can be interpreted as green and how has that share changed during the research period and 2) what is the content in green car advertisements like and has that content changed over the research period. To find answers to these questions, three different car magazines were gone through from the whole research period that covered all the issues from January 1995 to early September 2010, altogether almost 16 years. This formed a data of 962 magazine issues and 5844 car advertisements.

The data was gone through using content analysis. From all 5844 car advertisements 845 (14,46%) were found to contain green elements. However, the share of green advertisements fluctuated greatly during the years. It was found out that during 1995-1999 approximately 13,88% of car advertisements were green, in 2000-2004 only 3,27% and in 2005-2010 the average share had risen to 22,85%. This means a 76,41% decrease between the first two year groups and a dramatic 598,16% increase between the two latter year groups. Green marketing in car advertisements can therefore be said to have increased during the research period but the increase has not been linear.

For the second part of the study a smaller sample of 79 green car advertisements were examined more closely. Through a categorization model, partially taken from literature, it was found out that 84,80% of green car advertisements promote the product itself (ad objective) the most common ad appeal being presenting technical information (64,60%). Also the greenness of the advertisements was estimated and the result was that 65,80% are only light green, 20,30% green and 13,90% dark green. A statistically significant difference between year groups existed only in ad appeal but that was most likely explained by small case numbers in some sub-groups. As a conclusion it can be said that even the share of green car advertisements has increased, yet changed a lot over the years, their content has remained somewhat the same.

TIIVISTELMÄ  
ITÄ-SUOMEN YLIOPISTO  
Yhteiskuntatieteiden ja kauppatieteiden tiedekunta  
Kauppatieteiden laitos  
Markkinointi

KORTETMÄKI, HELI: Fluctuation and Manifestation of Green Marketing in Car Advertisements in 1995-2010 – A Content Analysis. Vihreän markkinoinnin vaihtelu ja ilmeneminen automainoksissa 1995-2010 – sisällönanalyysi.

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Viimeisten vuosikymmenten aikana ympäristöasioiden merkitys on noussut monilla eri aloilla. Muutos on ollut merkittävä myös markkinoinnissa eritoten kahden viime vuosikymmenen aikana, jolloin vihreän markkinoinnin osuus ja merkitys on kasvanut. Muutos on ollut erityisen näkyvä autoteollisuudessa sekä automainonnassa, joka on tämän tutkimuksen mielenkiinnon kohteena.

Tutkimuksen tarkoituksena oli selvittää millainen rooli vihreällä markkinoinnilla on automainonnassa. Tutkimuksen tavoite oli kaksijakoinen: 1) selvittää miten suuri osa automainoksista voidaan tulkita vihreiksi ja miten tämä osuus on muuttunut tutkimusajanjakson aikana sekä 2) millainen on vihreiden automainosten sisältö ja onko sisältö muuttunut tarkasteluajanjakson aikana. Vastausten saamiseksi kolmen autolehden kaikki numerot käytiin läpi tammi-kuusta 1995 syyskuun 2010 alkuun saakka. Tästä muodostui tutkimusaineisto, joka käsitti 962 numeroa, joissa oli yhteensä 5844 automainosta lähes 16 vuoden ajalta.

Aineisto käytiin läpi sisällönanalyysin keinoin. Kaikista 5844 automainoksesta 845 (14,46%) tulkittiin vihreiksi. Vihreiden mainosten osuus on kuitenkin vaihdellut huomattavasti vuosien aikana. Vuosina 1995-1999 keskimäärin 13,88% automainoksista oli vihreitä, vuosina 2000-2004 vain 3,27% ja 2005-2010 osuus oli noussut 22,85%:iin. Täten vihreiden automainosten osuus väheni 76,41% ensimmäisten kahden vuosiryhmän välillä ja nousi 598,16% kahden jälkimmäisen vuosiryhmän välillä. Vihreiden automainosten osuuden voidaan siis sanoa nousseen, mutta lisäys ei ole ollut lineaarista.

Tutkimuksen toiseen osuuteen otettiin 79 vihreää automainosta kattava otanta. Osittain alan aiempien tutkimusten perusteella muodostetun vihreiden mainosten kategorisointimallin mukaisesti tarkasteltuna huomattiin, että 84,80% vihreistä automainoksista mainostaa itse tuotetta (ad objective) ja suurin osa (64,60%) vetoaa kuluttajiin kertomalla tuotteen teknisistä ominaisuuksista. Myös mainosten vihreyden taso analysoitiin ja tuloksena oli, että 65,80% mainoksista on vain vaaleanvihreitä, 20,30% vihreitä ja 13,90% tummanvihreitä. Tilastollisesti merkitsevä ero eri vuosiryhmien välillä oli vain mainosten vetovoimatekijöissä (ad appeal), mikä johtunee siitä, että osa ad appeal -kategorian alakategorioista sisälsi hyvin pienen määrän tapauksia, jolloin muutokset ovat prosentuaalisesti suuria. Johtopäätöksenä voidaan sanoa, että vaikka vihreiden automainosten osuus on noussut tutkimusajanjakson aikana, tosin vaihtelut eri aikakausien välillä ovat suuria, on mainosten sisältö pysynyt jotakuinkin samanlaisena.

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## 1 INTRODUCTION

### 1.1 Background of the Research

“Pollution, agricultural poisons, deforestation, global warming, ozone depletion, groundwater contamination and a host of other maladies”, enumerates John F. Wasik (1996, xvii) the plagues of today. Despite the evolution has brought a lot of positive changes so that land is not cultivated or goods transported by hand anymore, nor are commodities any longer fabricated by every household separately since industrial revolution provided us with machines, it has not happened without negative consequences. After being ignorant as well as unconcerned about the consequences caused to nature, people have finally started to accept what our actions throughout centuries have caused and are causing to the planet. For example glaciers that effectively reflect heat radiation coming from the sun back to space, are now melting with an increasing pace causing the sea level to rise which threatens to drown inhabited coastal areas and flat islands. This is due to global warming that is largely caused by human activity. Carbon dioxide emissions pollute the air all around the world causing the earth protecting ozone layer to deplete which leads to more global warming and increased radiation that is detrimental to health. This is also mainly caused by human activity. Cutting down forests, which act as gigantic carbon sinks and oxygen providers, with a pace that exceeds their power of regeneration causes not only weakening of the air quality but also diminution of animal species. These examples just add to the list of what unnecessary overconsumption can cause. Changes in nature and climate are to some extent part of the natural evolution but as Donald A. Fuller (1999, 23) puts it “the dramatic and unrestrained increase of one species, Homo sapiens, currently appears to be triggering large numbers of extinctions well beyond any norm”.

All the things mentioned above are part of today’s environmental crisis but what has this to do with business and marketing? Increased concern about the environment together with other dramatic changes such as the globalization of markets and growth of electronic commerce has created new pressures on marketing to respond and evolve (Belz & Peattie 2009, 15). Environment’s role in business can be said to be quite obvious since it provides every field of business all the inputs needed and the destination for all the outputs (Peattie 1995, 10). Raw materials for manufacturing come from the natural environment. The power needed in factories is also obtained from nature whether it is a question of harnessing water, wind or solar

power or burning coal or oil. At the end of a product's life cycle a place for dumping the waste is found also from the environment, either natural or built one. Peattie (1995, 24 & 49) writes that marketing as a business function has contributed to the current environmental crisis because it has acted as a driving force in unsustainable growth in consumption. Whether the impacts have been intentional or unintentional, marketing can try to compensate the damages and become part of the solution by marketing more sustainably produced products, new companies doing business in a sustainable manner, new more sustainable lifestyles, new values and new ideas.

Awakening to the harsh reality that nature might not take the modern style of living much longer together with the shortcomings of conventional economics has led towards greener economics (Peattie 1992, 19). Marketing is often seen as the antithesis of sustainability (Jones, Clarke-Hill, Comfort & Hillier 2008, 123) but that view is changing as a new kind of marketing, green marketing, has emerged. Green marketing offers a new way of making business, a way which leads into a *win-win-win situation* where not just companies and their customers, but also nature benefits from business transactions.

Caused by the increased talk about climate change, global warming and the overall environmental crisis, environmental issues have now become a topic on all fields of every day life. A significant change has taken place in the auto industry where during the past few years new, greener technologies and greener marketing have emerged. In vehicle manufacturing, operation and disposal, there is almost nothing that is not polluting in some way. Car engines have been found to produce harmful combinations such as carbon dioxide, nitrogen oxide, hydrocarbons and carbon monoxide which contribute to global warming, formation of smog and several serious diseases. Vehicle exhaust gases are found to be the single largest contributor to air pollution in the world. (Wasik 1996, 78.) This opens a brilliant chance to car manufacturers to diminish the burden caused to the natural environment, by developing cars that are more environmentally friendly in every stage of their life cycle. Also 78% of consumers believe that it would make a lot of difference to the environment if cars were greener (McDonald & Oates 2006, 164). A key example of developing alternative technologies that allow people to continue living their current life style only in a more environmentally friendly manner, is the process of developing bio fuel-driven cars (Belz & Peattie 2009, 10). Electric, hybrid, zero-emission and low-emission vehicles are other examples. To inform consumers

about the benefits of these new technologies and new cars that burden the environment less than their predecessors, there is green marketing.

Green marketing, and especially one part of it, green advertising, are the main interests in this research. The area of environmental communications, which includes green advertising, has gained in importance as environmental impacts of business actions are now raising more concern (Buchholz 1998, 384). Easwar Iyer and Bobby Banerjee (1993, 494) named in their article three reasons why it is current and important to study and analyze green advertising. First, they wrote, because the media has really picked up on the green theme; secondly, most consumers get their information about environmental issues through mass media (Scott Paper Company Study 1990), and thirdly, despite the high dependence on mass media, consumers do not believe or trust the information they get. Though written more than 15 years ago, these reasons apply to a great extent even still.

The march of green marketing and increase in the amount of green advertisements has been especially noticeable in the auto industry. Industry that has a history of putting no value on environmental issues, but instead causing huge amounts of pollutants, has now turned its coat. Cars are no longer sold using arguments concerning only their top speed, acceleration, engine size, the amount of horsepower they possess or other performance measures, but emphasizing also their lower petrol consumption, lesser emissions, how many percentages of the car parts are manufactured using recycled materials and overall environmental friendliness. As it is now evident that this new type of marketing has gained more supporters and is growing in popularity, it is interesting to examine exactly how much green marketing has really increased and how that trend shows in car advertisements.

## **1.2 Purpose and Goals of the Research and Research Problems**

The main purpose of this study is to find out what kind of a part green marketing plays in car advertising. The aim is to provide help in understanding the history of green car marketing and car marketing of today. The aim is therefore to study the evolution of green marketing on the car advertising field. Car advertisements will be observed from the past 16 years, up to present time, describing the changes and the current state of the field and based on these suggest into which direction it might proceed in the future.

This study could be seen to include two parts. In the first part, the goal is to produce information about the frequency of green car advertisements in general and during the research period. Questions concerning frequency can be defined as: how big a share of car advertisements can be interpreted to be green and how the amount of green marketing in car advertisements has changed over the years id est have car advertisements become greener? In order to do this, a definition for a green advertisement will be drawn from literature. In the second part of the research, the goal is to produce information concerning the content of green car advertisements and the changes that have taken place in them. Questions concerning the content of green car advertisements can be defined as: what kind of green car advertisements exist, what is the content like in them and how has that content developed during the research period. In order to do this, selected advertisements will be classified according to a classification model drawn partially from literature. Based on these, an attempt to find out a pattern in the changes, in both the amount and content of green car advertisements, will be made. Also an attempt to try to explain the reasons behind these changes will be made.

Through the goals of the research, specified research problems can be defined. The main research problem of the research is: What kind of a role does green marketing have in printed car advertisements today? Four essential research sub-problems can be derived from the main problem and distinguished as follows: 1) How big part of car advertisements in car magazines can be considered as green?, 2) How has the share of green car advertisements in car magazines changed over the research period of 16 years?, 3) What kind of green advertisements are there?, 4) Has the content in green car advertisements changed during the research period and if so, how?

### **1.3 Key Concepts**

Four terms can be named as the key concepts of this research: green marketing, green advertising, car magazine and content analysis. Green marketing is a relatively new field of marketing of which green advertising is part of. Car magazines provide the data used in this research. Content analysis will be used as the analysis tool when analyzing green advertisements in the selected car magazines. Here the concepts are defined briefly in the meaning in which they are used in this research.

*Green marketing.* Green marketing is a relatively new type of marketing ruled by a new set of values; it is in the middle of environmentalism, humanism and business. It is a philosophy that tries to balance techno-economic market perspective with a broader socio-environmental approach. (Peattie 1995, 28, 41.) In green marketing environmental concerns have a lot of importance. It is carried out in a way that respects the environment, and takes the delicacy of nature into consideration in every step of a decision-making process. Sustainability is one of its leading thoughts meaning that marketed products and services are produced in a way that does not endanger the supply of them in the future. Focus has shifted from the conventional short-sighted and profit-chasing view towards a more sustainable and environmentally conscious way of making business still satisfying the expectations of companies and customers. Peattie (1992, 11; 1995, 28) defines green marketing as “the holistic management process responsible for identifying, anticipating and satisfying the requirements of customers and society in a profitable and sustainable way”. More definitions follow in chapters 2.1 and 2.1.1.

*Green advertising.* Green advertising can be defined through any advertisement that meets one or more of the following criteria: 1) explicitly or implicitly addresses the relationship between a product or a service and the biophysical environment, 2) promotes a green lifestyle with or without highlighting a product or a service and, 3) presents a corporate image of environmental responsibility (Banerjee, Gulas and Iyer 1995, 22). More about green advertising follows in chapter 2.3.1.1.

*Car magazine.* In this thesis the term car magazine is used to refer to magazines that focus on different kinds of automobiles in general. Car magazines refer here also to magazines that focus on different types of technique but that also write about cars to a large extent.

*Content analysis.* “Content analysis is a research technique for making replicable and valid conclusions from data to their context” (Krippendorff 1981, 21). Content analysis is used to analyze the contents of messages. Content analysis is explained more widely in chapter 3.2.1.

#### **1.4 Approach, Definition and Limitations to the Subject**

The subject of the research is approached through examining green advertisements. Because the appearance of green marketing and green advertising is especially noticeable in the car industry and, because of the writer’s own interests, the research was decided to be focused on

car advertisements. In addition, the exciting contradiction between the natures of the highly-polluting car industry and environmental protection awoke interest. Therefore also the data was to be gathered from car advertisements. Printed car magazines were selected as a proper medium because of the easy access to older advertisements in order to make a long-term study. Also it is easy to obtain a large research data when focusing solely on car magazines. Instead it would have been a lot more difficult to obtain both as broad research data and older material within the same time frame if focusing on for example television car commercials. Advertisements in other media were therefore excluded from the research.

The proportion of green car advertisements among all car advertisements and a possible change in that will be examined and the content and changes of green car advertisements will be defined and described. Reasons behind these possible changes both in the share and the type of green advertisements will also be discussed. The research data includes all issues of the selected three car magazines from years 1995-2010 and from those magazines solely the advertisements that are at least one page in size and that clearly advertise cars are included. Other than car advertisements and all editorial content in the researched magazines will be left outside the research.

### **1.5 Literature and Previous Researches about the Subject**

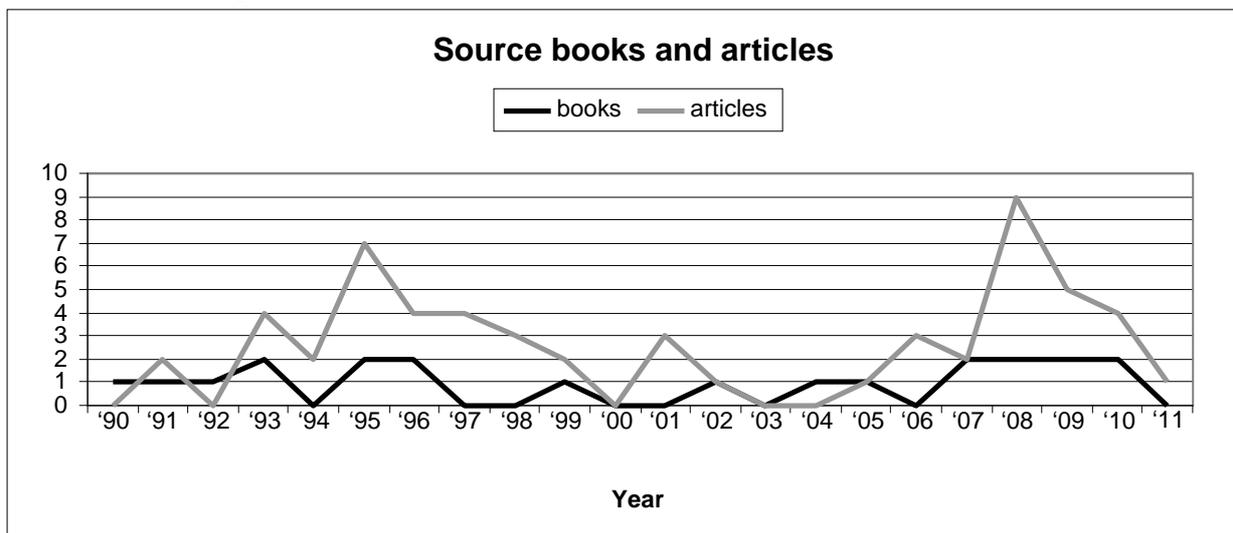
As it is later presented in chapter 2.2.2 interest in environmental issues among marketing has fluctuated over decades. Increase and decrease can be clearly seen in the amount of books and articles published on the field yearly. When environmental marketing first started properly to develop in the 1970s, the first studies concentrated on studying the relations between environmental concern and behaviour, mainly focusing on consumers' recycling activity, and the characterization of the green consumer. Researches made back then focused on subjects that are seen as irrelevant when it comes to the subject of this thesis and also too old to be used as source material. Then, already at the end of the 1970s, interest towards green issues started its first decline, largely due to the economic crisis, and this naturally resulted in the decline of academic contributions at the time as well. (Chamorro et al. 2009, 223-224.)

In late 1980s and early 1990s, interest in environmental marketing grew again and led to a dramatic rise in the amount of researches made. Books and articles about several issues around the topic were published also in Europe and not just in the US anymore. Especially

numerous books were published at the time. (Chamorro et al. 2009, 224.) This led to the use of quite a large amount of source books compared to the amount of articles in this thesis. This boom also caused a somewhat bias towards books and articles published especially in the 1990s which is why a rather big part of the source books and articles are relatively old, from 15 to 20 years. Of all the source material that concern green marketing, more than 47% of the books used and 49% of the articles are published between 1990 and 1999.

In the beginning of the 21<sup>st</sup> century environmental issues were forgotten for a while which resulted in a low amount of publications at the time as also Chamorro et al. (2009, 225) point out in their research. From early to mid 2000s there were several years from which any articles or books concerning green marketing could not be found. Towards the end of the 2000s interest in green issues grew again heavily. This caused also the bias of late 2000s in the source material. Of all the green marketing source books and articles used in this thesis over 42% are published between 2005 and 2010. Years 1995-1999 cover 24% of books and 35% of the articles. This leaves less than 10% of source books and 7% of source articles being published between 2000 and 2004. The rest are published before 1995 and one article as a pre-publication from 2011. The numbers are illustrated in chart 1 below.

**Chart 1** Years of publication for source books and articles.



Although environmental issues are a common topic nowadays, green marketing, or to be more specific, green advertising, is a subject that seems to be concerned by surprisingly few scientists. Especially researches concerning green advertising are few, covering only 7,7 % of all researches made about green marketing and management. Five major issues are addressed in

green marketing and management research: environmental claims, consumers' attitudes and responses to green advertisements, greenwashing, advertising greenness and green advertising ethics. (Leonidou & Leonidou 2011, 14, 18.)

Many of the books or articles used in this thesis were written by the same authors. This was caused by the fact that source material for the theory part was not by rights abundantly available. Chamorro et al. (2009, 228) have also concluded that a lot of researches and literature on the green marketing field are done by the same authors. They list nine people as the most productive authors in the green marketing field: John Thøgersen, Norman Kangun, Stephen J. Grove, Michael J. Polonsky, Subhabrata (Bobby) Banerjee, Andrew Crane, William E. Kilbourne, John A. McCarty and L.J. Shrum. Material from all of these researchers except for the first one, have also been used in this thesis. In addition to these at least Ken Peattie, Jacqueline Ottman, Easwar Iyer, Les Carlson and Joel J. Davis have been productive in making researches and writing books concerning green marketing.

Kilbourne (1995, 7) writes that unlike in other areas of research, in green marketing a proper theoretical framework to guide future research has not been developed. Research in green marketing tends to be fragmentary and highly specific with common goals focusing on the identification of the green consumer or the development of scales to find out the level of environmental concern among consumers. Now, 15 years after Kilbourne's statement not much has changed. Kilbourne however mentions Iyer and Banerjee (1993) to be a notable exception to this with their attempt to categorize green advertisements. Researches concerning green advertising have recently concentrated on greenwashing and the use of green claims or investigating the connection between green claims and the actual greenness of the company behind those claims. Not so much research has been done about the content of green advertising (for example Leonidas & Leonidas 2011, 14) and no researches at all were found about car advertising so this thesis is exploratory in nature. On the next two pages, in table 1, previous researches most closely related to the subject of this thesis are listed.

**Table 1** Previous research about the subject.

Authors (year of publication)	Title of the study	Research problem	Research data	Method	Results
Iyer, Easwar & Banerjee, Bobby (1993)	Anatomy of Green Advertising	What kind of green advertisements are there?	Claims from 173 environmental print ads	Content analysis	Most green ads focus on planet preservation and corporate image and not on consumption.
Carlson, Les, Grove, Stephen J. & Kangun, Norman (1993)	A Content Analysis of Environmental Advertising Claims: A Matrix Method Approach	What are the types and frequency of environmental claims in ads and to what extent claim types are deceptive/misleading?	Claims from 100 full page environmental print ads from 1989-1991	Content analysis	Most ads are image-oriented, least are process oriented, more ads are misleading/deceptive than acceptable.
Kangun, Norman, Carlson, Les & Grove, Stephen J. (1991)	Environmental Advertising Claims: A Preliminary Investigation	How much environmental ads contain misleading and deceptive claims?	Claims from 100 full page environmental print ads from 1989-1990	Content analysis	43% of the ads were identified as deceptive, 58% contain at least one misleading claim.
Banerjee, Subhabrata, Gulas, Charles S. & Iyer, Easwar (1995)	Shades of Green: A Multidimensional Analysis of Environmental Advertising	What is the content of environmental advertisements like?	95 green TV ads from 1991-1992 and 173 environmental print ads from 1987-1991	Content analysis	Structure of green advertising is best explained with sponsor type, ad focus and depth of the ad.
Polonsky, Michael Jay, Carlson, Les, Grove, Stephen & Kangun, Norman (1997)	International Environmental Marketing Claims. Real Changes or Simple Posturing?	Do marketers increasingly make substantive environmental advertising claims or are they just jumping on the green bandwagon?	300 environmental ads from magazines from Australia, Canada, UK and US from years 1992-1993	Content analysis	There are differences between countries: US firms make less substantive changes to their activities than other 3 countries.
Carlson, Les, Grove, Stephen J., Laczniak, Russell L. & Kangun, Norman (1996)	Does Environmental Advertising Reflect Integrated Marketing Communications?: An Empirical Investigation	Is integrated marketing communications (IMC) reflected in green advertisements, how is it manifested and how does it impact green marketing?	100 green print ads from 1989-1990	Content analysis	49% of ads were integrated, most of them at the lowest level of integration, IMC is manifested through the use of public relations, sales promotion, direct response and brand advertising.

Authors (year of publication)	Title of the study	Research problem	Research data	Method	Results
Kilbourne, William E. (1995)	Green Advertising: Salvation or Oxymoron?	Does green advertising exist? What is the nature of green advertising?	Previous writings and researches in the green marketing field	Theoretical research	Green advertising exists and is useful. There are at least 5 types of green: environmentalism, conservationism, human welfare ecology, preservationism and ecologism.
Kärnä, Jari, Juslin, Heikki, Ahonen, Virpi & Hansen, Eric (2001)	Green Advertising: Greenwash or a True Reflection of Marketing Strategies?	Does environmental advertising reflect genuine environmental marketing strategies?	167 advertisements (from years 1995-1998) and 114 interviews from 75 Finnish companies in the forest industry	Content analysis & personal interviews with a structured quantitative questionnaire	There is clear environmental substance behind green advertising in the forest industry.
Iyer, Easwar, Banerjee, Bobby & Gulas, Charles (1994)	An Exposé on Green Television Ads	What is the structure of green television advertisements?	95 green TV ads from 1991-1992	Content analysis	Most green TV ads are only moderately green or even shallow, focus on several environmental issues, promote corporate image and emphasize control or social responsibility.
Wagner, E.R. & Hansen E.N. (2002)	Methodology for Evaluating Green Advertising of Forest Products in the United States: A Content Analysis	What is the level of greenness in environmental forest product advertisements?	323 issues from 6 magazines from 1995-2000	Content analysis	57% of the ads were on the top two levels of greenness on a five-step scale while 23% were on the least green step.
Lähdesmäki, Kristiina (2005, Master's thesis)	Mainonnan vihreät vuodet. Vihreän kuluttajamainonnan muutokset suomalaisissa aikakauslehdissä vuosina 1982-2002	Has advertising for consumers become greener during the last 20 years and if so, in what way?	582 advertisements (of which 54 green) from three magazines from years 1982, 1992, 1997 and 2002.	Content analysis	The amount of green advertising has increased but also fluctuated as has the level of greenness of advertisements.

## **1.6 Structure of the Research**

In this thesis, there are altogether five main chapters. After this introduction chapter comes the theory part that consists of one main chapter, chapter 2, that is divided into seven subchapters. The first subchapter, 2.1 What is Green Marketing?, includes three subchapters. The first subchapter presents six different concepts of green marketing, in the next subchapter some reasons for why companies are going green are presented and, the third subchapter tells how a company can be green and what kind of different green marketing strategies there are. Chapter 2.2 represents the history of green marketing with four subchapters about green politics, the evolution of green marketing, discussion about whether the environmental crisis really exists and a chapter about criticism towards green marketing. Subchapter 2.3 presents in its two subchapters a green version of the traditional marketing mix of four Ps and a new set of four Cs. Green advertising is introduced as part of the four Ps. Chapter 2.4 tells about green marketing as a part of a wider concept of holistic green management, 2.5 represents the position of ethics in green marketing, 2.6 is about green consumerism and identifying and categorizing the green consumer and 2.7 discusses about the future scenario of green marketing. Chapter three starts the empirical part of the work, the research part where the research data, research methods, execution of the research and analysis tools are presented. Chapter four represents the results of the research verbally as well as through tables and diagrams. Finally, there is a conclusion chapter, chapter five, that ends the thesis. In this chapter results are summed up, discussion takes place, conclusions are drawn and suggestions for further research are presented. Finally, at the end, there is bibliography.

## 2 GREEN MARKETING

A green way of thinking means diminishing the burden caused by human actions to nature and includes therefore reduction of consumption. Since marketing is traditionally seen aiming to stimulate consumption, it is easy to claim that marketers and supporters of greenness are on a collision course. Then it is to be remembered that it is not marketing itself that is environmentally unfriendly, but instead it is some of the marketed products and services. (Peattie 1992, 85.) Nowadays, a growing number of companies are emphasizing their commitment to sustainability attempting to differentiate themselves on the market and enhancing their corporate brand and reputation even integrating sustainability thinking into their core brand (Jones, Clarke-Hill, Comfort & Hillier 126, 2008).

### 2.1 What is Green Marketing?

According to a definition by Iyer and Banerjee (1993, 494), the term *green* is considered to mean an underlying concern for preserving the environment and following a noninvasive lifestyle. The term is typically used interchangeably with the term *pro-environmental* (Shrum, McCarty and Lowrey 1995, 72). Peltomäki and Kamppinen (1995, 7) write that greening means taking nature conservation aspects into more careful consideration in all of society's actions. Ken Peattie (1992, 25-26) enumerates six things of which at least some he says to make a person green: 1) concern for life on earth, 2) concern for future generations, 3) concern for other countries and their nations, 4) desire to develop sustainable alternatives to environmentally destructive growth, 5) desire to move away from values of consumption and materialism towards the values of conservation, sharing, and self-reliance, and 6) emphasis on quality of life over material standards of living. These same six things or at least some of them can as well be used to describe the whole green thought and that way also the underlying world of ideas of green marketing.

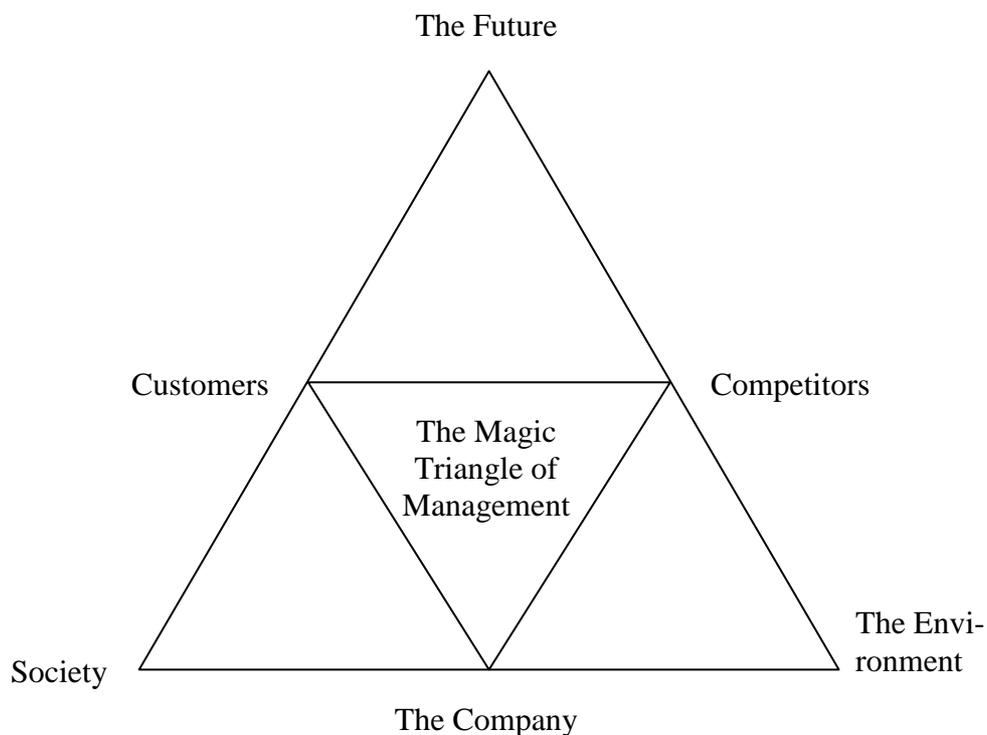
There is no one unambiguous definition of what *green marketing* is but instead several different ones. Green marketing is a relatively new type of marketing that has been developed to market products and services in a way that not just satisfies the needs and wants of consumers and the company, but at the same time also tries to answer to existing concerns about the state of our planet. It is a holistic view that includes a company trying to achieve its corporate ob-

jectives and meet their customers' needs while trying to minimize the environmental harm that these actions are causing. It is a post-modern marketing approach that focuses on the lack of fit between conventional marketing and the ecological and social realities of the wider marketing environment (Belz & Peattie 2009, 16). Nair and Menon (2008, 468) define it as a holistic and sustainable managing process that is aimed to optimize consumer value and other stakeholder value without compromising human and environmental safety.

Despite being new, green marketing is not a totally separate genre; it has some overlap with other marketing variants. It is not so different from conventional marketing either; the difference is in the information that is fed into the process, the performance evaluation criteria, the more holistic nature of it and the values that lie behind the company's objectives. (Peattie 1992, 11, 100; Polonsky & Rosenberger 2001, 23.) In green marketing the environmental arguments and values seen as important by the company, are productized as part of the product or service (Pallari 2004, 20). Green marketing is pulled by markets and pushed by legislation towards improved and environmentally friendlier corporate performance (Van Dam & Apeldoorn 2008, 254). Green marketing is based on three principles: social responsibility, sustainability, and a holistic approach (Peattie 1995, 29). The aim of green marketing can be seen as generating as much customer satisfaction as possible in a profitable way by using fewer raw materials, less energy, diminished pollution, less waste, less packaging, less replacement purchases and smaller overhead costs (Peattie 1992, 93). Environment is incorporated into many marketing activities including planning, product and package design, pricing policies, distribution, retailing, promotion, customer segmentation, strategic alliances, industrial marketing and even overall marketing strategy (Polonsky, Carlson, Grove & Kangun 1997, 220).

Ken Peattie (1995, 39) lists ten key elements and characteristics of environmental marketing, the word that he uses instead of green marketing: 1) in environmental marketing there is a balanced approach to social, technological, economic and physical aspects of businesses and societies that allows companies to step forward, 2) emphasis is put on long-term sustainable qualitative development instead of short-term unsustainable quantitative growth, 3) it is a holistic approach and not the fragmented approach of previous business theory and practice, 4) emphasis is put on meeting the genuine needs of consumers instead of stimulating their superficial desires while 5) seeing consumers as real people rather than economic entities, 6) multiplicity and complexity of both consumer and society wants and needs is recognized and real-

ized that sometimes those wants and needs can be conflicting, 7) environmental marketing as well includes a view of company and all its activities as part of the final product that is consumed, 8) it is also recognized that the current large-scale, long-distance economy is not sustainable, 9) it embraces the concept of eco-performance including non-market outputs of the company, performance of the product during use and after it and the environmental impact of companies which promote the creation and marketing of a product elsewhere in the supply chain, and 10) there is a pursuit of added socio-environmental virtue as well as added techno-economic value. Peattie also presents an expanded environmental marketing agenda seen below in figure 1.



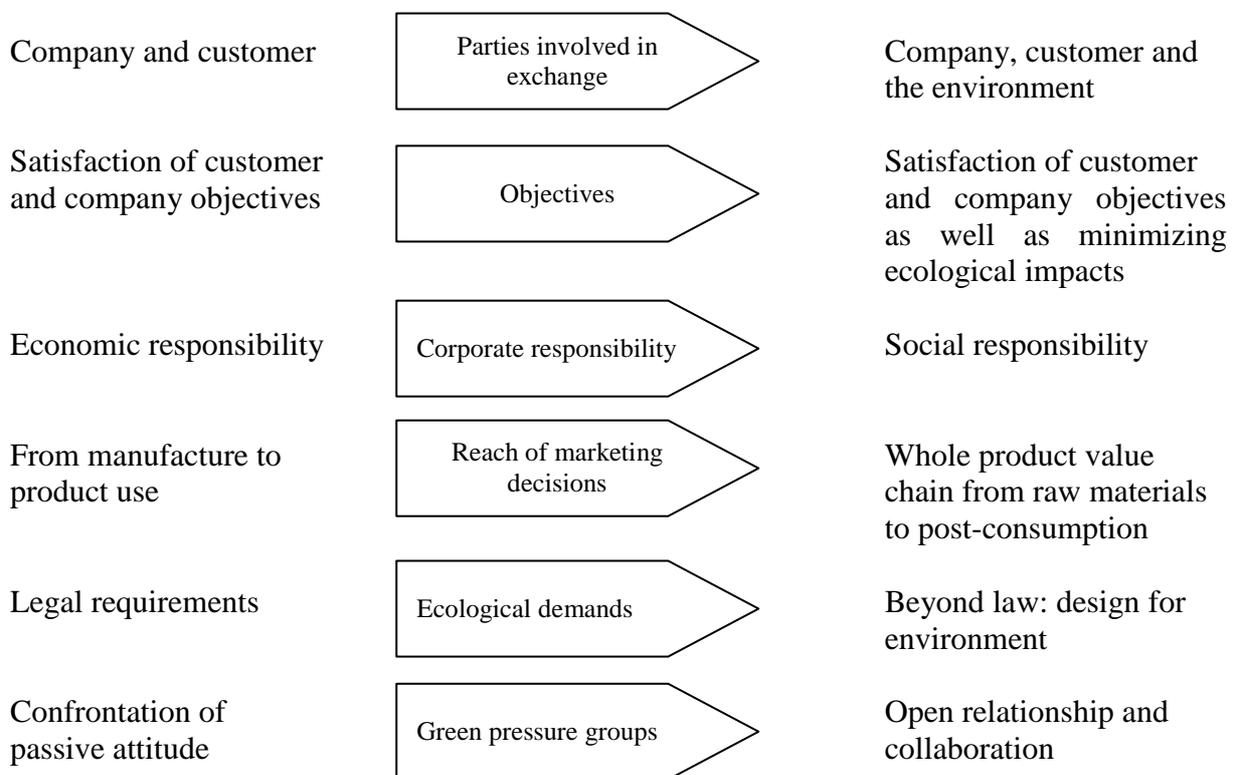
**Figure 1** The expanded environmental marketing agenda (Peattie 1995, 40).

In the beginning a lot of green marketing had only little to do with marketing or the environment. It was more opportunistic and based on tactical advantage rather than a real pursuit of strategic change. (Peattie 1995, 25.) Now green marketing is changed and it can be seen as a win-win-win situation meaning that all the three parties, the company, its customers and the environment will benefit from the results of the chosen marketing actions. It can be delineated as a new way of noticing environmental consequences, caused by business activities, and taking them into account when making business decisions. This way of thinking requires a widening of the traditional focus and, means that a closer examination of the relationship between

the business and its natural environment must take place (Oksanen 2002, 64). Green marketing offers a good way for companies to react to the concerns that have risen among consumers worldwide concerning the alleged environmental crisis. It offers environmentally conscious marketers a real chance to try to change the buying behaviour of their company's customers towards a pro-environmental direction. It is also a way for marketers to satisfy the demands stemming from changed consumer habits that get customers demanding for products that have been manufactured in an environmentally sustainable way and that are also environmentally friendly in use. Green marketing can create whole new business segments, new customer segments or help a company to gain customers that used to be out of their reach.

### TRADITIONAL MARKETING

### GREEN MARKETING



**Figure 2** Differences between traditional and green marketing (modified from Chamorro & Bañegil 2006, 13).

Whereas conventional marketing values are usually considered to be somewhat hard, calculating a monetary value for everything, greening is often seen to mean a sort of softening of values. In green marketing environmental aspects are seen to balance hard business thinking with humane aspects. With serious environmental and humankind-related changes in question,

green marketing can never be short-sighted. Functions of green marketing are aimed to preserve the future; it has an open-ended rather than a long-term perspective and it treats environment as something that has intrinsic value beyond its usefulness to society (Peattie 1992, 11). Chamorro and Bañegil (2006, 13) present differences between traditional marketing and green marketing as presented above in figure 2.

Ranta (1993, 1) writes that as marketing is often regarded as a method that tries to make people buy what they really do not need, it is in stark contrast with the extreme environmentalist aim of only consuming the things we absolutely need. Marketing is yet one of the most efficient means with what environmental problems can be solved in the long run.

### **2.1.1 Different Concepts of Green Marketing**

There is no single, unequivocal definition of the concept green marketing. Since the 1970s, several marketing concepts dealing with ecological and social issues have emerged. There are several terms with a slightly different meaning and yet several concepts of green marketing are used to mean the same thing. These kinds of terms include: *green marketing*, *ecological marketing*, *environmental marketing*, *sustainable marketing*, *sustainability marketing*, and *social marketing*. (Belz & Peattie 2009, 26.) Some see them as totally separate concepts whereas most use them or at least some of them interchangeably usually to describe the phenomenon of marketing products in a way that also benefits the natural environment. Even a single term might have several slightly different definitions but most of them however overlap each other to a great extent.

At least the terms green marketing, environmental marketing and sustainable marketing are usually used interchangeably. For example Pallari (2004, 13) uses all three terms green marketing, environmental marketing and *eco-marketing* when referring to marketing where salient points are the environment and taking environmental issues into consideration. Chamorro, Rubio and Miranda (2009, 223) write that all the previously mentioned terms as well as some other not-so-common terms such as *greener marketing* and *enviropreneurial marketing* are normally considered as synonymous terms that all refer to the same field of study: the analysis of how marketing activities impact on the environment and how the environmental variable can be incorporated into the various decisions of corporate marketing. Kilbourne (1995, 7) writes that even the terms ecology, environment and green appear synonymously in litera-

ture, though they have different meanings as can be seen from explanations that follow later in this chapter. Most of literature describes the general term of green marketing as companies adapting to the increasing consumer demand for environmentally friendly products (van Dam & Apeldoorn 2008, 263). The following chapters present different definitions, taken from literature, for the most commonly used terms on the field.

*Green marketing.* Green marketing consists of all the activities that are designed to generate and facilitate any exchanges intended to answer to human needs and wants in a satisfactory way with minimal detrimental impact on the natural environment (Stanton & Futrell cited in Polonsky 1995, 30-31). Green marketing must satisfy two objectives: improved environmental performance and customer satisfaction (Ottman, Stafford & Hartman 2006, 24). Green marketing has also been described as the movement in business towards developing and promoting ecologically compatible products (Laczniak & Murphy 1993, 97). It can be seen as a response by companies to the increasing demand for environmentally sensitive products (Buchholz 1998, 373). Green marketing is a general term used to refer to taking environmental aspects into consideration in marketing decisions. In addition, the definitions presented earlier in chapter 2.1 can be included here. According to Donald Fuller (1999) the term green marketing was first used by Ken Peattie in 1992 and Jacquelyn A. Ottman in 1993.

*Ecological marketing.* Ecological marketing developed during the 1970s. During its early years, it dealt mainly with depletion of natural resources, despite if the resources were suitable for energy use or not and, pollution caused by production and consumption. Ecological marketing now raises questions about using critical, environmentally harmful substances and energy consumption. It also deals with marketing activities that cause environmental problems. Ecological marketing examines the marketing mix of product, price, place and promotion from an ecological point of view and questions for example the type and amount of modern ways of packaging. Ecological marketing also foregrounds recycling as a key issue. (Belz & Peattie 2009, 28.) The term ecological marketing was first used by Karl E. Henion already in 1976 (Fuller 1999).

Major difference between ecological marketing and the general term of green marketing is that in ecological marketing societal and moral motives are very strong, whereas market pressures might overcome these in green marketing. Ecological marketing sees environmental consideration as a moral act, when in green marketing environmental friendliness is seen

mostly as a marketing tool even though partially as a moral act as well. (van Dam & Apeldoorn 2008, 263.) Ecological marketing is seen as the one closest to nature and the one that is the most pro-environmental of the concepts.

*Environmental marketing.* Environmental marketing is considered simply as use of the environment in marketing. Environmental marketing can be separated into functional and strategic parts. Functional environmental marketing refers to application of environmental issues as a marketing tool. Strategic environmental marketing then again refers to a process with what environmental issues are integrated into the strategic planning of marketing. (Ranta 1993, 3.)

Environmental marketing is an open-ended perspective that treats environment as something that has intrinsic value above its usefulness to society and focuses on global concerns (Peattie 1995, 28). Marketing for the environment is a traditional form of environmental marketing. It refers to using the methods of marketing in order to change the behaviour of consumers and companies towards being more environmentally friendly. (Ranta 1993, 7-8.) According to Fuller (1999) and Chamorro et al. (2009, 223) the term environmental marketing was first used by Walter Coddington in 1992-1993. The word environment can be used to refer to both the natural environment and built environment though usually only to the first one. In this thesis, it is used to refer to the natural environment.

Environmental marketing differs from its ancestors, societal marketing and ecological marketing because it entwines equally ecological and social concerns, the breadth of its ecological agenda is wide and because it is potentially applicable on all types and sectors of business (Peattie 1995, 28). The view of ecologism is more radical and ecocentric when environmentalism is more reformist and anthropocentric (Kilbourne 1995, 9). The difference between environmental marketing and ecological marketing can be clarified by reviewing the distinction between environmentalism and ecologism. Environmentalism demands a managerial approach to environmental problems believing that they can be solved without having to make fundamental changes in the present values or patterns of production or consumption. Ecologism on the other hand includes an idea that a sustainable and fulfilling existence requires radical changes to be made in the relationship between human kind and the environment and in the existing mode of social and political life. (Dobson 2007, 2-3.)

*Sustainable marketing.* Sustainable marketing is a term coined by Jagdish Sheth and Atul Parvatiyar. It means the process of planning, implementing and controlling the development, pricing, promotion, and distribution of products in a manner that customer needs will be met, organizational goals will be attained, and the process is compatible with ecosystems. Sustainable marketing addresses the ways for reconciling economic and ecological factors through reinventing products and production systems. (Fuller 1999, 3-4.) Sustainable marketing can also be defined as “marketing within, and supportive of, sustainable economic development” (van Dam & Apeldoorn 2008, 254).

Sustainable marketing includes the idea that production and consumption systems must function in a way that they imitate the natural systems. Five fundamental dogmas must be recognized if sustainable marketing is adopted: 1) ecosystems are a limiting factor on marketing decisions, 2) the product system life cycle is the appropriate decision framework, 3) pollution prevention and resource recovery are appropriate strategies for achieving sustainability, 4) small environmental improvements done by companies and customers at the micro level turn into large absolute improvements at the macro level, and 5) sustainable marketing is not an exercise in corporate altruism. (Fuller 1999, 4-6.)

The difference between sustainable marketing and green marketing is that sustainable marketing emphasizes ecological, social and economic issues whereas green marketing mostly focuses only on environmental problems (Belz & Peattie 2009, 30).

*Sustainability marketing.* Sustainability refers to long-term maintenance of systems from environmental, economic and social viewpoints (Crane & Matten 2001, 23). According to another definition, sustainability means consuming resources at a rate which allows them to be replaced and producing pollution not faster than what nature can assimilate. Creating a sustainable world economy ensures that people today will not live their lives at the expense of future generations. (Crosbie & Knight 15, 1995; Peattie 1995, 33.) According to Fetzer and Aaron (2010, xii) sustainability means looking for different ways how to achieve goals without sacrificing people, planet or profit. In sustainability marketing the idea is to do business while making sure that those elements that make possible to make business are sustained to enable business in the future as well. Belz and Peattie (2009, 32) write that sustainability marketing means understanding of social and environmental problems on both macro and micro level. It means understanding the problems in general (macro level) and especially be-

ing able to analyze all social and ecological impacts of corporate products (micro level). Another definition by Belz and Peattie (2009, xii, 74) describes that sustainability marketing is a sustainability-oriented marketing trend that combines the strengths of conventional marketing with sustainability perspectives taken from ecological and ethical marketing and insights from the field of relationship marketing. The benefits of consumption to individual customer are balanced by a concern for collective social and environmental costs. This way a new marketing paradigm is created based on building sustainable, value-based relationships with the company's consumers.

Sustainability marketing is to a large extent similar with other newer marketing trends, such as green marketing but there are differences. Some of the differences between different concepts are that in sustainability marketing social concerns, such as those concerning people's health, have more importance than in some other concepts. Sustainability marketing should still not be confused with closely linked *societal marketing* where social issues are the main focus. In sustainability marketing ecological perspectives are still important, whereas in societal marketing they are dismissed. Sustainability marketing has a very long time perspective.

Difference between sustainability marketing and sustainable marketing is that since the word sustainable means durable and long-lasting, it could also be interpreted to refer solely to long-lasting customer relationship marketing without any reference to actual sustainable development, that can be defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Our Common Future, accessed on October 23<sup>rd</sup>, 2010). The concept of sustainability marketing then again relates more explicitly to the sustainable development agenda. (Belz & Peattie 2009, 31.)

*Social marketing.* According to Amy V. Fetzner and Shari Aaron (2010, 7-8), a social dimension means the human elements of actions, such as health, wellbeing and social expectations. Social marketing therefore refers to application of marketing principles, concepts and tools to problems caused by social change (Kotler cited in Belz & Peattie 2009, 28). Social marketing programs are designed to influence the behaviour of individuals in order to improve their wellbeing or the wellbeing of the society. Social marketing is concerned about the issues of macro marketing but usually it takes a micro marketing perspective. (Belz & Peattie 2009, 28.) In social marketing, environmental issues themselves do not play a big part but they are part of concern since environmental problems are mostly caused by social change. Environ-

mental issues are also taken into consideration because the improvement of society's wellbeing includes also taking care of the natural environment.

### 2.1.2 Why to Go Green?

Going green has turned into a trend within several business fields. While concern for the environment and an honest aspiration to save the planet might be a reason enough for some companies to increase their environmental marketing activities, it is not that for all. Companies are interested in going green because of both pull and push factors. As pull factors, the competitors' increased reactions to environmental hazards and the demands coming from green consumers have gained in visibility and significance and as push factors, the environmental regulation and laws imposed by governments have become stricter (Peattie 1995, vii; Roarty 1997, 244). Also the rising costs of resource inputs are a reason for many to go greener by focusing on more effective usage of resources or trade down for natural raw materials (Pallari 2004, 21; Peattie 1992, vi). Other reasons for going green include demands coming from suppliers or other co-operation partners, company's own garbage reduction goals, philosophic or moral reasons such as seeing greening as "the right thing to do", competitive reasons, recycling trend or community relations (Kassaye 2001, 448; Polonsky & Rosenberger 2001, 22). Practicing green marketing just because everyone else is doing so or because it seems to be a trend is a classic example of *bandwagoning* (Hesz & Neophytou 2010, 178).

Victoria Olausson (2009, 86-88) suggests four reasons for a company's increased level of activity among environmental marketing: 1) a will to give a public promise that can work as a "point of commitment", 2) a desire to create markets, 3) an effort to accelerate a change in society, and 4) a desire to achieve a competition advantage. Peattie (1992, 46-47) on his behalf lists eight possible reasons why companies are greening their actions: 1) going green is what customers seem to want and a failure to become green can mean lost sales, 2) becoming green can open up new markets for the company since environmental problems create markets for solutions, 3) increase in environmental actions can generate competitive advantage as well as it can save money for the company, 4) becoming green can also provide the company a sort of insurance, 5) a company whose environmental performance exceeds the requirements set by legislation, has a buffer against tightening regulations and can that way avoid making constantly small adjustments that are often costly in time, effort and money, 6) poor environmental performance can also be costly as it is and it will increasingly become illegal through-

out the world, 7) greening business can boost the morale of the company itself, and 8) environmental problems can provide major threats as well as opportunities.

Jones et al. (2008, 125) suggest in their article five reasons for the popularity of sustainability in companies: 1) a need to comply with increasing amount of environmental and social regulation, 2) concerns about cost and scarcity of natural resources, 3) greater general public awareness of the importance of socially responsible financial investments, 4) growing media interest and coverage concerning the activities of anti-corporate pressure groups, and 5) general changes in social attitudes and values in modern capitalist countries.

According to Kotler et al. (2010, 153-154, 157-159) companies can adopt three different roles in their environmental marketing according to their motivations: the innovator, the investor or the propagator. The innovator invents or innovates products that have the potential to save the environment and not just products that do not harm the environment or that are environmental friendly. Innovators' products reverse the damage done and do not damage the environment in their production process or in their disposal. The investor is a company or individual that finances research projects and has a vision of a greener world but for whom green business is not a core business mission. The propagator has a green business model which turns its internal values into external competitive advantage. The propagator has a mission of creating awareness among user groups, employees, and the public about the importance of protecting the environment. Propagators seek to create environmental ambassadors by spreading the values of protecting the earth to employees and consumers.

Some reasons, such as targeting green consumers might not necessarily mean that marketers are authentically improving their companies' environmental performance (Polonsky et al. 1997, 220). Companies might appeal to their customers expressing their environmental concern or introducing their products or production processes as more environmentally friendly despite if they have really become greener or not. Going green might be a company's own voluntary choice or it may be a forced solution. Companies might have to change their actions because of tightened legislation or in order to not to lose their status on the market or to not to give a competitive advantage to others. Environment can impact business in various ways. It can have direct impacts if the physical or the human environment of the company changes. Environment can also impact business through changed consumer demands or changes in the competitive environment of the company. Legislative changes can bring big, compulsory

changes at once. Business can be impacted also indirectly meaning a situation where environmental concerns encourage media, company staff, general public or shareholders to put pressure on the company. (Peattie 1992, 49.) Transforming into a green, sustainable culture requires a balance consideration of economic and technical impacts and aspects of businesses with understanding of their social and physical implications (Peattie 1995, 9).

Environmental friendliness and ethical values have become an asset in competition for companies and they actively want to emphasize it in their marketing (Majaniemi 2007, 195). Success of a company is also increasingly becoming dependent on its environmental performance (Koechlin & Müller 1993, iix). Environmental issues are gaining a lot in importance which is to be noticed on the business field. Companies which reduce their negative impact on the environment should have or will have competitive advantage, at least in terms of satisfying socially responsible consumers, over those companies that do not improve their environmental behaviour (Polonsky, Bailey, Baker, Basche, Jepson & Neath 1998, 290). Another hard-to-measure advantage is the advantage of green reputation (Arnst, Reed, McWilliams & Weimer 1997, 98). Surveys show that many consumers are likely to choose one brand over another if they believe the brand will help the environment (Carlson, Grove & Kangun 1993, 27). A company can acquire public goodwill success when it combines an overall green strategy with a good product design and is then able to advertise it effectively (Wasik 1996, 115).

Becoming environmentally friendly might require a lot of investments from the company such as new machinery and production systems, acquiring raw materials, new research and development costs, new marketing schemes, staff training et cetera. But starting to follow the rules of sustainability can also generate income. Greening happens both in the internal environment meaning the mindsets, values and attitudes inside the organization, and in the external environment that consists of customers, legislation, competitors and so on (Peltomäki & Kampinen 1995, 19). Through new sustainability based actions an organization can gain a competitive edge, enhance its public image, qualify for tax concessions, be eligible for so called green loans or attract ethical investors and potentially add green credentials and premiums to its products. This can also be turned the other way around: being unsustainable can cost more money. Environmentally unfriendly behaviour causes day-to-day expenses through among others wasted energy, unnecessary transport costs, emission offset payments, fiscal penalties and waste disposal costs. (Fetzer & Aaron 2010, 44.) According to Olausson (2009, 134) envi-

dence has been found through research that companies which function sustainably can gain better increase in value and better profitability.

The profit a company makes unambiguously increases when it cuts down its consumption of raw materials and energy and reduces its production and distribution costs as well as its waste output. Green marketing is suggested to actually be a by-product of the new way of seeing environmental friendliness in an ecological light and not just a socially acceptable way to cut down costs. Many companies see their environmental awareness as part of an overall cost-reduction plan: “good ecology is good economics”. (Wasik 1996, 2-4, 14.)

### **2.1.3 How to Be Green?**

Greening of the philosophy and practice of marketing requires a re-evaluation of some of its most fundamental elements. A company should take a new approach to consumers. Instead of seeing them as just consumers, environmental marketers should talk about customers in order to be able to keep a more personal, human and responsible relationship with them. A company should also assimilate a new concept of customer satisfaction meaning that whether customers are satisfied with the product or not, it is a matter of not just how the product performs at the moment of consumption, but also what happens to it afterwards. The time horizon in green marketing has extended from that of conventional marketing. A marketer’s time horizon must reach beyond the economic lifetime of the product because its environmental impacts may take a long time to appear. Moving towards a successful greening of the company activities should not be seen as a straightforward path, but more so as a continuous process in which diverse dimensions of the organization interact (López-Rodríguez 2009, 401). Companies generally need to adapt an open mindset and a more widened horizon because the green challenge makes them think more internationally and globally and might force them to reject some of their preconceptions. (Peattie 1995, 36-37.)

In sustainability marketing strategy, decisions must be made in four categories: market choice, competitive advantage, targeting and positioning. Concerning market choice it has to be decided in which markets the company is going to compete in and whether or not to enter a particular sustainability-oriented market or market segment. Concerning competitive advantage a company has to decide if it should use a superior social or environmental performance as a source of differentiation or to follow a strategy that is based on low costs and low prices

or should it focus on identifying, occupying and defending a particular market niche. When it comes to targeting, decisions have to be made about which segments in the market the company will target and how to vary its market offering and how to appeal to different market segments. Segmentation, differentiation and targeting are combined in the concept of positioning, which can be considered as a competitive position that a product or a company occupies on the markets and in the minds of consumers. (Belz & Peattie 2009, 134-136.)

Polonsky and Rosenberger (2001, 23-26) make their own listing about strategic activities and tactics that companies have to consider when going green: targeting, design, positioning, pricing, logistics, marketing waste, promotion and alliances. They write that although there are many ecologically minded consumers, companies should still not develop products targeting only those consumers. Designing and developing new green products is an integrated and complex process that requires innovation. In green positioning, a company should recognize what are the underlying environmental values and behaviours of it and its products; rhetoric should match consumer expectations. Pricing is a problematic area for green goods given that they often have a higher purchasing price though lower long-term costs and that consumers are generally willing to pay only a small premium for environmentally friendlier products while still expecting them to perform as well as conventional goods. Green logistics is a complex strategic activity that includes not only the traditional logistics chains but also reverse logistics. While inventions such as the internet have reduced the environmental impact of distribution activities, in green business there are still a lot of complex issues in developing effective reverse logistics through which used goods can be transferred from consumers back to the company. According to Polonsky and Rosenberger, waste being a product of company activities as well as manufactured products can be used to add value through waste reduction or internal use of waste. A primary issue in green promotion is that there must be something worthwhile to communicate about. Green promotion needs to communicate essential environmental information that has meaningful links to corporate activities. Green alliances with for example environmental groups can be valuable to companies in helping them understand environmental issues, developing good solutions and implementing associated strategies and tactics. Crosbie and Knight (1995, 62-63) add that a company should choose whether to use a green business development strategy based on innovation, diversification, integration, internationalism or co-operation.

Every company's stage of greenness can be seen from its product criterion, technology criterion and business ethics criterion. A company is truly green if it manufactures products that are environmentally friendly in terms of their durability, pollution or something else, uses production methods that minimize environmental damage, and applies a corporate philosophy that includes environmental values and that is made effective by environmental policy with specific objectives. The most essential characteristic is the last mentioned, business ethics criterion. (Roarty 1997, 249.)

Pierce (2007, 20) enlists three things that need to be taken care of in order for a company to successfully make green work in business and when building a brand. First, a company's green initiatives must be authentic. Customers are becoming more educated in green issues so making environmental claims up or disguising ordinary commodities as green is not easy anymore. Green activist groups are also more alert so cheating in environmental issues will not get a company far. The commitment a company makes to the environment must permeate the business. Secondly, a company should be able to clearly demonstrate how their green initiatives address their customers' needs and enhance the customer experience. Customers are not often willing to compromise convenience or increase their burden even though it would be for the environment's sake. Thirdly, going green should be based on the energy and passion of the company's employees.

Peattie (1992, 130-131) on his behalf enlists six things that green marketers need to do in order to become successful. First, marketers have to make sure that they understand the wants and needs of green consumers. Secondly, marketers have to be able to sort out those green issues that are relevant to their company, their customers and their products. Thirdly, they need to evaluate the level of green performance that is needed to match to the wants, needs and expectations of the consumers. Fourthly, marketers should evaluate how the company and its competitors are able to meet the customers' needs both today and in the future. Fifthly, marketers need to plan and execute a marketing strategy that fills all the gaps in current or future green performance of the company. And lastly, marketers should stay informed about green issues, the company performance and the behaviour of both consumers and competitors.

Jacquelyn Ottman (cited in Wasik 1996, 85) says that for green marketing to be effective, various stakeholder groups have to be involved. These stakeholder groups are the parties that are interested in the outcome of a company's green marketing efforts and include the com-

pany's own marketing organization, government agencies, different types of environmental groups, other non-governmental organizations and consumers and the public at large. Taking these groups into consideration is part of pursuing holistic management of marketing actions. In their article Ottman, Stafford and Hartman (2006, 31) state that the foundation of effective green marketing is credibility. Green products must meet or even exceed the consumers' expectations by delivering the promised consumer value and proving customers with substantive environmental benefits.

Ottman (2008, 65-66) presents "the five simple rules of green marketing" in her article by that name. Rule one is to know one's customer. If a company wants to sell greener products to consumers, they should first make sure that those consumers are aware of and concerned about the issues that the company's products try to address. Rule two is to empower consumers. A company should make sure that consumers feel they can make a difference. According to Ottman, empowerment is the main reason why consumers buy greener products. Rule three is to be transparent. A company has to get the consumers to believe in the legitimacy of the company's product and the claims it is making. Rule four is to reassure the buyer. Consumers should believe that the company's product performs as it is supposed to. Consumers are not willing to compromise over product quality in the name of the environment. Rule five is to pay attention to pricing. If a company is charging more for its product it should make sure that consumers can afford the product and feel that it is worth the premium.

Neither time nor energy should be spent on product features that have no importance to the consumer. Thereby, ecological restrictions that are not explicitly mirrored in consumers' demands or enforced by political, social or consumer action should not be incorporated into production or marketing behaviour. (van Dam & Apeldoorn 2008, 258.) To maximize the opportunities offered by environmental issues, a company should integrate their environmental knowledge with their business planning. Marketing strategies have to become environmentally coherent so that a product's environmental attributes are supported by all other aspects of marketing, including packaging, promotion, distribution, brand image building, and price setting (Crosbie & Knight 1995, 62, 252-253). López-Rodríguez (2009, 406) states that the success of a company's green engagements is reinforced when the adoption of the green concerns is thought as a multidimensional recursive process because the outcomes of a company's environmental commitments influence back on the drivers behind them. Thus, in order for a

company's greening actions to succeed, an uninterrupted re-examination of the reasons and the outcomes is required.

Guidelines for presenting environmental claims according to Davis (1993, 26-29) include that a marketer should: 1) make sure from the consumer's perspective that the promoted environmental benefit of a product or service will really help the environment, 2) identify the specific benefit of a product or service by stating the specific aspect in which the environmental benefit lies, 3) provide the consumer with specific data to permit the consumer to believe that the claimed environmental product attribute is real, 4) provide a context so that the consumer could evaluate the promoted environmental attribute, 5) define technical terms accurately enough, and 6) explain to the consumer why the product attribute will result in the promised environmental benefit.

Chamorro and Bañegil (2006, 12) state that green marketing should not be limited only to communication policies, instead ecological aspect should be incorporated into all areas of marketing. They continue that green marketing should not be understood only as a series of procedures, activities and techniques to design and commercialize green products but it needs to be regarded as a philosophy that guides the behaviour of the whole organization. Green marketing philosophy can be seen as something that goes beyond the current needs of the consumer, considering simultaneously the social interest in protecting the natural environment.

## **2.2 History and Evolution of Green Marketing**

### **2.2.1 Greenness as a Political Thought**

Climate change, deforestation, acid rain, species loss, ozone depletion and genetically modified food were the environmentally linked issues that invigorated political life at the end of the 20<sup>th</sup> century. The rise of green issues in politics has happened extraordinarily quickly. Only a few decades ago a development of a political movement concerning environmental issues would have been unimaginable. Approximately twenty years ago, hardly anyone had heard about climate change and green political parties were a novelty. (Dobson 2007, 1-2.) In this day and age, global warming among other environmental problems is a hot topic worldwide while green parties are active in daily politics. Yet still green thinking is not a totally new

mindset since it represents an amalgamation of several philosophies, many of them created centuries ago. These include humanism (freedom, wealth and well-being of human race), conservationism (will to conserve a particular environment, natural or built one), environmentalism (concern for natural environment and the life it contains) and pacifism (stemming from consequences caused by war to people and their environment, and concern about resources going to warfare). (Peattie 1992, 14-15.)

Green politics can be divided into light-green and dark-green politics. The former refers to environmentalism and the latter to ecologism. Ecologism is considered to be a political ideology distinct and different from others. (Dobson 2007, viii, 5.) Environmentalism represents an ideology of political reform that is motivated by a world view that deviates significantly from the one within which ecologism was developed. It evolved out of deficiencies in social and political theory development which were primarily concerned with distributional justice and democratic participation. Environmentalism and ecologism are not just different but virtually political antitheses. (Kilbourne 1995, 7, 10.)

Buchholz (1998, 10-15) identifies four different stages of environmental concern in the United States: conservation, preservation, environmental protection and sustainability movements. Conservation movement arose in the beginning of the 1900s. It was recognized that continuous exploitation could not continue anymore and that resource conservation must take place. Some attempts to restrain the exploitation of nature took place but general attitude that nature has utility only when it serves human purposes, remained. Still, this movement promoted wise use of resources and engendered ideas like founding national parks. Some years after the conservation period, in early 1900s, came a stage of preservation. Certain areas were preserved in their natural state and ethics came along into the movement. People started seeing that nature has intrinsic value in its own right and that natural systems should be allowed to operate without human interference. In the 1960s began an age of environmental protection, inspired by Rachel Carson's world-famous book *Silent Spring*, alongside with social revolution. This period was labeled by a feeling of humility concerning the place of humans in the ecosystem. A desire to improve the quality of life and protect human health, pollution control, especially that of air and water and human centered ethics were characteristics of this stage. The last phase is the current environmental movement that focuses on the idea of sustainability. This view sees all environmental problems as global and interrelated. Sustainable growth, equity considerations and eco-centered ethics play a significant role in this ideology

that cuts across liberal-conservative lines and affect both socialistic and capitalistic systems. These distinctive periods resulted in different policy approaches and practices.

The first time environmental protection was really put on the world agenda was in 1972 in the *Stockholm Conference* which was followed by the *World Industry Conference on Environmental Management in Versailles* in 1984. These two events are often seen as the most significant milestones for environmental issues. (Elkington & Burke 1991, 18.) Generally green movement, which Wasik (1996, 40) defines as defining new alliances between businesses, the United Nations, non-governmental organizations, governments and consumers in order to help to prevent further degradation of nature, is considered to have seriously emerged in the late 1980s when green political parties started to gain more votes. According to some sources environmental movement began earlier, but it changed significantly in the mid 1980s by adapting a professional rather than ideological philosophy, and because business and lawmakers began collaborating with environmental groups (Menon & Menon 1997, 53-54). At the time, investors started investing money into green and ethical organizations covering many different concerns such as protection of species or historic buildings, poverty and animal welfare. Green movement is concerned about issues concerning both natural and human environment. The first-mentioned is a legacy of the original environmentalist movement whereas the latter reflects how the environmental agenda has widened into the green agenda. (Peattie 1992, 28.) This loose bond of interests is spoken of as addressing a green agenda which again presents a green challenge to society, businesses and government. Green marketing is also a response to this. At the same time environmental issues started showing in media and in the purchasing behaviour of consumers who that way expressed their concern about nature. (Peattie 1995, 24, 27.) Since that the green agenda has gained tremendously in popularity. Environmental issues have become an inseparable part of daily politics and have been institutionalized in terms of for example certification systems such as environmental ISO-standards (Wasik 1996, 4). This political power originates naturally from voters and the pressure groups that influence them. This leads in democratic countries to laws, regulations and taxes in favor of green issues. (Crosbie & Knight 1995, 20.)

A foundation-stone of radical green politics is the belief that the earth defines limits on industrial growth. Political ecologists stress that over-consuming material goods should be reduced and that human needs are not best met by continuous economic growth as we understand it today. They suggest that radical changes in our social habits and practices are needed in order

to become a sustainable society. (Dobson 2007, 12, 13, 53.) The main dilemma of the policy makers is how to reconcile profit motives with conservation so that companies and their customers take full responsibility of environmental costs (Roarty 1997, 245).

### **2.2.2 Evolution of Green Marketing**

Concern for the environment has been on society's agenda every now and then throughout history. Already the rapid economic growth during the industrial revolution evoked concerns about nature and caused a movement to create public parks and garden cities. In the 1900s a concern about destruction of farmland and countryside led to among other things, the creation of national parks. During depression in the 1930s and the war years after that, other issues overshadowed environmental concerns. (Peattie 1992, 19-20.) Ford (1993, 62) writes that the vast majority of people at the time were still not very interested in issues concerning nature since during the first half of the century they had to concentrate on surviving through among others wars, diseases and poverty whilst after the second world war raging economic growth in the western world made people believe that science and technology would change and perfect everything, it was the so called *techno-fix* way of thinking. But some concern existed so the concept of environment is therefore not totally new to society; the impacts that economic activities have on the natural environment have been an issue of varying importance on society's agenda for several centuries (Peattie 1995, 4). The concept of environment is not new to marketing either; environmental analysis has been a marketing management tool already for some decades (Ranta 1993, 2). But Buchholz (1998, 2) writes, what is different in the world today is that taking care of our natural environment has become an issue of survival rather than an issue concerning the quality of life.

After the war years in 1950s, promoting higher levels of consumption was considered to be desirable and it was thought to strengthen the economy. High consumption rates were believed to enable free markets to triumph over communist, state controlled production and consumption. (Tadajewski & Brownlie 2008, 3.) During that decade the concept of marketing was born. It was defined that the focal point of business is not the company but the customer, which moved focus from production to consumption. (Panula 2000, 27.) This shift led to the so called modern marketing, where the emphasis moved beyond selling more and more products to customers towards understanding them and learning how to meet their needs and

wants (Belz & Peattie 2009, 14). So it was not until the 1960s when the environment became a concern among consumers and that way a critical issue in marketing as well.

The publication of Rachel Carson's book *Silent Spring* in 1962 created wide concern about the social responsibility of businesses and the impact they have on natural environment and to health and welfare of the whole planet (Peattie 1995, 28). The rise of counterculture, the Vietnam War, growth of environmental problems among other hot issues in the 1960s joined people together and gave a boost also to consumer movement. Business was accused of lacking social consciousness and for harming the society. (De George 2006, 17.) Environmentalists tried to change business practices through affecting public opinion and pressured the decision-makers in order to change business practices (Menon & Menon 1997, 53). During the whole 1960s, the impact that people's actions have on nature was widely questioned (Peattie 1992, 20). Ever since, greater attention has been drawn to all the downsides of marketing such as negative ecological impacts, rather than focusing on the beneficial aspects (Tadajewski & Brownlie 2008, 1). The viewpoint in these social responsibility issues that included also environmental issues was still human centred, concerned about protecting human health and not the environment just for its own sake (Buchholz 1998, 55). Apart from the environmental issues, the concept of marketing broadened in the 1960s to contain also non-profit activities (Tadajewski & Brownlie 2008, 3).

The counterculture of the late 1960s and early 1970s challenged many values and assumptions within industry and society and some profound shifts took place. At that time also many of the effects caused by decades of environmental neglect began to show. Predictions of the forthcoming environmental crisis were addressed as an important issue on the business agenda for the first time. Concern about the physical environment and the social impacts of business, together with a response to the world-famous book about possible consequences of the proliferation of the world population and confronting the limits of resources, *The Limits to Growth* (published in 1972 by the Club of Rome), gave rise to ecological marketing and societal marketing concepts. (Peattie 1995, 5, 9, 28.) Starting in the 1970s, some researchers mainly in the United States began to develop marketing with an environmental perspective (Chamorro et al. 2009, 223). Societal marketing concept evolved trying to resolve environmental issues by adding a long-term concern for society into the marketing concept. The 1970s witnessed the expression of ecological marketing, public policy and disadvantaged

consumers (Tadajewski & Brownlie 2008, 3). The concept of responsible consumption was born and business ethics movement grew. (De George 2006, 17; Peattie 1992, 8, 20.)

According to Peattie (1992, 21) during the time period from the mid 1970s to the mid 1980s an urgent need to overcome the environmental problems existed in society but still that concern did not exist as strongly on the business and political agenda because of several reasons. For example the darkest short-term predictions did not come true, the anti-growth attitude of many environmentalists did not attract businesses, politicians and general public, economic recession in mid-seventies was prioritized as more important, and many pollution problems improved due to tighter emission regulations and slowing economic growth which was caused by the rising oil prices as a consequence of the previous oil crises. Between 1970 and 1985 only a weak integration between environmental concerns and business and marketing strategies existed (Menon & Menon 1997, 53). Yet, environment had become a mainstream issue, it was an issue also in marketing, and green marketing had started to form and to have some impact but it still did not reach big proportions. Then, in mid 1980s, a belief in free market economy gained in popularity and environmental regulation among other things were seen as a hindrance to economic development (Peattie 1995, 6). In late 1980s a lot of analyses about the state of the planet were made and the media started focusing again on environmental questions. This led to environmental issues moving to the centre of business and political agenda in industrial countries. Environmental concern in the 1980s concerned more on the outputs of economic growth and their impact on the environment whereas in the 1970s, the concern was more focused on the inputs. (Peattie 1995, 6-7.) Green marketing was also interested in environmental issues such as loss of species, destruction of ecosystems and even poverty in developing countries instead of just including concerns about depletion of non-renewable resources and critical substance (Belz & Peattie 2009, 29). The concept of sustainable development was born in 1980 in the World Conservation Strategy while planning the optimum use of renewable resources (Peattie 1995, 32).

The late 1980s was a time when environmental issues re-emerged. A backlash against the disposable culture of the late 1970s and individualism and consumption of the early 1980s arose. General awareness of the environmental decline increased perhaps because of some major environmental disasters (for example Chernobyl in 1986 and Exxon-Valdez in 1989) and science had developed enough to be able to detect and measure signs of environmental degradation. The term green marketing finally became one of the big business buzz words,

often spoken but still rarely really understood. (Peattie 1992, vi, 21-23.) Late 1980s (some count in the 1970s too, for example Belz & Peattie 2009, 29) is often seen as the first stage of green marketing when the idea of it really, properly emerged. Corporate activity burst among green marketing and green business research and writings amongst academics proliferated. (Peattie & Crane 2005, 358.) Green movement of the late 1980s is different from the environmentalist movement of early 1970s and that affected the development of green marketing as well. Localized concerns of the 1970s turned global in the 1980s; instead of environmental problems, people started seeing problems more widely as symptoms of underlying problems in social, economic, technical, legal and administrative systems; environmental movement became a green movement, one that is separate from civil rights and anti-war causes and; green movement also gained support from a range of people, representing all socio-economic, income and age groups. (Peattie 1992, 24.) New instruments such as life cycle assessment allowed ecological considerations to be included into marketing decisions (Belz & Peattie 2009, 29).

The second stage of green marketing is considered to have begun, depending on the source, either already in the late 1980s, or in the beginning of the 1990s. Green marketing grew dramatically in the beginning of the 1990s and, environmental problems became a competitive factor on the marketplace instead of just being issues of public controversy and political regulation and, the concept of green marketing broadened to contain also packaging and product issues and not just production. Those things made the second phase of environmental marketing more significant than the first one. (Belz & Peattie 2009, 29; Stisser 1994) Stricter environmental legislation and pressure groups and media announcing the green hype made green marketing to focus on more fundamental and significant changes (Peattie 1995, 25). Among others Belz and Peattie (2009, 12) mention that a report called *Our Common Future*, also known as the *Brundtland Report*, by the United Nations gained a lot of worldwide support in the 1990s after it was published in 1987. The report presented the principle that the scale and nature of human economy should not exceed what the planet can physically take. The report also states that while before it has been focused only on the effects of development on the environment, today, we should as well be concerned of how environmental degradation can dampen or reverse economic development (Our Common Future, accessed on October 23<sup>rd</sup>, 2010). Wasik (1996, 93) writes that this is when green marketing really took hold of the marketplace, and that is why he exceptionally sees this period as the real first wave of green marketing. In the beginning of the 1990s a lot of new green products were introduced to the mar-

kets (see table 2). In halfway of the decade green product growth continued strongly in some markets, but it was no longer impressive. (Peattie & Crane 2005, 359.)

**Table 2** Green product introductions (as a percentage of total product introductions).

Year	Total	Food	Beverages	Household	Pets
1986	1.1	1.4	2.3	2.7	0.9
1987	2.0	2.1	2.3	7.4	3.9
1988	2.8	3.4	5.4	9.4	1.4
1989	4.5	4.9	10.1	15.7	1.6
1990	11.4	9.2	11.4	25.9	11.6
1991	13.4	9.3	13.4	32.9	22.9
1992	11.5	8.7	8.9	30.5	18.2
1993	13.1	10.4	15.1	29.6	15.3

(Productscan, Marketing Intelligence Service, 1994 cited in Wasik 1996, 10)

Since 2000 began the third stage of green marketing (Lee 2008, 575). The 20<sup>th</sup> century has seen a democratization of consumption and the rise of mass markets. Marketing has emerged as a force that could change and challenge the world. (Belz & Peattie 2009, 7.) Since the beginning of the 1970s interest in environmental issues has waxed and waned. During the first decade of the 21<sup>st</sup> century there has been a widespread and increasing support for a sustainable development in economics. (van Dam & Apeldoorn 2008, 253.) Changes between the green marketing that is practiced today and the view that existed between economics and environment before are clear. Now there is a view of sustainable, green economics instead of a hunt for continuous, unbridled and unsustainable growth. Marketing is now used to sustain life in addition to filling people's needs. Design for environment is a prevailing practice instead of design for obsolescence and disposal that dominated before. (Wasik 1996, 6.) Responsible green marketing has evolved into being a complex, integrated, strategic and tactical process. As such, it is a holistic approach instead of just a simple marketing hype or some tactical opportunism. It tries to minimize the negative impact of transactions on the natural environment and that way expands the basic transaction concept. (Polonsky & Rosenberger 2001, 21.) Each high-water mark in the development of green marketing coincides with the end of a longer period of sustainable economic growth. Those are the times when the environmental consequences of growth are easily noticed, and a tendency to react against materialistic values is at its strongest. (Peattie 1995, 4.)

### 2.2.3 Does Environmental Crisis Really Exist?

Some criticize the buzz surrounding conversations concerning environmental crisis, claiming that it is unnecessary to even talk about such issue since any environmental crisis does not exist. Critics of the environmental crisis do not believe in the objectivity of scientific reports made by climate experts and published by the governments around the world. It is claimed that in these reports, environmental problems are exaggerated on purpose in favor of marketers or environmental lobbying groups who can that way get support to their new business fields, green marketing and environmentalism. Sometimes even the principles of ecology can be drawn to the discussion about the existence of environmental crisis. It is claimed that as one of the principles of ecology says “climates change – communities change”; drastic climate changes have taken place before with communities surviving them and the same will happen again. Another principle of ecology says that communities can rebound from disturbances, which is what some consider the current climate change to be. (Buchholz 1998, 38.)

Results of environmental researches can also be interpreted in different ways. For example when comparing the change that has happened in air temperatures during the past decades or centuries the results are naturally more or less dramatic depending on the length of the time period under examination. Critics of environmental crisis often oppose to fear and guilt that they claim to have been indoctrinated to the minds of people by environmentalists in order to get them to buy more green products. These critics are often against all kinds of efforts to reduce consumption claiming that the modern style of living does not cause any harm to nature so there is no need for a change in behaviour. It is undeniably true that environmental effects of human actions are difficult to prove since they occur with a delay, but to most people the evident environmental problems are a sign that the natural environment has met its limits and a change has to take place to prevent more serious problems from developing.

Some environmental skeptics agree that indeed a climate change is really happening but say that that is what is supposed to happen as a part of natural change. Nature has changed before and it will continue to do so despite what actions humankind takes. For example climate change has been said to happen only within natural variation limits so that it does not pose any threat to the existence of humankind. A very popular theory amongst environmental skeptics is the *Gaia theory*. In this theory it is admitted that living organisms and their surroundings have evolved as a single system that strongly affects the earth, but that the effect is not

something that the globe could not take. The Gaia theory relies on the belief that the globe is a self-regulating system that can control for example its temperature, atmospheric content and the salinity of the oceans automatically and does not need any human intervention. According to Gaia theory, the globe adapts to all environmental changes automatically keeping the living conditions right for humans without any environmental conservation actions taken. (The Gaia Theory, accessed on May 7<sup>th</sup>, 2010.) According to this view, no environmental crisis exists since the globe will adapt to all the changes caused by humans, no matter how severe they are.

Many socio-ecological qualities of sustainable solutions are credence qualities meaning that they cannot be directly verified by consumers before purchase even if consumers gather a lot of information. Neither are they directly verifiable after purchase or during use through experience. (Belz & Peattie 2009, 189). Same goes with the problems that need sustainable solutions; they are not all immediately visible to the eye. To a great deal, it is a question of belief and trust. Believing in the existence of the environmental crisis means realizing that there are a lot of changes required in order to avoid more serious consequences and to improve the state nature is in at the moment. Denying the existence of the environmental crisis means resisting a need to change. Ignorance and fear can also be reasons behind resistance towards change, but also convenience since changing one's life style towards more environmentally friendly might mean having to give up on some modern life facilities or some comfortable product attributes. Denying environmental change is also in a way, an easier option.

Environmental changes can be interpreted in various ways and the nature's tolerance can only be guessed. Options are to wait and see what happens until it is possibly too late or to make the efforts to enhance the state of the environment and living conditions. Environmental destruction does not often show right away, it can take several decades for the environment to deteriorate, which makes green movement partially a matter of faith.

#### **2.2.4 Critique against Green Marketing**

Green marketing has not been embraced open-mindedly by all companies. Since the global environmental crisis does not even exist to all, some companies see that there is simply no need for greening one's actions. Others agree that the current over-consuming lifestyle is tak-

ing its toll on the natural environment but the need for a significant change in the ways to do business is well exaggerated. Green marketing is sometimes seen as just another way to add costs since it requires a lot of changes in the company's contemporary behaviour.

As the most visible part of green marketing, green advertising has been criticized for the accuracy of its claims. Green marketing claims are sometimes seen to be excessive, false, vague, ambiguous, meaningless, unrealistic, insufficient, unexplained, confusing or even outright lies (Carlson et al. 1993, 31; Peattie 1992, 197-198). According to Wasik (1996, 95) consumers find much of the green jargon in advertisements incomprehensible. Undefined terms such as *environmentally friendly*, *environmentally responsible*, *environmentally sound* or *environmentally safe* are used broadly without any specifically defined meaning. When companies advertise their products or services exaggerating their green qualities even in a way that puts a green spin on something that does not deserve it at all, it is called *greenwashing* (Fetzer & Aaron 2010, 194). Hesz and Neophytou (2010, 178) define that using communications and campaigns that try to create a halo of greenness on a company by painting everything green and spreading green messages of various validity is greenwashing. According to another definition by Olausson (2009, 39), greenwashing means misusing environmental message, promising too much or using words that are too grand or even fallacious in advertisements. Kärnä, Juslin, Ahonen and Hansen (2001, 59-60) simplify greenwashing as the misuse of the principles of environmental marketing and practicing environmental advertising without any environmental substance in the company's other operations. Greenwashing as a term was created by combining the terms greening and whitewash and was first used by environmentalist Jay Westerveld when he objected to hoteliers' practice of asking their guests to reuse towels in order to save the environment though the real reason behind it was the aim to save in laundry costs (Belz & Peattie 2009, 189-190).

Polonsky et al. (1998, 285) have divided misleadingness of green marketing into four categories: acceptable, poor explanation, no explanation and meaningless. In acceptable green advertisements enough qualitative information is provided to explain the meaning and reason behind the claim. Poor explanation means a situation where the claim is not justified with enough qualitative information to make it clear what the claim is trying to express. When a claim does not include necessary important information so that its truthfulness and reasonableness could be evaluated it falls into the no explanation -category. Meaningless means claims that contain statements that are too broad to have any clear meaning.

Misleading or greenwashing is very harmful for business since once noticed by the public, it vitiates respect and raises cynicism towards the company (Olausson 2009, 39). Greenwashing endangers the company's brand loyalty and provokes backlash from environmental groups or customer activists (Wasik 1996, 139). Greenwashing also destroys credibility and makes people to stop trusting the company's commitment to sustainability. This can naturally lead to denting of sales. The untruthful nature of greenwashing might even affect the company from inside making employees cynical and that way affect company's success. (Fetzer & Aaron 2010, 194.) Greenwashing is not viable as a long-term marketing strategy because of the existence of the *green gap* which here means the difference between the actual behaviour of the company and the claims it makes (Hesz & Neophytou 2010, 190). In order to avoid this gap advertisers are urged to make sure that their environmental messages are highly specific instead of vague (Pfanner 2008). When marketing sustainably produced products, the presented ideas should have strong and verified grounds (Pallari 2004, 20). "There can be no truly green advertising if there is not something green about the product" (Kilbourne 1995, 8). Yet, a key problem in developing factual green claims that would be safe from any deceptiveness charges, is that there is no clearly agreed set of environmental marketing terms that could be used when creating green advertisements (Peattie 1995, 235).

*The International Code of Environmental Advertising* set by the International Chamber of Commerce in 1991 (International Chamber of Commerce – The World Business Organization, accessed on August 20<sup>th</sup>, 2010) is a widely accepted body of rules to help self-regulation of environmental advertisement of companies worldwide. In the first article of the basic principles of the International Code of Environmental Advertising it says: "All environmental advertising should be legal, decent, honest and truthful. It should be consistent with environmental regulations and mandatory programmes and should conform to the principles of fair competition, as generally accepted in business. No advertisements or claims should be such as to impair public confidence in the efforts made by the business community to improve its environmental performance." Also Majaniemi (2007, 37) writes that environmental marketing has to be based on facts. The environmental impacts of products have to be true and investigated. Though Majaniemi's writings are based on Finnish legislation, similar orders exist in several western countries.

Greenwashing can appear in different forms of which Terra Choice, an American environmental marketing company made a study about in 2007 and based on that created a list titled

”The six sins of greenwashing”. These sins included: 1) hidden trade-off, for example electronics that were advertised as energy-efficient contained hazardous materials, 2) no proof, claims that were made without any verifiable certification, 3) vagueness, for example claims that the product is 100% while many naturally occurring substances are hazardous, 4) irrelevance, for example emphasizing that the product is CFC-free while CFCs have been banned for over 20 years already, 5) fibbing, for example falsely claiming products to be certified by internationally recognized environmental standards and, 6) lesser of two evils, for example selling organic cigarettes. (Terra Choice cited in Belz & Peattie 2009, 190.)

Environmentally negative consequences can be difficult to quantify and make tangible (Fuller 1999, 224). This is because it often takes a lot of time for environmental consequences to develop yet even though they can appear to be extremely hazardous

### **2.3 The Green Marketing Mix**

During the first half of the 20<sup>th</sup> century companies were mainly product oriented. Unsatisfied demand was answered with mass production to increase output, expand supply and lower the costs. During the second half of the century mass production expanded so much that it led to overcapacity as supply overtook demand. Saturated and competitive markets led to the development of explicit marketing and customer orientation. (Belz & Peattie 2009, 25.) Companies started responding to consumers’ needs instead of just trying to sell them what the companies wanted to make. Now, during the environmental crisis era it is good to evaluate marketing functions and the classic marketing mix of the four Ps, product, price, place and promotion, afresh. Green marketers need to gather information concerning these new issues and re-evaluate the existing marketing mix in a new, greener light (Peattie 1992, 133).

Peattie (1992, 103-104) expands the traditional set of four Ps into a green marketing mix of 15 green Ps and divides them into internal and external Ps. Those can be used as checklists of the company’s environmental status. The eight internal green Ps that can be used to diagnose the company’s environmental performance are: products, promotion, price, place, providing information, processes, policies and people. Concerning products, the company has to think about their safety in use and in disposal as well as the products’ longevity and the environmental impacts of all the components. In promotion, the use of green promotional messages and accuracy of their green claims must be examined. Prices have to be checked whether they

reflect the differences in costs and demand for green products and it has to be researched how price sensitive the company's customers are. Concerning place, channels with suitable green credentials should be used. In proving information, internal and external issues that are relevant to environmental performance must be monitored. The energy consumption and waste production of manufacturing processes must undergo an inspection. The ability of the company's policies to motivate, monitor, evaluate and control the environmental performance of the company must be checked. The company also has to find out how people understand environmental issues and the company's performance as well as their role in the whole greening process.

The seven external green Ps that must be monitored and evaluated are: paying customers, providers, politicians, pressure groups, problems, predictions and partners. Paying customers should be investigated in order to see how green they really are and what kind of green products they want. Also providers' greenness must be canvassed. Politicians must be monitored since green voters can affect companies indirectly by influencing the government. Pressure groups have to be evaluated in order to understand what issues do they have, what or who are they campaigning about and what new areas of concern are rising. The company's links with environmental or social problems must be found out. Also predictions must be made about what environmental problems might affect the company in the foreseeable future. When it comes to partners, a company must find out if any of the organizations they are linked with have some environmental problem that might affect the perception of the company's own greenness. (Peattie 1992, 105.) However the conventional marketing mix of 4Ps, product, price, place and promotion, is still the most popular one and will be presented next as a green version.

### **2.3.1 The 4Ps**

*Product.* A product or service can be defined as green if its environmental and societal performance in production, use and disposal, is significantly improved when compared with conventional or competitive products. *Absolute green products* are those products which can contribute to the improvement of society or the environment. *Relative green products* are those whose greenness claim lies in reducing the actual or potential harm that they cause to society or to the environment. Several elements influence how green a product is perceived, for example what goes into the product, what is the purpose of the product and what kinds of con-

sequences follow from the product's use and misuse. (Peattie 1995, 181.) Fuller (1999, 130-131) writes that sustainable green products have positive ecological attributes that are nothing more than enhanced waste management factors that have been achieved through decisions concerning their manufacturing, raw materials, function, longevity, distribution, use and disposal. Product attributes can be classified as process specific or product specific, both contributing to dematerialization (Fuller 1999, 131). Success of many manufacturing strategies depends on consumer demand for products that are environmentally sensitive and that are produced by companies that are environmentally conscious in their manufacturing and distribution processes (Buchholz 1998, 373).

The sum of the parts -thought is very important in greening processes, meaning that a company cannot consider making an ecologically sound product without considering how the product's raw materials, acquisition, development, manufacturing, distribution, sales, and disposal systems impact the environment (Wasik 1996, 41). Terms that can be used in defining a green product include definitions such as organic, durable, non-toxic, recyclable, and produced without threatening important ecosystems (Roarty 1997, 252). Crosbie and Knight (1995, 133) draw attention also to questions such as does the product meet a real human need and is the highest possible percentage of recycled material included.

New segments are forming to the greening markets meaning a demand for new kinds of products. On green markets these products have to be suitable for preventing, relieving or controlling of environmental damage. (Peltomäki & Kamppinen 1995, 7.) Yet, these products do not necessarily have to be completely new products; a company can re-productize existing products through changing the product attributes towards an environmentally friendlier direction or just through emphasizing an existing product's environmental values in a new way (Pallari 2004, 18). There are three strategic choices how to re-evaluate one's product offering when going green: diversification, innovation and repositioning. Diversification can be done through producing an offering which is complementary to the company's existing product range or developing a parallel green product range. Through innovation an unmet need can be fulfilled or a new greener technology can be invented and then marketed. Repositioning involves re-evaluation to take into account changed environmental and consumer factors, so that by reformulation, representation or through the use of new distribution channels the core values of the company's offering can be redefined to earn new appraisal by consumers. (Crosbie & Knight 1995, 131-132.)

There is an overriding need to minimize environmental damage by making responsible choices in materials, printing and adhesive technologies and to take care of disposal and recycling in an appropriate way. Packaging has many different functions such as to contain, to stop spoilage, to assist display, to educate and to inform the user. In communication packaging works in two ways, by what it says and environmentally more importantly, by what it is. (Crosbie and Knight 1995, 224.) Green concerns about packaging include resource consumption, low recycling rates, inadequate or even misleading information and labelling and waste and litter issues. When a company focuses on making its packaging more environmentally sound the main functions of packaging, such as protecting the consumer, the product and the environment, attracting attention and stimulating purchase, enabling product usage and portioning the right amount to serve different consumer needs, have to be kept in mind. (Peattie 1995, 263.) Green packaging strategies include issues such as removal (remove unnecessary layers), reduction (sell in larger units, sell refills, use efficient design forms, switch package material), reuse, recycling, biodegradability and technology development (Peattie 1995, 268-271). A process known as '*light-weighting*' has progressively reduced the amount of package material (Elkington & Burke 1991, 139).

Design for environment (DFE) is an outgrowth of industrial ecology. It for example reduces the amount of materials used in production and it increases the recyclability rate of a product. It emphasizes product design, toxicity of materials, durability of a product, the amount of recycled content in a product, recyclability of a product, energy consumption, reuse, manufacturing wastes et cetera. DFE also has an appeal for marketers because the benefits attained from it are immediately promotable. DFE gives products an edge at the marketplace in the minds of environmentally concerned consumers and it also shows the company image in a greener light. (Wasik 1996, 30-31.)

*Price.* Price is a key marketing variable that functions as a reflection of the production costs, an important sign of profit seeking, a signal of quality, a basis for marketing segmentation, a measure of a product's worth, reflection of demand as well as the available supply and an important basis for competition (Peattie 1995, 280). The environmental performance of a company can affect its cost structure. Improved environmental performance may increase costs or decrease them. Costs may also remain the same despite the company's environmental performance. (Oksanen 2002, 74.) Companies often claim that investing in new technology and raw materials when striving for improved environmental performance leads to increased

costs and that way to a higher price of the end product. At the same time customers do not always understand why products should have a higher price when they claim to include fewer inputs. Yet, surveys show that many consumers are willing to pay more for products and services if they consider them to benefit the environment. Companies should calculate if their pricing reflects all the environmental costs caused by bringing a product to market. (Crosbie & Knight 1995, 133, 135.) Peattie (1999, 142) suggests that the green premium may relate more to the pricing strategy of a company than to actual economic necessity. Peattie (1999, 142-143) continues that green products are not often even exceptionally expensive but instead it is the conventional products that are unrealistically cheap. Ottman et al. (2006, 24) state that successful green products are able to appeal to mainstream consumers or profitable market niches and repeatedly gain price premiums by offering 'non-green' consumer value such as convenience and high performance. Belz and Peattie (1999, 30, 104) however write that as long as institutional setting and price signals remain as they are now, neither ecological nor green marketing will be adopted by a majority of companies. If all environmental and social costs associated with production and consumption would be covered by the price of the product, it would be a big step forward for sustainable development.

*Place.* Effective channel structure management is of great importance to the success of almost any product. Channel simplification is an environmentally friendly answer to this demand for effectiveness. (Peattie 1995, 249, 256.) However, place issues have not yet played a big role in environmental marketing (Oksanen 2002, 75). Distribution channels must now be reconsidered in green light too. The emergence of a product Life-Cycle-Analysis that aims at reducing a product's environmental impact at all stages and, a cradle-to-grave stewardship require closer relationships with the company's distributors. (Crosbie & Knight 1995, 136.) Distribution channels vary in many ways, for example their geographical coverage and the nature, number and variety of the intermediaries used are both issues that can be easily changed to environmentally friendlier options (Peattie 1995, 255). Though the primary objective of environmental strategy for logistics is improving the environmental performance, it can also produce cost savings. Individual companies can have a big impact to the well-being of the environment through reducing travelled distances and switching into less harmful transport options. (Crosbie & Knight 1995, 179-180.)

*Promotion.* As part of green promotion, a company has to develop a green communications mix that consists of greener versions of the standard tools of advertising, personal selling,

sales promotion and publicity and public relations. The legitimate purpose of marketing communications is to blend these tools to provide customers with added value through information. Green promotion is a good opportunity for a company to use environmental issues and product information to channel consumers' buying behaviour towards the company's ecologically compatible products. (Fuller 1999, 223-224.) Evaluating a company's promotional strategy from an environmentally conscious viewpoint, it requires evaluating the nature of the message that the company gives out and the environmental impact of the message delivery mechanism, meaning what media that the company uses in their mass media marketing. Concerning consumer proposition a company has to evaluate if their consumer proposition presents the total environmental performance of their product without making exaggerated claims. They also have to judge if their proposition associates in consumers' minds with consuming more resources. The appropriateness of the media selected and the consistency of sent messages should be evaluated as part of the communication strategy. (Crosbie & Knight 1995, 133, 137.) Promoting green products is a particularly difficult challenge since it means trying to communicate very complex issues in an age where the consumer is expecting messages to be delivered in a non-time consuming way. This involves also communicating serious issues that threaten the whole existence of mankind while today's marketing is expected to be entertaining and upbeat. (Peattie 1995, 230.)

### **2.3.1.1 Green Advertising**

An advertising perspective considers green to be one-dimensional concept that encapsulates environmental, ecological, green and environmentally oriented behaviours. This approach can be seen as too simplistic from the perspective of ecological literature because ecology is a multi-dimensional concept containing at least political and positional dimensions. In this framework five different types of green can be established; from least to most political and human positional they are environmentalism, conservationism, human welfare ecology, preservationism and ecologism. For an advertisement to be classified as green in any sense, it must be placed within that framework. (Kilbourne 1995, 17.) Banerjee, Gulas and Iyer (1995, 22) define a green advertisement as any advertisement that meets one or more of the following criteria: 1) explicitly or implicitly addresses the relationship between a product or a service and the biophysical environment, 2) promotes a green lifestyle with or without highlighting a product or a service and, 3) presents a corporate image of environmental responsibility.

Polonsky et al. (1997, 220) present a definition according to which environmental advertising means making environmental claims in commercial advertisements. Broad objectives of green advertising are similar to those of conventional, grey advertising: to inform the target audience about the company and its products, to persuade consumers to switch to using a their (green) brand, to change consumers' assumptions about their (green) brand and, to remind customers that they will soon need the product and to accentuate where and how they can purchase it (Peattie 1995, 231). Giridhar (1998) states, that the aim of environmental advertising is to educate consumers about the need to care for the environment, thus making 'environmental friendliness' of a product a selling proposition.

The highest profile aspect of communication is often the paid-for advertising campaign that also includes the highest risk. Many advertisers would like to take advantage of the new found environmental concern among consumers but consumer cynicism poses difficulties for advertisers and in the beginning, in late 1980s and early 1990s, environmental advertisement campaigns did not work out well. Environmental claims were then challenged and advertisements had to be withdrawn. (Crosbie & Knight 1995, 225.) Advertising is nonetheless the most obvious means by which to spread the company's green message even though it does not necessarily seem to be the most ideal. Skepticism about environmental claims combined with doubts about advertising in general create a considerable challenge for a company to convince the green consumer. (Peattie 1995, 230, 239.)

Most companies that use environmental marketing, attempt to leverage the environmental changes that are related to their activities through environmental advertising. Organizations promote that they have introduced a new environmental product, modified already existing products, sponsor various environmental programs or participate in some environmental cause-related marketing programs. (Polonsky et al. 1997, 220.) Well designed advertising can succeed in informing consumers about important environmental issues, and can help in raising awareness and improving consumers' understanding (Peattie 1995, 243-244). Advertisers generally adopt one of two different approaches when they determine how much advertising emphasis to put on the environmental attributes of a product. One approach is to keep advertising focus solely on the environmental attributes of the product. Another alternative approach is to keep the main focus of advertising on communicating product attributes that are traditionally seen as important in that specific product category and presenting environmental product attributes as supplemental or secondary. (Davis 1993, 29.)

It is suggested in literature that the more information consumers get about environmental issues the more responsibly they will act. Yet, this does not apply to all activities or all product categories. Instead it is expected that if a product's environmental impact is very negative, consumers rely on such information much more while making choices between different brands. (Polonsky et al. 1998, 281-282.) With so many companies promoting their environmental credentials nowadays, consumers are deluged in green-linked advertising (Pfanner 2008). The overload of green products has reduced the effectiveness of green marketing campaigns (Wasik 1996, 10). If green claims and images are overused, they become much less effective (Peattie 1995, 238). It has also added significantly the amount of customer complaints made about green advertisements and especially about those concerning automotive products (Pfanner 2008). By providing the public with large amounts of factual information and emphasizing the seriousness of environmental issues a company can easily overwhelm consumers who are already suffering from information overload. Companies can also unintentionally demotivate customers by sending out gloomy environmental messages. On the contrary, communicating in a lively, cheerful and entertaining way is also in a risk to be interpreted as trivializing serious issues or as being superficial. (Blez & Peattie 2009, 187.) Companies have problems communicating their position on environmental issues to distrusting consumers that are concerned about companies' operations (Buchholz 1998, 384).

In sustainability marketing messages, as in conventional marketing messages, three generic types of appeal with what the company behind the messages tries to engage with its audience, can be indentified: 1) rational appeals that target to consumers' self-interest by stressing the value or performance of the product (for example cost savings), 2) emotional appeals try to create an emotional connection to the consumers and also to get an emotional response which will motivate to make a purchase, this is often tried by connecting the benefits from sustainability strategies with children's welfare, endangered animals or disadvantaged people from poorer, developing countries and, 3) moral appeals aim to engage with consumers' sense of what is right and what is wrong and in the case of sustainability marketing, they stress consumers' sense of duty to protect the quality of the environment in order to save it for future generations or, stress efforts of trying to put an end to poverty. One key determinant in success of sustainable product claims relates to credibility and trust. (Belz & Peattie 2009, 186, 189; Peattie 1992, 201; Peattie 1995, 232).

Creating green advertisements is not the easiest of advertisement functions. Green advertisements can easily become accused of green washing since there is no unequivocal set of green marketing terms standardized. A good thing for green product advertisement is though that it poses a promotional problem for their grey rivals since it is difficult for a company to attack a green competitor without appearing anti-environment (Peattie 1995, 230).

Criticism against advertising tends to fall into two types: 1) practical criticism that is concerned about the “sins against the consumer” focuses on the techno-economic dimensions of the advertisements and issue such as whether images of products, their use and benefits are accurately portrayed and delivered in practice, 2) socio-environmental criticism that relates to “sins against the society“ concentrates on the role and effect of advertising beyond influencing market exchange processes and the satisfactions that they create (Peattie 1995, 236).

### **2.3.2 The 4Cs**

According to Lauterborn (cited in Belz & Peattie 2009, 33, 153), the classic marketing mix of the four Ps is designed from the seller’s point of view instead of the buyer’s and it focuses on products and purchases. A new green marketing mix of four Cs has been especially designed to classify sustainable marketing mix. The four Cs are customer solutions, customer cost, convenience and communication.

*Customer solutions.* The challenge for green marketers is to solve the direct problems that consumers have in their every day life and to find out what are their social needs while also improving social and environmental performance of the company. The company should be able to offer socially and environmentally responsible goods without compromising too much in cost, performance or convenience in order to remain competitive. These sustainable products or services have six characters: customer satisfaction, dual focus of ecological and social aspects, product life-cycle orientation, significant improvements to socio-ecological problems or product performance, a view of a long term continuous improvement and learning from competing offers. Customer solutions for the use of the product include issues concerning health and safety, energy efficiency, durability, product-related services such as guidance how to use the product eco-efficiently, use-related services such as rental service as an option for product purchase and result-related solutions where buyer neither owns nor uses the products but still gets to enjoy the final result, for example textile care laundry. Customer post-use so-

lutions include options like giving the product away, trading it, selling it and disposing it. (Belz & Peattie 2009, 153-154, 157-160, 161.)

The first generation of sustainable products did not really fulfil the definition of proper customer solutions since they overemphasized the improved socio-ecological performance of the products at the expense of really satisfying consumer needs. Thus, they served the cause but not the customer, for example the first electric cars were environmentally friendly but did not serve their function properly since they did not go fast nor far. (Belz & Peattie 2009, 163-164.)

*Customer cost.* From the consumer perspective the total customer cost consists of the costs of acquisition, use and post-use of the product. Acquisition costs are the actual price of the product added with other purchasing costs which include costs from searching for the product, gathering information for the purchase decision, comparing alternative marketing offerings and the costs of obtaining the product (for example transportation costs). Costs of use are the costs that the consumer has to pay when having the product in use. Post-use costs are costs caused by collecting and storing the product and afterwards recycling or disposing it. From the marketer's perspective the total customer cost mainly consists of the price of the product, while purchase, use, and post-use costs are not seen to be significant. (Belz & Peattie 2009, 203-204, 206-207.)

*Convenience.* According to Belz and Peattie (2009, 227-231, 236-237), from a sustainability perspective there are three essential weaknesses when talking about place as one of the four Ps in the conventional marketing mix. First, with its emphasis on distribution of products, place as one the four Ps suffers from being shown mainly from the producer's perspective. Secondly, thinking about place focuses attention to the point of exchange when in practice customers want convenience throughout the whole consumption process. Thirdly, the concept of place in many markets is becoming less and less relevant since consumption is moving more into the virtual environment. The term convenient can be defined so that something is convenient when it is appropriate in time and place, if it removes discomfort or trouble, promotes ease and is well suited to one's wants. Convenience is an attribute that is highly appreciated among consumers. Convenience can also be seen to be accessibility in distribution meaning for example getting all products from the same place, availability in distribution, the

24/7 economy meaning for example wide opening hours of companies and convenience through packaging, convenience in use and convenience in post-use.

*Communication.* There are arguments that while marketing aims to create consumer satisfaction, marketing communication generates considerable dissatisfaction without intention. Anyway, for sustainable marketers, communication is as important part of the marketing mix as it is for conventional marketers. Without effective communication it is practically impossible to make consumers aware of sustainable solution. The communication mix consists of advertising, sales promotion, personal selling and public relations. A real challenge for green marketers is to succeed in developing communication campaigns that suit the nature of their products or services and the nature of their customers. The conventional marketing communications style is somewhat unidirectional and inflexible sending one message to the whole audience without providing direct ways to reply. Sustainability marketing communications represent the next step of marketing communications. Instead of focusing on promoting the product to consumers, sustainability communications communicate with the consumer as in relationship marketing and also opens up the company behind the product offering. (Belz & Peattie 2009, 178-179-180.) Effective communication is based on knowledge of one's audiences and what their concerns and needs are (Crosbie & Knight 1995, 214). One of the most important factors in generating credibility is consistency; a company's actions must live up to its messages. Communication and thus also consistency must continue through the whole consumption process from pre-purchase through purchase and use all the way to post-use. (Belz & Peattie 2009, 181, 189.) To not communicate at all about green issues, known as *green muting*, is also a form of green communication. Reasons for this according to Olausson (2009, 83-86) can be that a company wants to appear as humble, wants to let other companies do the job for them: a thorough green strategy that is not communicated outside the company can surprisingly be effective once it is experienced by customers, wants to avoid difficult questions concerning environmental issues, is afraid of being attacked or receiving criticism, does not want to break the laws with vague green communication if there are no factual proofs to show, and a company might think that its customers are not interested in green marketing.

## 2.4 Green Marketing as Part of Green Management

Demands for companies have changed as has global marketplace. Green consumers are demanding companies to go green as well which has led to a need for green and holistic management. Organizations have to adapt to the new era with a vision of management that takes into consideration the organization's relationship to the society it works in and to its natural environment. Decision-making in environmental issues is nowadays an important part of the strategic management of a company. Therefore, a strategic approach also to environmental marketing is essential. Issues such as waste and pollution reduction, energy usage, green design, responsible marketing and community development are perennial concerns of green management. (Wasik 1996, 17, 27, 43, 90.) A precondition for becoming green is that a company must follow a corporate philosophy in which environmental criteria is explicitly included in all management decisions. Parameters of efficiency are changing; environmental resources that used to be free will become taxed and priced which means that the managerial concept for efficiency is becoming increasingly more ecological (Müller & Koechlin 1993, 37). When environmental protection becomes a guiding principle for the company, it is then a company can ultimately become sustainable to the core. (Roarty 1997, 249.)

According to Chamorro and Bañegil (2006, 12) there are two things that justify the need to have a holistic view on greening of a company. First, the environmental impact of a product is not likely to diminish if environmental aspects are not taken into consideration by other functional areas of the company that have an impact on the end-product's ecological quality, such as design, supplies and production. Second, most green purchasers do not just buy a green product; they also buy the company's green image.

According to Buchholz (1998, 2) it is becoming increasingly evident that positive environmental performance of a company must be institutionalized by being incorporated into the fundamental responsibilities of line management; top management declaring the company's environmental policies or the efforts of environmental staff specialists is not enough. Company's environmental attitudes and values must be spread to the whole organization. This way management of environmental issues becomes holistic. In order to create this holistic approach, a company has to be familiar with the requirements and expectations of its stakeholders such as the government, customers, authorities, media, distributors, trade unions, supplier, employees et cetera (Oksanen 2002, 32). In a holistic view, there is no green marketing

without green management. Viewing environmental issues holistically is called practicing ecomanagement where the environmental impacts of every business function are taken into account. Pane Haden, Oyler and Humphreys (2009, 1052) use the term *green management* and define it as the organization-wide process of applying innovation in order to achieve sustainability, waste reduction, social responsibility, and a competitive advantage continuously learning and developing as well as embracing environmental goals and strategies. Taking action in green management means setting priorities, realizing the stakes, and doing cooperation with interested stakeholders in order to advance. (Wasik 1996, xvi, 40, 48.) Belz and Peattie (2009, 112) write that corporate values are a normative basis for sustainability marketing approach. Incorporated values help marketers to make sustainable decisions on strategic and operational levels. Belz and Peattie (2009, 115) continue that ecological objectives reflect that all the impacts of a product or service consumption and production must be managed through all phases of physical product life cycle.

The International Chamber of Commerce (cited in Wasik 1996, 47-48) has named the issues to focus on in order to chart one's green management action plan. The list includes sixteen items: 1) corporate priority, 2) integrated management, 3) process of improvement, 4) employee education, 5) prior assessment, 6) products and services, 7) customer advice, 8) facilities and operations, 9) research, 10) precautionary approach, 11) contractors and suppliers, 12) emergency preparation, 13) transfer of technology, 14) contributing to common efforts, 15) openness to concerns and, 16) compliance and reporting. In their management of environmental issues, a company can take either a proactive or a reactive approach. In a proactive way of managing environmental issues are seen in a more positive light, as opportunities when again in a reactive way of managing, these issues are seen more as a threat and only obligatory or necessary changes are made (Roarty 1997, 249).

A key to environmental excellence is to identify what are the priority targets of the company and make people move towards them. In the green marketing literary management's ten steps to environmental excellence are: 1) developing and publishing an environmental policy, 2) preparing an action programme, 3) finding staff, 4) allocating adequate resources, 5) investing in environmental science and technology, 6) educating and training people, 7) monitoring, auditing and reporting, 8) observing the evolution of the green agenda, 9) contributing to environmental programmes, and 10) helping to build bridges between various, and perhaps conflicting interests. (Elkington & Burke 1991, 228-236.) The first step expresses how it is very

important to not just develop a good environmental programme for the organization, but also to publish it. By publishing its environmental policy, a company may be able to commit itself and its employees more strongly to the environmental objectives decided. Publicly proclaimed policy makes a company to try to achieve its goals harder in order to avoid public humiliation which could fall over it if it would fail to do so. The second step expresses how it is crucial to plan carefully the actions to be taken, and not just develop general outlines of environmental consciousness. Particular planning helps in execution, well begun is half done. The third step emphasizes the importance of finding committed staff. Allocating adequate resources makes it possible to carry through the planned actions. Steps five and six stress the importance of investing in continuous development, as well as in educating and training people. Observing the progress is an important step that should not be forgotten. Through monitoring, auditing and reporting progress and development can be noticed and the adjustments that are needed can be made. Observation should still not focus only on the company's internal processes but also on the outside. Keeping on track with the evolution of green agenda is important so that the company does not just follow its plan blindly if the external conditions have changed. Contributing to environmental programmes is part of going public with one's environmental values. Deleting disagreements between different parties and smoothing the way towards a mutual understanding helps the company to achieve best possibilities in achieving environmental excellence. These steps once again emphasize the holistic view to environmental management and the comprehensive nature of environmental issues.

Successful implementation of marketing covering a company's environmental performance requires that the aspects of sustainable development have already been considered in among others research and development and packaging and distribution technology (Oksanen 2002, 12). This relates again to the holistic way of seeing and implementing organization's environmental attitudes and actions. Going green may this way require a change in corporate behaviour and culture so that environmental issues will have the same importance as other organizational objectives, which is the view also is supported by some academic writings (Polonsky et al. 1997, 219). All environmental actions must also show on corporate balance sheet or otherwise they will be short-lived (Wasik 1996, 5). It is definitely not enough to dye a brand green, brands and businesses have to be grown green to the core. Companies that have done it correctly have noticed that becoming green is "not just good, but gold for business". (Pierce 2007, 20.) Green marketing has become a part of "cultural fabric" that binds organiza-

tions together, flowing from spirit of the firm into its strategic approach and onto its tactical implementations (Polonsky & Rosenberger 2001, 21).

## 2.5 Green Marketing and Ethics

Business ethics is a study field where business situations, activities, and decisions with added issues of morally right and wrong are studied (Crane & Matten 2007, 5). Marketers traditionally have a strong tendency to think that marketing is somehow amoral (Belz & Peattie 2009, 103). Also the general public quite often sees marketing as one of the least ethical of all business functions (Panula 2000, 83-84). Panula (2000, 129) continues that marketing is caught in the crossfire between economics and ethics and according to consumers it has so far seemed that the economical view is winning. The new direction of marketing, green marketing, is however strongly values driven and therefore seen as a firm, moral trend. Marketing is said to have reached its ultimate extension: it is now selling values. It is what the global arena seems to be demanding: marketing of social responsibility, ethics and values. (Wasik 1996, 89.)

The rise of green consumption has led to an appearance of a wider concept, *ethical consumption*. The ethical consumption concept broadens the view of green marketing by including ethical and moral aspects from for example production and delivery of goods, the use of child labour, suppressing or preventing labour unions, and animal testing. Ethical consumer practices aim to change business practices towards socially responsible trade. One future opportunity for companies in marketing's ethical dimension is the practice of selective ethics. A company does not need to try to be ethical in everything it does; it can choose only one or a couple ethical claims and follow those. While also consumers find it difficult to consider several ethical criteria simultaneously, selective ethics requires that the company acts by only one or two important ethical issues. (Uusitalo & Oksanen 2004, 215, 220.) In practice the advantages that values give to the company and what they really mean is that they serve as an activator, guide and administrator, they express what is desirable, provide a sustainable ground for making choices and guide behaviour and directing of energy (Koskinen 2003, 73).

Marketing ethics is often criticized of being an oxymoron, a square circle, it does not exist. Criticism concerning ethical issues in marketing communications is divided into two levels: individual and social level. On the individual level critics are concerned with the use of misleading or deceptive practices that try to create false beliefs about specific products or compa-

nies among individual consumers. On the social level critics are mainly concerned with the overall social and cultural impacts that marketing communications and their unethical functions have on every day life. (Crane & Matten 2007, 319.) Marketers' social responsibility is something that is often demanded in order to increase the ethicality of marketing.

The demand for acting ethically and responsibly arises from the changed set of values among consumers. Ethical consumerism arose in the mid 1990s (Lee 2008, 575). The ethical consumer ideal implies that individual consumers can have a significant role in promoting ethical corporate practices, through their daily purchasing decisions. A visible aspect of ethical, green consumerism is that the consumer considers not only individual but also social goals, ideals and ideologies. (Uusitalo & Oksanen 2004, 215.) It is sensible for businesses to take advantage of this trend and to change their organization throughout since customers appreciate right actions and real change. (Koskinen 2003, 67.) Panula (2000, 91) has made a research among Finnish consumers and noticed that in general, consumers see ethics and marketing as two separate fields of thinking and action. In consumers' minds there is a great distance between these two concepts which makes it difficult for marketers to try to reconcile these two constructs in the same concept. Panula (2000, 201) noticed in his research also that consumers have a very low trust in that marketing functions ethically in the right way and that marketing will keep its promises. In his research 70 percent of the respondents had a very low trust in marketing doing what is ethically right and, 57 percent had a very low trust that marketing will keep its promises. These views are strengthened because of so called *teflon companies* that take advantage of ethicality and societal responsibility in their marketing but do not follow the same rules in their actions (Koskinen 2003, 68). See table 3 below about the connection between ethics and consumer decision making.

**Table 3** Ethics and consumer decision making.

How important do you think is that firms follow an ethical code of practice?	%
Very important	44.3
Rather important	46.8
Rather unimportant	8.1
Very unimportant	0.8
How reliable do you think is the information that firms give about their business ethics?	%
Very reliable	2.1
Rather reliable	60.6
Rather unreliable	35.3
Very unreliable	2.0

How much influence does a firm's business ethics have on your purchasing decisions?	%
Significant influence	17.0
Some influence	52.5
Little influence	23.2
No influence at all	7.3

(Uusitalo and Oksanen 2004. 21)

Buchholz (1998, 48-49) writes that there can be no divergence between the operation of a successful business organization and that organization's ethical behaviour because ethical responsibilities are defined in terms of marketplace performance. Marketers should act in an ethical way because if they do not, it is likely to generate significant costs to them personally as well as organizationally and socially. While being ethical might sometimes reduce the company's short-term profits by adding costs, it should enhance the shareholder value in the long run. (Laczniak and Murphy 1993, ix, 5-6.) Zinkhan and Carlson (1995, 2) argue that it is much more important to do what is right in a moral sense instead of doing things right in a technical sense. When more company owners think this way, green marketing will bear fruit.

## 2.6 Green Consumerism

Green marketing forces the marketer to change its internal perspective because the customers' viewpoint has changed. In most markets the final consumers as well as the buyers within marketing intermediaries are an important influence in the greening process. As green marketing means providing consumers with more sustainable and socially acceptable products, involves green consumption consuming in a more sustainable and socially responsible way. (Peattie 1995, 79, 83, 115.) Peltomäki and Kamppinen (1995, 13) state that companies are nowadays more bound to consumer behaviour than before and therefore as consumers become greener and greener, companies should adapt to that. This means that greening is consumer-led. According to Wasik (1996, 8) this kind of movement where consumers have embraced environmental consumerism is called by sociologists a *Green Wave*. This green consumption can be defined as the purchasing and non-purchasing process carried out by consumers and based on at least partially on environmental and social criteria (Peattie 1992, 118). An environmentally conscious and active *green consumer* is considered to have emerged in the late 1980s in Western Europe and North America (Belz & Peattie 2009, 29).

Increased demand for green products can reflect a long-term interest towards environmentalism, a concern for the wellbeing of future generations, rejection of predominant values of the consumer society or simply a willingness to try something new (Peattie 1995, 86). In the beginning green marketing appeared to be a new area for marketers. It became more complicated when consumers started wanting to express their concerns about the environment through their market place behaviour, but lacking in knowledge, they were easily exploitable and were left without any means of evaluating the environmental claims that were made by companies. (Buccholz 1998, 374.)

A key element of green consumption is a desire for more information about the relationship between a product and the environment (Peattie 1995, 87). A green consumer is concerned with what goes into the product and what becomes out of it after consumption (Peattie 1992, 92). Carlson et al. (1993, 28) define *green consumerism* as a marketplace orientation in which a products' purchase, usage and disposal decisions made by consumers are driven by a desire to preserve nature's ecological balance. It is important to notice that green consumption is not just about purchasing decisions but as well about non-purchasing decisions. Consumers may favor companies that they feel to be environmentally friendlier than others, but they can also vote with their feet against companies that they think are not acting in an environmentally responsible way. Consumers can either boycott or 'boycott' products (Boström & Klintman 2008, 2). But there are also other non-purchasing options; instead of purchasing or non-purchasing, a person can lend, hire or reduce usage of some product or service. Ken Peattie (1995, 83-84) points out, that consumers can turn against, not just products and companies, but even against whole industries if they consider them to be environmentally harmful. Peattie continues that green consumer behaviour cannot be viewed only in terms of purchasing choices. Consumers may respond to the green challenge in various ways besides purchasing; for example the way they use, maintain and dispose products are also ways to react to the green challenge. Targeting green consumers is not an easy task for companies not just because of lack of consistency among green consumers but also because it means trying to hit a moving target; consumers' green understanding, awareness and concerns are constantly evolving (Peattie 1995, 232).

A green consumer can be defined to be anyone whose purchase behaviour is influenced by environmental concerns (Shrum et al. 1995, 72). According to a stricter definition green consumers can be defined as consumers who care about the environment sufficiently in order to

make conscious efforts to buy products that avoid causing any damage to the environment (Roarty 1997, 252). Green consumers can also be defined as consumers who are worried about production process and disposal issues as well instead of just worrying about their own purchase and consumption (Zinkhan & Carlson 1996, 2). Being green involves a lifestyle that has a minimal adverse effect on the natural environment (Banerjee et al. 1995, 22). It must be noticed that many consumers are not green in the same definite and enduring way than for example when categorized on the basis of socio-demographic variables. A consumer might be green in some consumption decisions, but just a *grey consumer* in other decisions (Peattie 1995, 85). The term refers to a consumer who is not especially pro-environmental but not especially anti-environmental either; that is a consumer who does not think much about environment when making purchase and other consumption decisions. Peattie (1995, 84-85) writes that the use of the label 'green consumer' gives the impression that they are a group of consumers who are different than conventional consumers but nowadays it seems that everyone is interested in environmental issues at least to some extent. Instead of the term 'green consumer' the term '*green concern*' could be more suitable.

According to Shrum et al. (1995, 80) research shows that green consumers have interest in new products, are information seeking and talk with others about products. They also consider themselves as opinion leaders, are careful shoppers, do not prone to impulse buying behaviour and pay attention to the price of products. Yet, it is to be noticed that green consumers are not a homogenous group. They vary at least in terms of the reasons why they demand for green products, the depth and range of their interest in green issues, the degree to which they actively look for green alternatives, the density of their green actions, the degree to which they accept increased prices or reduced performance and their loyalty to green brands (Peattie 1992, 121-122). There are several different segmentations made of green consumers. One segmentation divides consumers into seven different groups: greens, consumers with a conscience, wastage focused, currently constrained, basic contributors, long-term restricted and disinterested. In this segmentation greens are consumers who are driven by a belief that sustainability issues are critical. Consumers with a conscience want to be seen as greens. Wastage focused dislike all kinds of waste and try to avoid it. Currently constrained would like to be more sustainable but who do not believe that they can do much more in their current situation. Basic contributors are sceptical that there even is a need for a behaviour change. Long-term restricted have a lot of other life priorities before beginning to consciously consider their environmental impacts. Disinterested are consumers who do not show any interest to change

their current behaviour to turn their lifestyle into a more sustainable one. (British Market Research Bureau cited in Belz & Peattie 2009, 89-90.)

Another segmentation divides green consumers according to their perceived shade of green into four categories: green activists, green thinkers, green consumer base and generally concerned. In this segmentation green activists are those who are members or supporters of some environmental organization (5-15% of the population). Green thinkers are those who will look for new ways to help the environment (maximum 30% of the population including green activists). Green consumer base includes all those consumers who have changed their consumption in response to their green concerns (45-60% of the population including two previous segments). Generally concerned are consumers who claim to be concerned about green issues (90% of the population including previous segments). (Marketing Diagnostics cited in Peattie 1992, 120.)

A third segmentation is made in the 1990s and divides green consumers into three groups: true blue greens, greenback greens and sprouts. True blue greens are the ones actively involved in environmentalism and who work to promote green issues. Greenback greens are not as active in green issues as true blue greens, but they are still ready to use more money on green products. Sprouts are neutral consumers with some environmental concerns but who are as likely to act as they are not to act them out. (The Roper Organization cited in Wasik 1996, 93-94.) According to Iyer & Banerjee (1993, 494) two other groups can be added to this segmentation, groups for conventional, non-green consumers: grouzers and basic browns. Giridhar (1998) makes his own version of this latter segmentation by dividing consumers into three groups: greens (true blue greens and greenbacks), browns (grouzers and basic browns) and an extra group of whites that are consumers who are unaware of the environmental consequences of their behaviour. It is still difficult to segment consumers this clearly into different segments since most consumers are green in some of their actions and on some markets while acting as grey consumers in others. The shade of greenness can vary from dark green to light green among population as well as among a single consumer's actions.

A sixth segmentation segments green consumers by distinct consumer motives. Green consumers can that way be classified into three different groups based on what motivates their green consumption: 1) preservation of the planet (planet passionates), 2) preservation of personal health (health fanatics) and, 3) preservation of animal life (animal lovers) (Ottman cited

in Iyer & Banerjee 1993, 494). Often different types of green consumers are being described simply based on their environmental behaviour using spectrums such as from light green to dark green or pure green, or from darkest black through grey shades to purest green.

The last segmentation presented is made by a conservancy association Naturvårdsverket (accessed on October 23<sup>rd</sup>, 2010). They divide consumers into five communicational target groups according to how they see their own ability to influence, the reason for climate change, their own responsibility, environmentally friendly consumption, the seriousness of the threat, attitudes to other environmental threats and emotional attributes such as concern and conscience. These groups are active (engagerade), reasonable (sansade), newly awakened (nyvakna), passive, (passiva) and skeptics (skeptikerna). Active include people who are active in these issues and who are driven by concern and guilty conscience. This group includes 18% of consumers. Reasonable (26%) include people who feel responsible and have begun to participate but at the same time feel that the questions concerning climate are complex. The newly awakened (25%) are consumers who have recently acquainted themselves with environmental issues and who feel concerned and think that something should be done but preferably by someone else. The group of passives (23%) are consumers who think that they don't have any possibility to influence and therefore are not very concerned and do not feel that they should act in any way. The skeptics (8%) are consumers who think that climate change is mostly natural and just a trend that will soon go by. These are consumers who are driven by vested interest and are suspicious of most things.

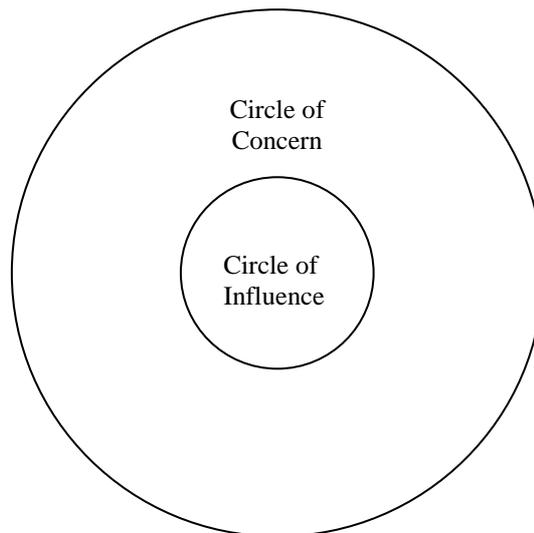
According to Kotler, Kartajaya and Setiawan (2010, 161-163) the market for green products and services can be classified into four segments: trendsetters, value-seekers, standard matchers, and cautious buyers. Green trendsetters are described as tree huggers or visionary environmental enthusiasts who have emotional and spiritual motivation for using green products and who are seeking competitive advantage through them. Value-seekers are environmental pragmatists with rational motivation who use green products in order to increase efficiency and save costs. Standard matchers are seen as environmental conservatives who wait until green products become popular among masses and use green products that have already become a standard. Cautious buyers are considered to be environmental skeptics who do not believe in green products. Green trendsetters are the early market, value-seekers and standard matchers form the mainstream market and cautious buyers are considered as laggards. A company's marketing approach towards each segment should naturally be different.

8-10% of people say they are ready to change their lifestyle into a dark green one that would include things such as composting, 20-40% say they are willing to make light green changes such as buy a smaller car and take fewer flights and 60-80% of people are up for so called no-brainer actions such as turning down thermostats in order to save energy and cut down their heating bills (Grant 2008, 25). However, an individual concerned about the environment does not necessarily behave in a green way in general, or in their purchasing. This has been noticed in many studies, for example those by Pickett-Baker and Ozaki (2008, 282), Yam-Tang and Chan (1998, 361) and Gupta and Ogden (2009, 382-383). Yam-Tang and Chan write in their study on Hong Kong consumers that even though environmental concern is clearly present among consumers, it is still not reflected in their purchase behaviour. This is known as the *value-action gap* (or *value-performance gap*) which Gupta and Ogden (2009, 382-383) confirm by saying that unlike other consumption behaviours, consumer attitude is weak and insignificant when trying to predict consumers' green buying behaviour.

Pickett-Baker and Ozaki (2008, 282) interpret Ajzen's Theory of Planned Behavior in a way that when pro-environmental behaviour aligns with self-interest, individuals comply. In this sense, advertising is effective when the product meets with the consumers' needs and aligns with their values (for example saving money on fuel, and increasing safety of their children). Conversely, the value-action gap may arise when pro-environmental behaviour does not go along with self-interest. This appears to be due to the fact that general attitudes are not specific enough to lead to pro-environmental action and more specific subjective interests interfere with the relationship between values and behaviour, for example a person might claim to be environmentally conscious because of wanting to be like that but then does not act that way. (Pickett-Baker & Ozaki 2008, 282, 290.) Also Gupta and Ogden (2009, 383) argue that the value-action gap in green buying exists because it presents a social dilemma to consumers. This means that green values guide people to change their consumption patterns in order to obtain collective good which is something people generally agree with but if they possibly have to make compromises over individual gain their attitudes do not turn into actions. Dolliver (2009, 8) writes as well that consumers become less eco-loyal when trade-offs might be entailed in helping the environment.

According to Ajzen's Theory of Planned Behavior (1991, 181-182) the value-action gap can also be explained so that even though consumers might be willing to make a change in their behaviour, it still depends on the action in question being under their volitional control as well

as on some non-motivational factors such as available requisite opportunities and resources (for example time, money and skills) if they really take the action or not. Ajzen (1991, 195, 206) continues that a person's normative beliefs that are concerned with the likelihood of an important reference individual or group approving or disapproving certain behaviour multiplied with the person's motivation together form a subjective norm which predicts well a person's behavioural intentions. At least Kalafatis, Pollard, East and Tsogas (1999, 454) have noticed the Theory of Planned Behaviour to be reliable in predicting a person's intention to purchase green products. Olausson (2009, 39) represents that one reason for the existence of the value-action gap can be that although consumers are interested in environmental issues, they might feel that there is nothing they can do about it. Then their so called circle of concern that consists of everything that the consumer is concerned about is much bigger than their circle of influence that consists of their priority concerns and the things they believe they can contribute to, as it is illustrated in figure 3 below.



**Figure 3** Circle of concern and circle of influence (Olausson 2009, 40).

Pickett-Baker and Ozaki (2008, 287) made an interesting note in their study that there is no evidence of a linear relationship between environmental beliefs and environmental behaviours. However, in the least environmentally concerned quartile environmental behaviour was lowest, and in the most environmentally concerned quartile environmental behaviour was highest.

*Voluntary simplicity* can be one way to explain the value-action gap. It is a relatively new lifestyle that can be interpreted as part of green consumer behaviour. It is inspired at least partly by concerns over the state of the environment and it could therefore be interpreted to be another new form of green consumerism. Consumers living a voluntarily simple life seek material simplicity, strive for self-realization, purchase do-it-yourself products and have adopted an ecological ethic as their guidance. Material simplicity does not necessarily mean consuming less but valuing hand-crafted and durable products over the conventional ones. This style of living has evolved from the 1960s and 1970s when the scarcity of natural resources came into general knowledge. (Michman 1983, 88-89.) The original, alternative movements of the 1970s also centered on the 'consume less' idea, but faded away as too marginal. Movements in the 1970s concentrated on self-sufficiency, green communes, reliance on local natural resources, smallness, holism and localness. However in its form of the time the movement appeared for many to be backward, inward-looking, too extreme, romantic and even ridiculous. In the 1980s and 1990s the environmental movement intellectuals, business elites and policy maker intellectuals gradually approached each other while ecological modernization developed dominant new approach for conceptualizing environmental problems with fundamental belief in progress and problem-solving capacity of modern techniques and institutions. (Boström & Klintman 2008, 20-21.)

Effective green consumerism requires that the tools used in it and the policy procedures behind them are designed, modified and explained in such ways that they stimulate reflective trust relationship among consumers and other stakeholders. This is a more advanced type of trust relationship where consumers and other stakeholders acknowledge fallibility, ideological diversity and the political compromises made in environmental policies. (Boström & Klintman 2008, 8.)

## **2.7 Future of Green Marketing**

Some criticism has been presented against green marketing saying that it has failed in its attempts to change the ways businesses behave and to move economy towards sustainability. Critics claim that the amount of green marketing has reduced which they see as a proof of decline in its power. Others interpret this same claim as not a decline but an improvement compared to the late 1980s when companies sent out several ill-judged advertisement campaigns that got a lot of criticism on the market. Also a reduction in specialist products can be

interpreted as a failure of trying to implement green values or it can be a sign of mainstream marketing improving its environmental performance so that it reduces the demand for a specialist green products. (Peattie & Crane 2005, 359.) Peattie and Crane (2005, 368) state that green marketing should not yet be seen as an unfulfilled prophecy that should just be forgotten but instead it should be recognized as one whose time has not yet come.

According to Ottman et al. (2006, 34) green marketing has historically been a misunderstood concept. It has been seen as a “fringe topic”, since environmentalism’s acceptance of limits and conservation does not go well with marketing’s traditional axioms of giving customers what they want and selling as much as possible. In practice, green marketing myopia has led to ineffective products and consumer reluctance.

As some companies and consumers still experience the talk about environmental issues as just one of the isms of today and another pressure among others, others are convinced that green marketing is a growing field of the future. Future developments in green product markets will be crucially affected by two mainly government policy related issues: 1) pricing policy, although it is a decision to be made by each company individually, it is strongly influenced by governments’ taxation policy, 2) product information, full and accurate product labeling is needed to reveal how products are made, what are their contents, how are they packed, are they recyclable and so on will help the consumer to make a well informed choice (Roarty 1997, 253-254). One of the principal challenges in environmental marketing is getting the terminology right (Peattie 1995, 235; Wasik 1996, 140).

Pricing policy has been a major obstacle preventing green products from taking over the markets. Many consumers would like to prefer environmentally friendlier products unless they are overpriced. According to Roisin Donnelly (McAnena, Warfield, Richardson & Donnelly 24, 2010) about 70% of consumers are interested in buying more sustainable products as long as they do not have to make a trade-off in price or performance. Governments that favor green products through regulations could make a difference by enabling green products to be sold at a lower price compared to grey products. When it comes to product information on packaging, regulation is needed. Consumers require information but as long as there is no clear regulation or it is not strict enough, genuinely environmentally friendly products will suffer from the bad reputation caused by greenwashed products.

Fifteen years ago Crosbie and Knight (1995, 7-8) listed six things as the most important natural environmental issues of the then-foreseeable future from a business perspective: 1) global warming and energy use, 2) toxic substances and business operations, 3) ozone destruction and chlorofluorocarbons (CFCs), 4) acid rain and transport, 5) marine pollution and health and, 6) reduced biodiversity, loss of species and habitats. The list seems to be quite current still. Global warming has been a topic of everyday discussions and a great concern for many for several years already as energy usage has become a worldwide topic especially heavily in recent years. Ozone destruction worried people strongly in the past years when its surprisingly rapid development was noticed. Transport is a very important area to focus on since it causes a big part of the world's emissions and is yet, a critically important part of the modern world. Marine pollution rose to the topics once again in 2010 after the Gulf of Mexico oil spill and reduced biodiversity is constantly battled against. Nowadays these topics are even more related to business than ever before. Some see that environmental health and economic health are now more closely bound than ever.

Fifteen years ago Peattie (1995, 83) wrote that green consumption and green purchasing are only a facet in the change of lifestyle that is needed in industrialized countries to make our economic growth sustainable. Oksanen (2002, 11) writes that environmental development is one of the key marketing challenges nowadays involving companies acting in new areas of market research and using new marketing strategies. Olausson (2009, 14) says that environmental technique or *cleantech* is often named as the branch of the future. Peattie and Crane (2005, 36) sum up that green marketing is needed to act as a bridge between the current lifestyle and the marketing which both serves and drives it, as well as we need a future of sustainable marketing based around more sustainable production and consumption. On the supply side every company needs to drastically reduce its impacts in manufacturing, distribution, raw materials, energy use and so on. If you don't, you'll be left behind by regulation and hardening customer demands. (Grant 2008, 25.) Econocentric views are slowly turning into ecocentric views.

Ottman et al. (2006, 34-35) predict that sustainability is destined to dominate the 21<sup>st</sup> century commerce. Rising energy prices, growing pollution and resource consumption and political pressures to address climate change and driving innovation toward healthier, more efficient, high-performance products. In the future, all marketing will incorporate elements of green marketing. Schock (13, 2010) refers to study made by the Shelton Group which shows that

60% of American consumers are intentionally looking for green products. 66% of American consumers said that their consumption of green products did not diminish even during the recent depression which shows that green products and green marketing have now reached a stable position. Products that are best-sellers but seriously harm the environment during their life cycle have no future; the same holds true for ecologically acceptable products which do not sell well (Koechlin & Müller 1993, 39).

Kotler (2010, 4) writes that Marketing 3.0 or the values-driven era is now on the rise. Instead of treating people just as consumers, marketers approach them as whole human beings. Increasingly, also consumers are looking for solutions to their anxieties about making the globalized world a better place looking for companies that can answer to their deepest needs for social, economic, and environmental justice. Chamarro et al (2009, 233) state that studies analyzing the green consumer will also continue to be attractive as environmental consciousness over time. The theme of analysing the value of environmental certification and eco-labels is seen as the direction of the future.

Peltomäki and Kamppinen (1995, 12) wrote that the meaning of environmental friendliness as a means of marketing diminishes when there are more and more products marketed with the same claims. Also Jack (2008, 21) has mentioned that the proliferation of greentinged marketing has led to '*green fatigue*' among consumers, who have become more knowledgeable and subsequently more cynical of the green claims about their brand's products and services. Green fatigue may very well be what is happening in many consumers' minds and it could be overcome by setting stricter rules for green marketing. Most of the leading green marketing experts however seem to think that sustainability is to dominate the twenty-first century commerce (Ottman et al. 2006, 34). Also Banerjee et al. (1995, 21) state that despite the variation in concern, green movement is arguably one of the more important social movements in recent history.

### **3 RESEARCH METHODOLOGY AND ANALYSIS**

The research in question is empirical by nature which is very common in these type of researches. 72,96% of all green marketing studies and even 92,86% of those focusing on green communication are empirical (Chamorro et al. 2009, 225, 228). It means that the situation that is considered to be interesting by the researcher, the research problem, will be observed in practice instead of merely considering it. In empirical studies the object of the study is some phenomenon of which information will be acquired through a chosen systematic method. As an empirical study, this research is descriptive in nature. It tries to answer to questions such as what, how and when. The aim in descriptive research is to describe the nature, prevalence, historical development or other features of some phenomenon. Reliability, exactness and generalization of findings are essential. (Uusitalo 1991, 62-63.) A descriptive study is a suitable method when the phenomenon under study is a rather new one, of which a lot of information is not yet available. (Koivula, Suihko & Tyrväinen 1997, 11-13.)

#### **3.1 Research Methodology**

Researches show that green consumers, who are sceptical about advertising in general, are more receptive to print advertising than television advertising. Many green consumers are information seekers which makes print medium a natural choice for them because through print advertising it is possible to convey concrete information in an easier way than through broadcast media. (Shrum et al. 1995, 81.) In the 21<sup>st</sup> century, car manufactures have invested three to five times more money on print advertising than they have on television advertising which shows it is an important area to focus on (TNS Gallup cited in Markkinointi & Mainonta 12/10). It is therefore interesting to study how green marketing occurs in magazine advertisements and that is why the research data will be collected from print advertising.

The research data in this study is primary data meaning original, written data that is collected by the researcher herself (Hirsjärvi et al. 1997, 186; Koivula et. al 1997, 36). The data will be collected from three different car magazines, both Finnish and non-Finnish magazines. Yet, the aim is not to make a cross-cultural study. The magazines were selected from two different countries in order to get a wider perspective on frequency and content of green marketing. Also a situation where the legislation of one country would restrict or otherwise effect on green advertising is avoided by studying magazines from two different countries. In a re-

search done by Chamorro et al. (2009, 225) it was found out that a majority of empirical studies on green marketing have a national level or lower as their geographical scope but 10,98% obtain data from two or more countries. Several different magazines were chosen in order to avoid a situation where one magazine's possibly existing strict advertising policy would determine the results of the research. Several magazines also provide a wider range of different car advertisements from different car manufacturers, aimed and therefore tailored to possibly different types of readerships, which improves the generalization of the study. Because the research is about car advertisements, only specific car magazines were selected in order to obtain a plentiful amount of research data. Every issue of all three magazines is examined from a time period from January 1995 to September 2010. All articles and other editorial material were left outside this study. Only advertisements that clearly advertize some car or car brand and that are at the least the size of one page (1/1) will be calculated as research data. Only full-page advertisements were decided to be collected to enhance readability (also done for example in Kangun et al. 1991) and also to prune back the amount of data. During the data collection, it was though found out that majority, almost all car advertisements were at least one full page in size which meant that by restricting the size of the eligible advertisements, actually only a handful of advertisements were left out of the study. Smaller sample of this data will be examined more carefully to study the content of the advertisements.

### **3.1.1 Selected Car Magazines**

The research data was decided to be collected from three car magazines: *Tekniikan maailma* (Finnish), *Tuulilasi* (Finnish) and *Teknikens värld* (Swedish). The magazines were selected as they are general car magazines or technique focused magazines that mostly write about cars and therefore were expected to include a substantial amount of suitable advertisements. All selected magazines have a wide circulation on their field in their country of publication, and are not concentrated on some special sector in the car field. Special magazines such as the ones concentrated on car tuning, museum vehicles or trucks did not qualify as eligible. The selected magazines are aimed at a large audience generally interested in cars and they enjoy a good reputation. A short presentation of the selected magazines follows.

*Tekniikan maailma.* *Tekniikan maailma* is a Finnish magazine that concentrates on technique. It writes mostly about cars but also about entertainment electronics, mobile communication, motorcycles, computers, cameras, sports equipment and science. It is published by Otavame-

dia. (Otavamedia, accessed on August 28<sup>th</sup>, 2010.) It was established in 1954 and is published 22 times a year. In 2009 its circulation was 148 216 and it had 667 000 readers. (Tekniikan maailma, accessed on August 28<sup>th</sup>, 2010.)

*Tuulilasi.* Tuulilasi is a Finnish magazine mainly concentrating on cars writing also about car accessories, other motor vehicles and traffic (Tuulilasi, accessed on August 29<sup>th</sup>, 2010). It is published by A-lehdet Oy. Tuulilasi was established in 1963 and is published 16 times a year. In 2009 its circulation was 80 071 and it had 487 000 readers. (Mediaopas – A-lehdet, accessed on August 29<sup>th</sup>, 2010.)

*Teknikens värld.* Teknikens värld is Swedish magazine focusing on cars, their purchase and use and everything related to that. It is published by Bonnier Tidskrifter. It was established in 1948 and is published 26 times a year. In 2009 its circulation was 43 600 and it had 277 000 readers. (Bonnier Tidskrifter, accessed on August 29<sup>th</sup>, 2010.)

### **3.1.2 Data Collection for the First Part of the Study**

As mentioned in chapter 1.2, in the first part of the research the aim is to find out how big part of car advertisements in car magazines can be considered as green and to find out how has the amount and share of those green car advertisements changed over the past 16 years. In order to be able to do this, green advertisements must be indentified using a specific definition. All car advertisements will be examined from all the issues of the selected three magazines from the whole time period of nearly 16 years (January 1995 – September 2010).

According to Kärnä et al. (2001, 62) advertisements can include many different elements to communicate the environmental friendliness of the company or the product. Such elements can be for example the use of green color, eco-labels, pictures of nature, statements of environmental friendliness, or mentions about use of renewable raw materials, environmentally friendly production processes and recyclability. In this thesis, images seen in the advertisements are not analyzed. In car advertisements cars are often pictured outside in nature as it is the environment they are used in without it having any connection to the car being environmentally friendlier. Cars also come in different colors and the selection varies according to trends and zeitgeist. Therefore things such as the use of green color or images of nature are not interpreted at all. Instead only the text and company logos and slogans seen in car adver-

tisements are interpreted. This goes well with the method of analysis since in content analysis the research data is usually reviewed from the textual point of view (Metodix, accessed on October 14<sup>th</sup>, 2010).

Literature and previous studies provide only few definitions for green advertisements; it is not an easy task to define them. Problems with implicit messages make it even more difficult to draw exact definitions of what constitutes as a green advertisement. This naturally makes it difficult to measure the extent of their use. (Peattie 1995, 238.) As also Kilbourne (1995, 14) writes, the difficulty in interpreting an advertisement as a green one is that the explicit message and implicit message in it can, and often do, conflict. In this thesis to define a *green advertisement*, definition from a study by Banerjee et al. (1995, 22) will be used. They define in their study *Shades of Green: A Multidimensional Analysis of Environmental Advertising*, a green advertisement to be “any advertisement that meets one or more of the following criteria: 1) explicitly or implicitly addresses the relationship between a product or a service and the biophysical environment, 2) promotes a green lifestyle with or without highlighting a product or a service and, 3) presents a corporate image of environmental responsibility”. This definition is versatile, yet simple enough and unequivocal and therefore easy to use in this kind of research. It also seemed to fit car advertisements well. This same definition has as well been used in other studies, for example one by Kärnä, Juslin, Ahonen and Hansen in 2001, which gives this definition support and credibility.

Only slight additional correctives to the chosen definition were made. The word “service” on the first part is unnecessary since this thesis focuses only on those car advertisements that clearly advertise cars, and not products, not services. On the same first part of the definition where it says “explicitly or implicitly”, slightly more emphasis was put on explicit relationship between a product and the biophysical environment. This came up for example in cases where an advertisement was otherwise completely ‘gray’, but contained only one small print word that could have been interpreted as green, such as “eco-motor”. In all these kind of cases (that were not that many), that type of word was then completed by claims that the car in question is economical and gives the consumer financial benefits, which gives the impression that the eco-affix in the advertisement refers to economical rather than ecological. This easily causes bafflement which is why it was decided that these kinds of small print mentions of only one undefined and unclear word without any additional explicit reference to the product’s or company’s relationship with the environment did not cause the advertisement to be

identified as green. If however, there were other words or claims in the advertisement that clearly linked the product or the company in question to environmental issues, the advertisement was naturally considered a green one.

If it was announced on the advertisement that the car in question is a low-consuming car referring to its petrol consumption it alone was not considered sufficient for the advertisement to be considered green even though lower petrol consumption leads to lower emissions which naturally makes the car more environmentally friendly (this exclusion is used also for example in a study by Kangun et al. 1991). This kind of clause does not satisfy the demand for explicitness of the connection between the product and the environment. Instead, lower petrol consumption is linked without exception to the car being cheaper in use. If the carbon dioxide (CO<sub>2</sub>) emission levels of the car are announced on the advertisement it could be interpreted as a green advertisement because those levels do not express any specific performance quality of the car, only its environmental friendliness. However, it has been obligatory for all car manufacturers to declare the CO<sub>2</sub> value of the car in the advertisement from the year 2001 onwards based on the European Community directive (Finlex, accessed on October 21<sup>st</sup>, 2010), so just a mention of the CO<sub>2</sub> –values was not enough for the advertisement to be defined as green. But if the CO<sub>2</sub> values of the car were described as especially low in the text of the advertisement, then it was considered to be a green advertisement because the issue was then clearly emphasized beyond the requirements of legislation. Main guideline in the identification of green advertisements can be compressed as getting the overall feeling that the advertisement somehow makes a claim about the product being less harmful to the environment than what a conventional model of the same product is.

Other definitions found in earlier studies were considered to be too narrow or too simplistic or just not suitable for car advertisements. One example is a division by Iyer and Banerjee (1993, 495), drawn from Jacqueline Ottman's classification of distinct consumer motives in 1991, where they define a green advertisement to be one that addresses either preservation of the planet, personal health or animal life. This definition was noticed not to suit car advertisements very well.

### 3.1.3 Data Collection for the Second Part of the Study

The second part of the research focuses on the content of green car advertisements and possible changes in them during the research period. The aim is to find out what kind of green car advertisements are there and has the content in them changed during the research period and if so, how. A smaller sample of the data is picked to analyze the content of the advertisements. Koivula et al. (1997, 37) write that one way to avoid a problem that might occur when having a data that is too large, is a so called *funnel technique*. Using that technique a quantitative analysis is first made using the larger data before a smaller data is sifted from the larger data. This smaller data is then analyzed more specifically. In this study the smaller sample will be picked from the whole research data by using *stratified sampling*. The research data from the first study is divided according to magazines and years (strata) so that every annual volume of every magazine forms its own category. Advertisements are then selected from these annual categories through *random sampling* by taking two green advertisements per year from all three magazines from the whole research data of sixteen years. Yet it was controlled that the advertisements are collected evenly throughout the year, to avoid any particular season from being over-emphasized so that it would not affect the results of the study. This makes the data collection partially non-random. This way, the aim was to collect six green advertisements from every year, altogether 96 green car advertisements. However, during a certain years, there were less than six advertisements or even no green car advertisements available at all, then the missing advertisements were not replaced by green advertisements from other magazines by the same year so that any magazine would not be emphasized more than others. Also, every car advertisement was included in the study only once which eventually dropped the amount of the advertisements chosen into 79. Yet, the intention was to try to avoid making the data a complete convenience sample of advertisements. Due to time limitations, the whole data of 845 green advertisements cannot be examined. By taking a sample of advertisements from a time period of several years, instead of studying all the ads in all selected magazines from a shorter time period a wider perspective can be achieved which allows drawing conclusions about the change in the content of car advertisements during the past years.

In order to be able to investigate the contents of advertisements, the advertisements have to be analyzed by using an advertisement claim analyzing model. This classification model can be drawn from literature and previous studies. Iyer and Banerjee (1993) made the first attempt to analyze green print advertisements. Their categorization was the one seen to suit this research

best, even though some changes had to be made to it. As Peattie (1995, 234) writes, messages communicate through the tone that they use as well as through the appeal and content they involve. This categorization by Iyer and Banerjee (1993) was seen to describe the communication of the selected advertisements best.

Iyer and Banerjee (1993, 495-497) present in their study a framework for categorizing green advertisements. Four categories with sub-categories, and their possible minor categories are presented: 1) ad target with subcategories of planet preservation, animal life preservation and personal health preservation; 2) ad objective with subcategories of corporate image and product/service itself from which the latter one, product/service characteristic had three minor categories of inputs (ad highlights raw material or production processes used), packaging (ad highlights packaging) and overall product/service (product/service promoted in general); 3) economic chain with subcategories of production, consumption and disposition of which production had two minor categories of raw materials and process; and 4) ad appeal with five subcategories and their minor categories: zeitgeist with minor categories mere statement (completely vague statement such as “this product is environmentally friendly”) and bandwagon (obvious attempt to hitch the company to green movement), emotional with minor categories of fear, guilt and you make a difference, financial with minor categories of money-off coupons and cause subsidy (the company supports a certain environmental cause), euphoria with minor categories of health (aspect) and natural (use of natural ingredients), management (implying that the company is engaged in green issues) with minor categories of control (for example green programs in the company) and social responsibility and a subcategory of others with minor categories comparison, exemplar and celebrity endorsement.

This categorization was not seen suitable for car advertisements as it is since the buying process for cars that are purchased very seldom differs a lot from the purchasing process of many other products that are purchased more often, perhaps even several times a week. Therefore this categorization was modified to a large degree but still maintaining its basic structure and some categories as well as some subcategories and their minor categories. The categorization was modified to reflect the nature of the studied advertisements and the environmental claims in them. The first item of ‘ad target’ was deleted completely since it did not seem to suit car advertisements at all. This is probably due to the fact that cars are purchased very seldom and they are expensive acquisitions, which makes consumers more likely to focus on other characteristics of the product, also the environmental ones, more than whether the car affects more

on planet preservation, animal life preservation or personal health. These issues are not emphasized at all in car advertisements. Perhaps also because cars are known to cause pollution anyway and the question with them is not whether they help preserve animals or something else, but the question is if they are less environmentally harmful than previous car models which would make them affect all of the issues mentioned but none of them specifically. The second item ad objective maintained its two sub-categories corporate image and product itself. The word service was left out because only advertisements that clearly advertise cars, id est products, were included in this research. Minor categories of the latter subgroup were defined to be inputs, overall product and outputs. Outputs category was added as it is a very important part of environmental car marketing to focus on the outputs of the product as well as on the inputs and the product itself. Again the word service was left out as was the minor group of packaging. Cars are sold as they are without packaging so this minor group was considered unnecessary. Though division of ad objective into corporate image and the service or product itself is probably the most common in existing literature, some definitions also include a third group of promoting a green lifestyle (for example Wagner & Hansen 2002, 17) but due to the nature of cars as consumer products this group was not included in this study.

Yet, Iyer and Banerjee noticed after their study (1993, 498) that their three-way categorization in the third item, economic chain, did not apply to over half of the advertisements they studied, the same goes with car advertisements in this thesis' research data. Due to the nature of cars, and the way they are used, neither their disposition nor the way are consumed were not emphasized in the advertisements at all and even production very little so. Here, by the word 'consumption', it is referred to the way in which the consumer can use the product in an environmentally friendlier way. In addition, the production's minor categories raw materials and production processes are already included in the second item, ad objective. As a result, the item of economic chain was deleted completely from the categorization for this study.

The fourth item of ad appeal was slightly modified. The first subcategory of zeitgeist meaning that the advertisements is just trying to ride on the current wave of green movement, is included also in this study but without the minor groups. It was considered difficult to estimate whether an advertisement includes claims in the sense of bandwagoning because the oldest advertisements in this study were over 15 years old so it would have required knowledge of the zeitgeist of that time to estimate possible bandwagoning. All the claims that are connected with zeitgeist are anyway mere statements so no minor categories are used here under this

first category. The emotional sub-category was expected to suit car advertisements well so it is included in this study as it is represented by Iyer and Banerjee above. Financial sub-category is one including those advertisements that directly emphasize financial aspects and it was included in the categorization model with only one minor category, cause subsidy. The minor category of money-off coupons is left out since those are not used in car advertisements. The name of the euphoria sub-category was changed into organic according to Banerjee et al. as presented in next chapters. Organic category was used to mean the emphasis of well-being and health aspects. So, the original minor category or health is included in the sub-category itself and the other minor category of natural ingredients is left out as not suitable for car advertisements. Sub-category of management refers to advertisements which imply that the company behind the advertisement is somehow proactively involved in the green movement. Sub-category of management with its minor categories control and social responsibility are used unchanged. One sub-category, technical information, was added because it is expected that in car advertisements technical features are emphasized and this does not suit any previously presented category. The last sub-category, others, include comparison and celebrity endorsement as minor categories. In previous researches where the category of ad appeal was used there seemed to be an underlying presumption that the whole advertisement is green. This, however is often not the case which lead to that in this study the ad appeal category was used to estimate the appeal of the green claims of the advertisement.

Banerjee et al. used in their research (1995, 23) a modification of the categorization made by Iyer and Banerjee (1993). In the latter study, the items ad target and economic chain had as well been left out of the study. Instead they had five major categories of 1) ad characteristics, 2) ad greenness, 3) ad objective, 4) ad appeal and 5) ad issues. Ad characteristics were divided into three groups by the type of advertiser (manufacturer, retailer, non-profit), product or service and characters of the advertisement. Ad greenness was used to refer to the extent of environmental focus in the advertisements and it was estimated to be shallow, moderate or deep. Ad objective was divided into four subcategories of product or service, company image, influence of consumers' behaviour and membership in sponsoring organisation or donation. Ad appeal had seven subcategories: zeitgeist, emotional appeals, rational appeals and financial aspects emphasizing appeals, organic appeals, corporate greenness, testimonial appeals and comparative benefit appeals. Ad issues had subcategories of atmospheric pollution, solid waste problems, water pollution, wildlife preservation, plant preservation, combination of any of these and general state of planet's environment rather than any particular problem.

The first item of ad characteristics is partially the same as ad objective by Iyer and Banerjee (1993) and partially does not fit car advertisements as the advertiser in car advertisements is almost without exception the manufacturer. Ad greenness is also used in the categorization framework of this thesis but with different subcategories of light green, green and dark green. The shade of greenness in the advertisements is estimated according to choice of green words or claims used as it was done by Banerjee et al. Yet, the greenness is not estimated strictly based on the frequency of some words but instead the impression that comes across through their use. Advertisements that contain only one or two small green words or vague green claims are considered as light green, advertisements that emphasize environmental issues with several sentences all the way up to filling about half of the advertisement with green claims or green claims that are more specific are considered green and advertisements whose main focus is on environmental issues (to the extent that the product might even play a minor part) are considered dark green. The item of ad objective partially overlaps the first item of ad characteristics and was not considered to be used a separate group in the research framework for this thesis. Only one subcategory, organic appeals, was taken from the ad appeal category by Banerjee et al. to the categorization model used in this thesis that is presented later in this chapter in table 5. The last category of ad issues was not seen to fit car advertisements well because of their nature.

Kilbourne (1995, 17) presents another categorization for the greenness of the advertisement in his paper. He established five different types of green each of them with a different human and political agenda. These five, from least to most political and human positional are environmentalism, conservationism, human welfare ecology, preservationism, and ecologism. For an advertisement to be considered green by Kilbourne, it had to fit this framework. Yet, this classification of greenness was seen to be too complex to fit car advertisements.

Kärnä et al. (2001, 63) define in their study the greenness of an advertisement according to existence, absence and way of presenting the advertisement objective (corporate image or green product: green actions taken, eco-labels, green awards etc), executional framework (company and brand logos, share of green colour or nature etc.), message elements (raw material, production processes, after-use), consumer satisfaction (need satisfaction, high quality, low price) and driving forces (emotional, rational or moral appeal).

From other advertisement categorizations could be mentioned one by Carlson et al. (1993, 31) in which they divide environmental advertising claims into five types: 1) product orientation (claim focuses on the product's environmental attributes), 2) process orientation (claim deals with organization's internal technology, production technique and/or disposal method that yields environmental benefits), 3) image orientation (claim associates an organization with an environmental cause or activity of broad public support), 4) environmental fact (independent statement about the environment or its condition) and, 5) combination (claim appears to have several facets). The first three items are all included in the ad objective part of the categorization model by Iyer and Banerjee (1993) that was presented earlier. The fourth item was not seen necessary because all environmental claims in car advertisements seem to be connected either to the product, production process or image of the company. Therefore, this categorization was seen neither suitable nor necessary in this research. The fifth item, combination, might be suitable for some advertisements but most car advertisements clearly focus on some issues, product, production processes or corporate image, more than on others so this category was rejected from this study as well.

Another categorization model comes from Belz and Peattie (2009, 186, 189), as presented already earlier in chapter 2.3.1.1, where they divide green messages according to three generic types of appeal with what the company tries to engage with its audience. These three categories are: 1) rational appeals that target to consumers' self-interest by stressing the value or performance of the product, 2) emotional appeals that try to create an emotional connection to the consumers and to get an emotional response which is often tried by connecting the benefits from sustainability strategies with children's welfare, endangered animals or disadvantaged people from poorer, developing countries and, 3) moral appeals that aim to engage with consumers' sense of what is right and what is wrong and in the case of sustainability marketing stressing the consumers' sense of duty. This categorization of green messages could also be used to categorize green advertisements but it was seen to be too simplistic for the research done in this thesis, since it only describes the types of appeal not at all for example the objective of the advertisement.

As a result, the categorization framework for green car advertisements for this thesis was made by combining frameworks mostly from Iyer and Banerjee (1993) and a little bit from Banerjee et al. (1995). Kilbourne (1995, 14) remarks that it is difficult to define the greenness of an advertisement, because most advertisements do not necessarily fall clearly into one or

another category, but contain elements of several categories. It can be said to be equally difficult to categorize green advertisements for the exact same reason. This caused some difficulty in this part of the research but it was overcome by resorting to the strongest impression that the advertisement gave. Therefore every advertisement was categorized only into one subgroup in every one of the three main categories. Framework from Iyer and Banerjee is presented below in table 4 together with the final framework that was used in this thesis.

**Table 4** Frameworks for categorizing green advertisements.

Framework for categorizing green advertisements by Iyer & Banerjee (1993):	Framework that is used in this thesis for categorizing green advertisements:
1) AD TARGET - planet preservation - animal life preservation - personal health preservation	1) AD OBJECTIVE - corporate image - product itself * inputs * overall product * outputs
2) AD OBJECTIVE - corporate image - product/service itself * inputs * packaging * overall product/service	2) AD APPEAL - zeitgeist - emotional * fear * guilt * you make a difference - financial * cause subsidy - organic - management * control * social responsibility - technical information (rational appeal) * mere * specific - others * comparison * celebrity endorsement
3) ECONOMIC CHAIN - production * raw materials * process - consumption - disposition	3) AD GREENNESS - light green - green - dark green
4) AD APPEAL - zeitgeist * mere statement * bandwagon - emotional * fear * guilt * you make a difference - financial * money-off * cause subsidy - euphoria * health * natural - management * control * social responsibility - others * comparison * exemplar * celebrity endorsement	

## **3.2 Analysis**

The first part of this thesis where the frequency of green marketing among car advertisements is researched is quantitative research. Quantitative research is very well suitable for descriptive studies (Koivula et al. 1997, 17). In quantitative research collecting, processing and analyzing the research data are separate phases. Yet, in this study the research data consists of observational data which is more typical to qualitative research. Likewise, the first part of this research is not testing any existing theory; it is more like an exploratory study. A suitable method of analysis is therefore quantitative content analysis. The second part of this study, in which the content of green car advertisements is researched, is more like a traditional qualitative study where the data is typically verbal or visual observational data, analysis method is more material bound and free in form often using thorough interpretation of the data and unequivocal classification as the basis for evaluating the data. Data collection, processing and analysis take place during the whole research process and are not clearly separate phases. Results are evaluated by the thoroughness of the researcher's conclusion drawing. Also this second part of the study is characteristically for qualitative research exploratory or theory creating because of the lack of previous theory on this field. (Uusitalo 1991, 80-81.)

Analysis of the data was done by using the statistical analysis program SPSS version 17.0. Results are illustrated by using figures and tables taken from the SPSS and creating them with Windows Excel based on the SPSS outcomes. Analysis unit is one advertisement. Since the nature of the study is exploratory, any particular hypotheses were not set to be tested but instead the purpose is to unveil possible patterns.

### **3.2.1 Content Analysis**

Neuendorf (2002, 1) defines content analysis as a systematic, objective, quantitative analysis of message characteristics which can be applied to many different areas of inquiry. She continues (2002, 10) that "content analysis is a summarizing -- analysis of messages that relies on the scientific method -- and is not limited as to the types of variables that may be measured or the context in which the messages are created or presented." Attention to objectivity, intersubjectivity, a priori design, reliability, validity, generalizability, replicability and hypothesis testing are included as well. Krippendorff (1981, 21) writes that "content analysis is a research technique for making replicable and valid conclusions from data to their context".

Whether content analysis is a form of qualitative or quantitative research has been discussed but yet, there is no clear answer (Hakala 2003, 15). In content analysis the traits and content of language are researched as communication and not as culture. (Hirsjärvi et al. 1997, 162, 166.) One of the key components in content analysis is the development of objective criteria with which to evaluate the stimulus (Polonsky et al. 283, 1998). Chamorro et al. (2009, 225) found out in their research about green marketing researches published during years 1993-2003, that 10,26% of researches were done by using observation by means of content analysis. Percentage rises close to a hundred when only researches about green advertising are calculated. Leonidas and Leonidas (2011, 14) simply state that researches focusing on green advertising use advertisements for content analysis purposes.

According to Koivula et al. (1997, 35-36) content analysis exists as both qualitative and quantitative. When analyzing qualitative data both qualitative content analysis and quantitative content analysis can be used side by side. *Qualitative content analysis* is based on comparing qualitative differences, similarities and contents. It analyzes the qualitative content and variations of the research data. In qualitative content analysis the research data can consist of written and illustrated material such as letters, comics or books. The research data is interpreted based on research themes and it cannot be done haphazardly or in a purpose-oriented way. *Quantitative content analysis* or statistical content analysis is used broadly for example when studying newspaper writing or television communication. It tells about the structure and the common features of the research data. In quantitative content analysis, a ready-made analysis frame is used to sift the data. The variables of the study are defined beforehand when the researcher familiarizes herself with the data. These variables are then used to measure the data. (Koivula et al. 1997, 35-36.)

Content analysis can be theory driven or data driven as in this study. According to Tuomi and Sarajärvi (2004, 98) it is however very difficult to execute a purely data driven content analysis because already the chosen methodology and concepts are theory driven which turns the data driven analysis closer to theory-bound analysis. In content analysis it has to be clear what data is analysed, how is it defined and from which population is it drawn (Krippendorff 1981, 26).

### 3.2.2 SPSS Analysis for the First Part of the Research

Descriptive analysis (for example percentage frequencies) is used mainly in researches that use an exploratory approach (Leonidas & Leonidas 2011, 15). It was used also here in the first part of the research to describe general key figures of this first part of the research. Analysis of frequencies was seen unsuitable because all three magazines contain different amount of advertisements in different years so it was not seen reasonable to try to look for frequencies for some certain figures. The target for this first part was to find out if a clear trend can be seen in the fluctuation of the amount of green car advertisements during the research period, id est if it can be said that the share of green marketing in all car advertisements has increased or decreased during this time. It was not seen interesting to compare the absolute amounts of green car advertisements from time period to another because also the amounts of car advertisements in general have changed during the research period so a comparison between absolute amounts would give misleading results when the task was to find out if the advertisements have become greener and not to find out if the amounts of green car advertisements has increased. So it was considered to be better to compare the shares of green car advertisements out of all car advertisements to see whether car ads have become greener. In order to see this, a comparison between different time periods had to be made. A year-to-year testing with small sample amounts was not seen to be a reasonable way to spot a possible pattern in the changes in the shares of green car advertisements so instead the data was decided to be grouped. This way three groups were formed, group one covering the years 1995-1999, group two years 2000-2004 and group three years 2005-2010. Thus, the first two groups contain a period of five years respectively and the last group covers 6 years (of which the year 2010 includes issues from January until early September).

According to Pallant (2006, 97, 107, 214) analysis of variance (ANOVA) is used when there are two or more groups in the categorical independent variable whose mean scores need to be tested on a continuous dependent variable. Analysis of variance compares the variance between different groups with the variability within each group. Variance between different groups is believed to be caused by the independent variable and variance within each group is believed to be caused by pure chance. There are different types of ANOVAs, in this thesis the one-way ANOVA was chosen as a suitable statistical tool to be used. It is called one-way because the impact of only one independent variable to the dependent variable is examined. One-way ANOVA therefore involves one independent variable (factor) that has a number of

different levels (at least three), in this research the year groups or different magazines. A one-way ANOVA tells whether the groups in question differ but does not reveal between which groups the significance difference is. To find out this, post-hoc comparisons are used. One-way ANOVAs exist as both repeated measures ANOVA and between-groups ANOVA. In the before mentioned the same group is tested in more than two occasions and the latter one, which is also called independent samples ANOVA, is used to compare the mean scores of two or more different groups. In this research, the between-groups ANOVA was used.

Pallant (2006, 197) writes that there are some general assumptions concerning the data used in analysis of variance and these assumptions need to be checked. These assumptions include level of measurement, random sampling, independence of observations, normal distribution and homogeneity of variance. The level of measurement requires the dependent variable, the share of green car advertisements, to be measured at the interval or ratio level which is fulfilled in this research meaning that this test is suitable for this kind of variable. The assumption of random sampling does not demand a lot of attention at this point since according to Pallant it is not often the case in real-life research though of course desirable. Observations for this research were gathered independently as assumed meaning that individual parts of the data do not affect other parts of the data. For example, how many green car advertisements were found in Tekniikan maailma issues does not affect the amounts found in Tuulilasi issues. Normal distribution or the skewness of all green advertisement shares in all three magazines was tested through comparing means and the skewness in all magazines was less than one ( $<1$ ) so they are normally distributed meaning that they can all be used in analysis of variance. The demand for homogeneity of variance was tested through the Levene test for equality of variances while doing the actual analysis of variance and the Levene test gave as a result a significance level of 0.000 ( $p < 0.001$ ). This indicates that the homogeneity of variance is not the case in this data. However, the analysis of variance is robust to these kinds of assumption violations if the size of all three groups is reasonably similar, which is the case here (groups one and two both contain data from five years in three magazines that is 15 figures for both, and group three contains data from six years in three different magazines, that is 18 figures). As a conclusion, analysis of variance can be made so that reliable results can be expected.

The same analysis was used to find out if there were any differences in the shares of green car advertisements between different magazines. The same assumptions were pre-checked also for this test giving the same results except for the homogeneity of variances. The Levene test

for this test about differences between magazines gave a result of 0,571 which indicates that the assumption of homogeneity of variance was not violated so reliable results can be expected also from this analysis.

Comparisons were made through One-way between-groups analysis of variance (One-way between-groups ANOVA) by using the statistical computer program SPSS version 17.0. This test was seen to be suitable because there were more than two groups to be tested. A between-groups techniques were chosen over repeated measures techniques since the subjects in each group are different (instead of being the same tested on several occasions). The dependent variable or the share of green car advertisements was formed by counting a ratio by dividing the total amount of green car advertisements with the total amount of all car advertisements for each year and each magazine. This test gave a result whether any group differed from others. To get a result that tells also which of the tested groups are those that differ from each other, post-hoc tests were performed as well. Also the effect size or the strength of association between groups was calculated with Eta squared formula to see the proportion of variance of the dependent variable that is explained by the independent variable. (Pallant 1996, 196, 201, 214.) Results are presented in chapter 4.1.

### **3.2.3 SPSS Analysis for the Second Part of the Research**

Analysis for the second part of the research differs from the first part because the collected data is in different form. Unlike in the first part where the data for the dependent variable was measured as a scale variable here, in the second part the dependent variables are nominal. Therefore non-parametric statistics were used. Assumptions for non-parametric techniques include randomness of samples and independence of observations. Randomness is explained in previous chapter 3.2.2. Independence here means that each case is counted only once, they cannot appear in more than one category or group and the data from one subject cannot influence the data from another. (Pallant 2006, 287.) As explained in chapter 3.1.3 this demand for independence is also met here. A descriptive analysis was used and the key figures of the second part are presented through analysis of frequencies. Then the two independent variables year groups (groups covering years 1995-1999, 2000-2004 and 2005-2010) and magazines were crosstabulated with the three content variables ad objective, ad appeal and ad greenness. A chi-square test for independence was used to find out if there is an association between the year groups or magazines when compared to the contents of the green car advertisements.

## **4 RESULTS OF THE RESEARCH**

The main research problem of the research was defined as: What is the role of green marketing in printed car advertisements today? Four essential research sub-problems were derived from the main research problem and distinguished as follows: 1) How big part of car advertisements in car magazines can be considered as green?, 2) How has the amount and share of green car advertisements in car magazines changed over the past 16 amount of years?, 3) What kind of green advertisements are there?, 4) Has the content in green car advertisements changed during the research period and if so, how? Answers to these questions, based on the research made, are presented in the next chapters.

### **4.1 Results of the First Part of the Research**

For the first part of the research all issues of all three magazines from years 1995 until the beginning of September 2010 were gone through. All car advertisements were carefully examined and those that were interpreted to fit the definitions of green advertisements concerning size and content that were presented earlier in chapters 3.1 and 3.1.2 were calculated. This data was then analyzed with a statistical program SPSS version 17.0 and graphs were drawn with Microsoft Excel or taken straight from SPSS. Altogether 962 magazine issues were examined, of which 345 were Tekniikan maailma, 208 Tuulilasi and 409 Teknikens värld issues. These issues contained altogether 5844 car advertisements, of which 845 were interpreted to be green. Thus, 14,46% of all the car advertisements examined were considered green but the share of green advertisements was noticed to have fluctuated remarkably over the years. As descriptive statistics, the amount of all car advertisements, green car advertisements and the percentage shares of green car advertisements as well as minimums, maximums, means and medians of all three magazines separately and together are presented below in table 5. From the table it can be seen that the share of green marketing differs slightly between magazines and this differentiation was examined more closely and the result can be found later in this chapter.

**Table 5** Key figures of advertisements in each magazine and altogether.

Tekniikan maailma 1995-2010

	All car advertisements	All green car advertisements	Share of green car advertisements of all car advertisements (%)
Sum	2633	346	13,14
Minimum (year)	119 (1996)	2 (2002, 2003, 2004)	1,11 (2004)
Maximum (year)	239 (2008)	78 (2009)	39,20 (2009)
Mean	164,56	21,63	13,12
Median	159,50	13,50	9,03

Tuulilasi 1995-2010

	All car advertisements	All green car advertisements	Share of green car advertisements of all car advertisements (%)
Sum	1535	218	14,20
Minimum (year)	63 (1996)	0 (2003)	0 (2003)
Maximum (year)	166 (2008)	50 (2008)	35,38 (2010*)
Mean	95,94	13,63	14,20
Median	94,00	11,50	11,37

Teknikens värld 1995-2010

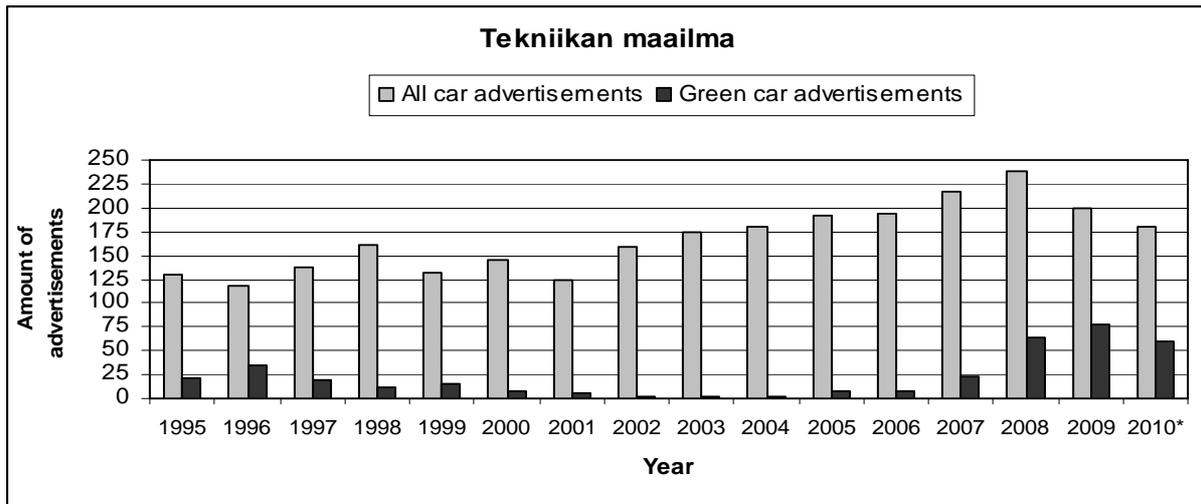
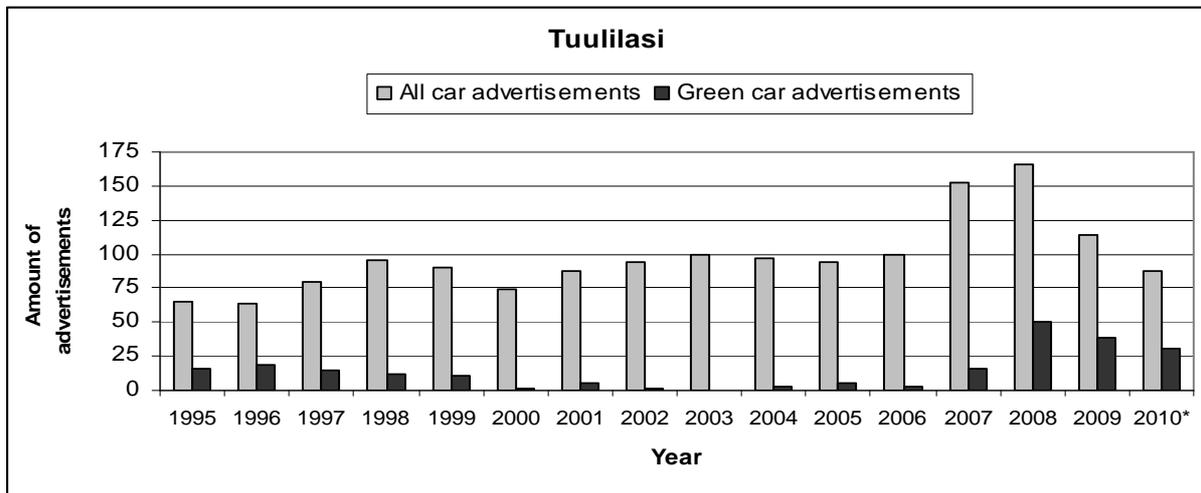
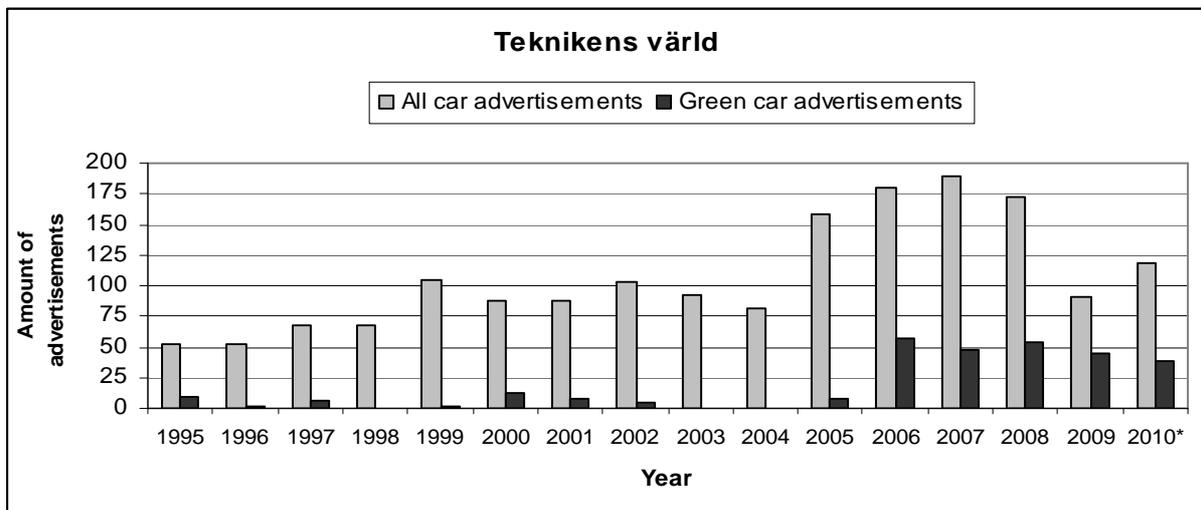
	All car advertisements	All green car advertisements	Share of green car advertisements of all car advertisements (%)
Sum	1676	281	16,77
Minimum (year)	53 (1995, 1996)	0 (1998, 2003, 2004)	0 (1998, 2003, 2004)
Maximum (year)	190 (2007)	57 (2006)	48,35 (2009)
Mean	104,75	17,56	14,47
Median	89,5	7,50	8,50

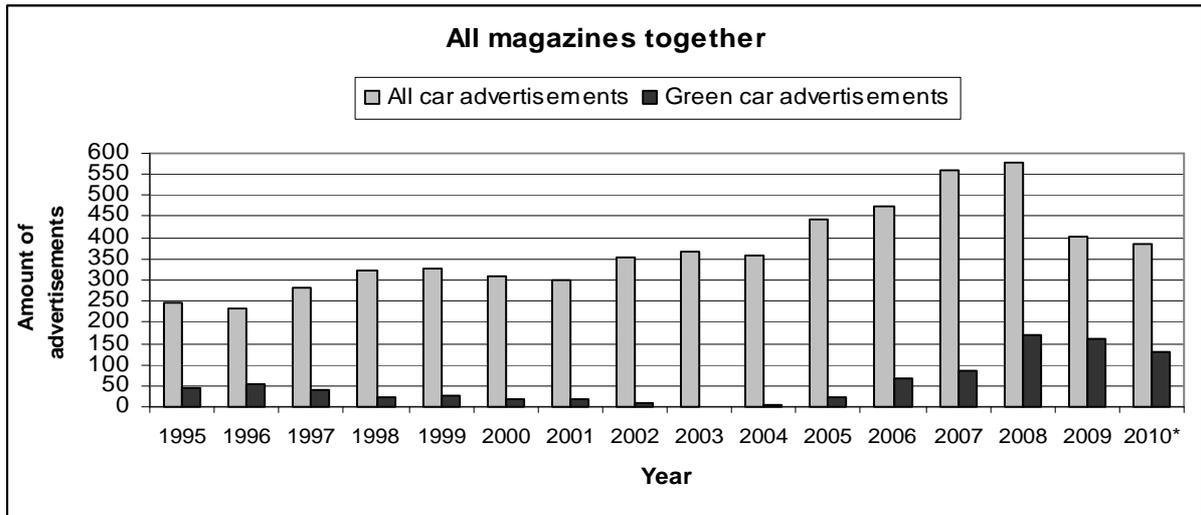
All magazines together 1995-2010

	All car advertisements	All green car advertisements	Share of green car advertisements of all car advertisements (%)
Sum	5844	845	14,46
Minimum (year)	235 (1996)	2 (2003)	0,54 (2003)
Maximum (year)	577 (2008)	168 (2008)	39,85 (2009)
Mean	365,25	52,81	14,12
Median	341	34	11,32

\* Results for year 2010 include issues from January to early September. If year 2010 is excluded the maximum percentage is 34,21 (2009).

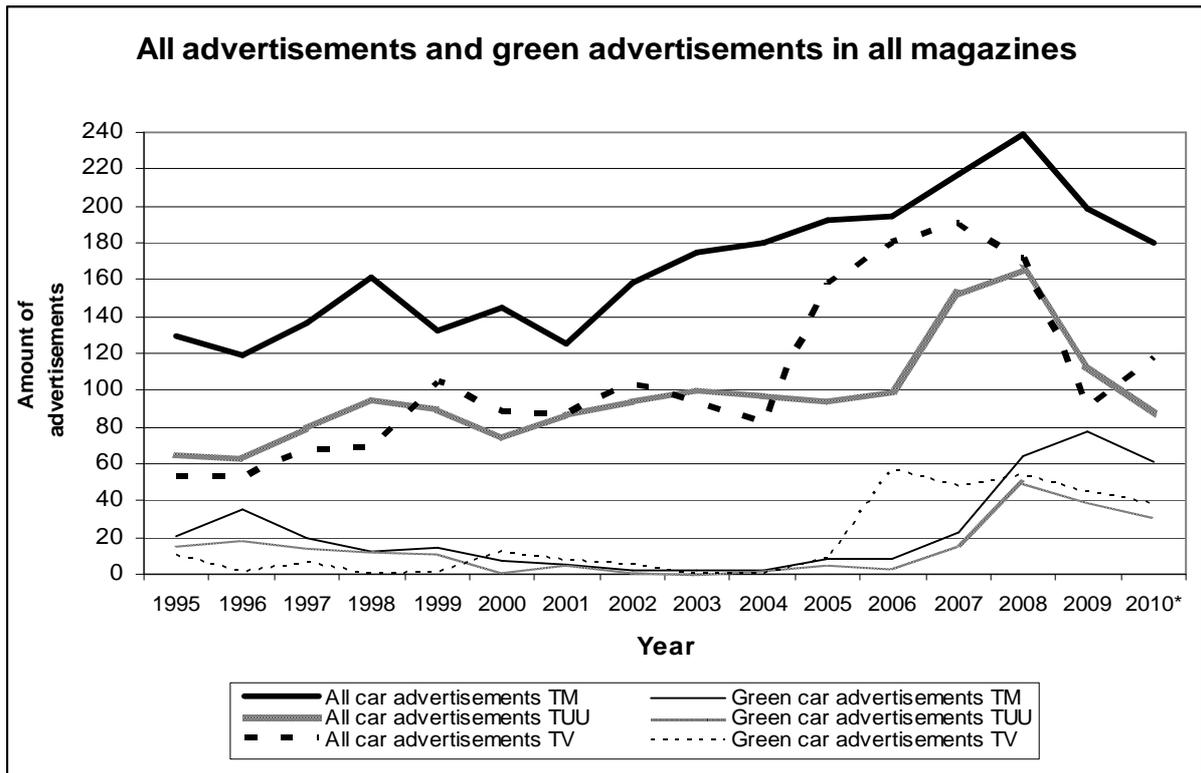
The amounts of all car advertisements and green car advertisements in every magazine separately and finally together are presented year by year in charts 2, 3, 4 and 5. The amounts of advertisements for the whole year 2010 was estimated based on the advertisement amounts between January 2010 and September 2010 in order to enhance the comparability between year 2010 and the previous years when looking at the charts.

**Chart 2** Car advertisements in Tekniikan maailma in 1995-2010.**Chart 3** Car advertisements in Tuulilasi in 1995-2010.**Chart 4** Car advertisements in Teknikens värld in 1995-2010.

**Chart 5** Car advertisements in 1995-2010 in all three magazines together.

\* The amounts for year 2010 are estimates for the whole year based on the amounts of advertisements from January to early September 2010.

It can be seen from the charts above that both the amount of car advertisements in general and the amount of green car advertisements has fluctuated significantly throughout the research period. The change in the amounts of green advertisements has been rather similar in all three magazines presenting higher numbers of green advertisements from mid 1990s to early 2000s followed by a clear decline until mid 2000s and again a rather steep rise from mid to late 2000s. The pattern is similar to the general trend in the amount of all car advertisements except for the mid 2000s when the amount of car advertisements increased in general unlikely the amount of green car advertisements. The relationship between these two variables is therefore not linear but more so a curvilinear which is why it is not possible to calculate a reliable correlation coefficient for it. A line chart of the amounts of advertisements in every magazine are presented below in chart 6 where the fluctuation and similarity or dissimilarity between different magazines can be seen more easily.

**Chart 6** Curves of the amounts of all car advertisements and green car advertisements.

TM = Tekniikan maailma, TUU = Tuulilasi, TV = Teknikens värld.

\* The amounts for year 2010 are estimates for the whole year based on the amounts of advertisements from January to early September 2010.

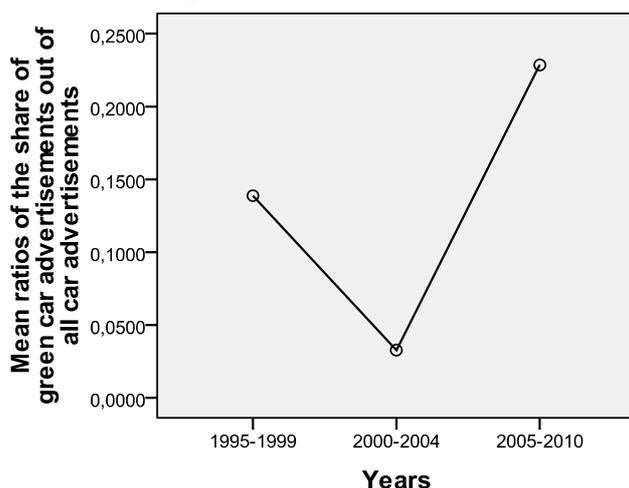
The data consisting of the ratios of green car advertisements for every year and every magazine separately and a new variable where the years 1995-2010 were grouped into three groups (as presented earlier: group one covers years 1995-1999, group two years 2000-2004 and groups three years 2005-2010) were entered into SPSS One-way between-groups ANOVA program to see the impact of year on the share of green car advertisements, in other words if there are differences between the shares of green car advertisements when comparing different time periods. The One-way ANOVA test gave as a result the significance level of 0,000 which being less than the usual limit of 0,05 means that a significant difference exists somewhere in the mean scores of the three groups. The actual difference between the means of these groups was also quite large as can be seen from table 6 below. A post-hoc test was made to see where the difference is, id est which groups differ from each other significantly. A Tukey HSD (Honestly Significant Differences) test was used. Tukey test revealed that there is a significant difference between groups one and two and groups two and three at the  $p < 0,05$  level. The difference can also be seen from the means plot in figure 4 below. To see to which extent these variables are associated with one another, the effect size or the strength of the

association can be calculated (Pallant 2006, 201). This was calculated from the ANOVA table using Eta square by dividing the sum of squares between groups with the total sum of squares. The result was 0,3806 which is considered a large effect meaning that the independent variable of year groups explains 38,06 percent of the changes in the shares of green advertisements.

**Table 6** Mean shares of green car advertisements according to year groups.

	Years 1995-1999	Years 2000-2004	Years 2005-2010	F-value	p-value
of all car ads	24,25%	28,88%	46,87%		
of all green car ads	22,96%	6,04%	71,01%		
Mean share of green car ads of all car ads	0,138767	0,032733	0,228528	13,811	p<0,001

**Figure 4** Means plot on the mean scores between different time period groups.



As a conclusion it can be said that the share of green car advertisements has declined significantly from years 1995-1999 compared to years 2000-2004 and increased from 2000-2004 compared to 2005-2010. As it can be seen also from the means plot (figure 4) above, the mean share of green advertisements has grown from 1995-1999 compared to 2005-2010 but this difference was not statistically significant. Additionally it can be calculated how much the share of green advertisements has changed between these groups id est during the research period by simply calculating how much bigger or smaller a mean share of green advertisements is compared to the mean share of another time period group. As a result, it was found that the share of green car advertisements went down by 76,41% from the years 1995-1999 to 2000-2004 and from the latter time period it skyrocketed by 598,16% compared to the time period of years 2005-2010. Formula can be seen on the next page in table 7.

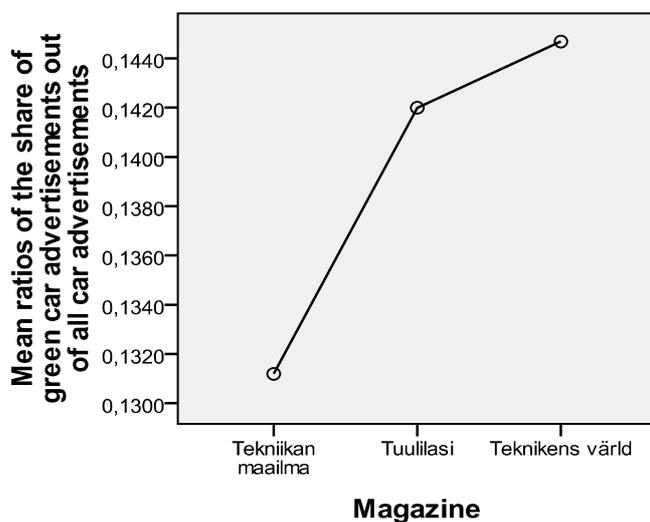
**Table 7** Change in the share of green advertisements from year group to another.

Year group	Mean of the group	Change (%) from a group to the next one calculated with formula: how much X is bigger than Y: $((X-Y)/Y)*100$
1995-1999	0,138767	
2000-2004	0,032733	-76,41
2005-2010	0,228528	598,16

A research was also carried out to see if there are differences in the green advertisements shares between the three magazines. The same analysis tool One-way between-groups ANOVA was used. Key figures can be seen below in table 8. In this test the One-way ANOVA gave 0,956 as a result of significance which indicates that there were no significant differences between magazines when comparing the shares of green advertisements. Below, there is also a means plot figure (figure 5) that shows the differences of the means between different magazines. This figure can however look misleading at first because the scale on the Y-axis is so small since the differences between means were very small as can be seen also from table 8 below. The differences between magazines were not statistically significant but the means plot figure tells however that Teknikens värld had the biggest share of green car advertisements while that share was the lowest in Tekniikan maailma.

**Table 8** Means shares of green car advertisements according to magazines.

	Tekniikan maailma	Tuulilasi	Teknikens värld	F-value	p-value
of all car ads	45,05%	26,27%	28,68%		
of all green car ads	40,95%	25,80%	33,25%		
Mean share of green car ads of all car ads	0,131194	0,141994	0,144688	0,045	p=0,956

**Figure 5** Means plot on the mean scores between different magazines.

## 4.2 Results of the Second Part of the Research

For the second part of the research a smaller sample of green advertisements was picked as described in chapter 3.1.3. This sample, altogether 79 advertisements was carefully analyzed according to a categorization model presented in table 5 in chapter 3.1.3. Frequencies in all main categories, sub-categories and minor categories can be seen below in table 9.

**Table 9** Table of frequencies for the second part of the research.

Magazine	Frequency	Percent	Cumulative percent
Tekniikan maailma	31	39,20	39,20
Tuulilasi	25	31,60	70,90
Teknikens värld	23	29,10	100,00
<b>Total</b>	<b>79</b>	<b>100,00</b>	<b>100,00</b>

Ad category	Frequency	Percent	Cumulative percent
<b>AD OBJECTIVE</b>			
- corporate image	12	15,20	15,20
- product itself	67	84,80	100,00
* inputs	0	0	0
* overall product	27	40,30	40,30
* outputs	40	59,70	100,00
<b>Total</b>	<b>79</b>	<b>100,00</b>	<b>100,00</b>
<b>AD APPEAL</b>			
- zeitgeist	19	24,10	24,10
- emotional	1	1,30	25,30
* fear	0	0	0
* guilt	0	0	0
* you make a difference	1	100,00	100,00
- financial	3	3,80	29,10
* cause subsidy	0	0	0
- organic	0	0	29,10
- management	2	2,50	31,60
* control	1	50,00	50,00
* social responsibility	1	50,00	100,00
- technical information	51	64,60	96,20
* mere	30	58,80	58,80
* specific	21	41,20	100,00
- others	3	3,80	100,00
* comparison	3	100,00	100,00
* celebrity endorsement	0	0,00	
<b>Total</b>	<b>79</b>	<b>100,00</b>	<b>100,00</b>
<b>AD GREENNESS</b>			
- light green	52	65,80	65,80
- green	16	20,30	86,10
- dark green	11	13,90	100,00
<b>Total</b>	<b>79</b>	<b>100,00</b>	<b>100,00</b>

As in this second part of the research the dependent variables, ad objective, ad appeal and ad greenness are nominal, non-parametric tests were used. All of these three groups were crosstabulated with previously presented three year groups and with magazines variable. Chi-square test for independence was also performed to show whether the two crosstabulated variables are associated. Below, table 10 presents a crosstabulation between the objective of the advertisements and the year groups.

**Table 10** Crosstabulations of ad objective and product itself by year groups.

Variable	Years 1995-1999	Years 2000-2004	Years 2005-2010	Total (%)	p-value, chi- square test
Objective of the advertisement (% of total)	N=26 (32,91)	N=20 (25,32)	N=33 (41,77)	N=79	
Coporate image	4	4	4	12 (15,19)	$\chi^2 (2) = 0,601,$ $p=0,740$
Product itself	22	16	29	67 (84,81)	
Product itself (% of total)	N=22 (32,84)	N=16 (23,88)	N=29 (43,28)	N=67	
Inputs	0	0	0	0	$\chi^2 (2) = 8,476,$ $p=0,014$
Overall product	14	3	10	27 (40,30)	
Outputs	8	13	19	40 (59,70)	

When crosstabulating between ad objective and year groups, the Pearson chi-square test gave 0,740 as the significance level result, which being over 0,05 indicates that there is no statistically significant difference in the objective of the advertisements between different year groups. From the table above it can be seen that in all the year groups there were much more advertisements advertising the product itself instead of promoting the corporate image. The share of product itself fluctuated in the year groups between 80% and 87,9% while only 12,1-20% of advertisements advertised corporate image so green car advertisements clearly focus on promoting the product. When crosstabulating the product itself with the year groups (table 10) it was noticed that there is a statistically significant difference (Pearson chi-square being 0,014) whether the product was being advertised through emphasizing its inputs, overall product or outputs. Inputs were not emphasized in any advertisements but the shares emphasizing overall product and outputs fluctuated greatly between different year groups from 63,6% in 1995-1999 to 18,8% in 2000-2004 and 34,5 in 2005-2010 while the share of outputs was respectively 36,4% in 1995-1999, 81,3 in 2000-2004 and 65,5% in 2005-2010. From these figures it was seen that the importance of emphasizing outputs of the car has grown remarkably while emphasizing the overall product is not as common now as it was during the

first research time period of 1995-1999. Next ad appeal was crosstabulated with the year groups as seen below in table 11.

**Table 11** Crosstabulations of ad appeal and technical information by year groups.

Variable	Years 1995-1999	Years 2000-2004	Years 2005-2010	Total (%)	p-value, chi-square test
Ad appeal	N=26	N=20	N=33	N=79	
(% of total)	(32,91)	(25,32)	(41,77)		
Zeitgeist	10	2	7	19 (24,05)	$\chi^2 (10) = 18,490,$ $p=0,047$
Emotional	1	0	0	1 (1,27)	
Financial	1	1	1	3 (3,80)	
Organic	0	0	0	0	
Management	0	0	2	2 (2,53)	
Technical information	14	14	23	51 (64,56)	
Others	0	3	0	3 (3,80)	
Technical information	N=14	N=14	N=23	N=51	
(% of total)	(27,45)	(27,45)	(45,10)		
Mere	7	8	15	30 (58,82)	$\chi^2 (2) = 0,855,$ $p=0,652$
Specific	7	6	8	21 (41,18)	

A crosstabulation between ad appeal and the year groups gave 0,047 as the Pearson chi-square significance level which being under 0,05 means that there is a statistically significant difference in the advertisement appeals between different year groups. Appeal groups of emotional, management and others have a significant difference between year groups due to all of them having only one, two or three existing cases in of the year groups. These differences most likely caused the significant result in the differences in ad appeal between year groups. From the table above it can be seen that the share of zeitgeist appeal in the advertisements varies between year groups. Fluctuation was from 38,5% in 1995-1999 to 10% in 2000-2004 and to 21,2% in 2005-2010. Technical information was the main ad appeal in 53,8% of green car advertisements in year group one, 70% in group two and 69,6% in year group three. Mere technical information was a bit more common than specific but when technical information was crosstabulated with the year groups it was noticed however that with a significance level of 0,652 there is no statistically significant difference in the shares of mere and specific technical claims between year groups (table 11).

Next, the variable of ad greenness was crosstabulated with the year groups to see if there is a statistically significant difference in the greenness between advertisements in different time periods. With the Pearson chi-square significance level of 0,171 there can be said not to be any statistically significant difference. In every year group most of the advertisements are

light green, dark greens being the smallest group. However the share of light green advertisements is smaller and the share of dark green ones is bigger in the two latter year groups when compared to the first group of years 1995-1999 as can be seen from the numbers in table 12.

**Table 12** Crosstabulation of ad greenness by year groups.

Variable	Years 1995-1999	Years 2000-2004	Years 2005-2010	Total (%)	p-value, chi-square test
Greenness of the advertisement (% of total)	N=26 (32,91)	N=20 (25,32)	N=33 (41,77)	N=79	
Light green	22	11	19	52 (65,82)	$\chi^2 (4) = 6,405,$ $p=0,171$
Green	3	5	8	16 (20,25)	
Dark green	1	4	6	11 (13,92)	

After finding out whether the changes in the objective of the advertisements, the appeal of the advertisements and the greenness of the advertisements are dependent on the time periods, id est different year groups next, the same dependent variables were crosstabulated with the magazine variable to see if there are differences in these advertisement content variables between different magazines. First, ad objective was crosstabulated with magazine variable and with a significance result of 0,322 it can be said that there is no statistical difference in ad objectives between different magazines. Crosstabulation can be seen in table 13.

**Table 13** Crosstabulation of ad objective by magazine.

Variable	Tekniikan maailma	Tuulilasi	Teknikens värld	Total (%)	p-value, chi-square test
Objective of the advertisement (% of total)	N=31 (39,24)	N=25 (31,65)	N=23 (29,11)	N=79	
Corporate image	7	3	2	12 (15,19)	$\chi^2 (2) = 2,265,$ $p=0,322$
Product itself	24	22	21	67 (84,81)	

As ad appeal was next crosstabulated with magazine variable, it was noticed that with the significance level of 0,271 there is no statistically significant difference in the appeal of the advertisements between different magazines. The shares can be seen below in table 14. As can be seen from the table the appeals of green car advertisements are rather similar in all magazines but some interesting differences, not statistically significant though, can be seen when comparing the appeal on the shares within magazines. For instance, a bigger part of the advertisements were with a technical information appeal in Teknikens värld than in the other two magazines whereas in Tekniikan maailma it was more common for an advertisement to have a zeitgeist appeal than on other magazines.

**Table 14** Crosstabulation of ad appeal by magazine.

Variable	Tekniikan maailma	Tuulilasi	Teknikens värld	Total (%)	p-value, chi-square test
Ad appeal (% of total)	N=31 (39,24)	N=25 (31,65)	N=23 (29,11)	N=79	
Zeitgeist	10	5	4	19 (24,05)	$\chi^2 (10) = 12,206,$ $p=0,271$
Emotional	0	1	0	1 (1,27)	
Financial	2	1	0	3 (3,80)	
Organic	0	0	0	0	
Management	0	0	2	2 (2,53)	
Technical information	17	17	17	51 (64,56)	
Others	2	1	0	3 (3,80)	

Lastly, a crosstabulation between ad greenness and magazines were made. In this crosstabulation the Pearson chi-square gave a result of 0,001 which means that there is a statistically significant difference between different magazines. From table 15 it can be seen that the advertisements in Tekniikan maailma and Tuulilasi where mostly light green in Teknikens värld there were exactly the same amount of light green and dark green advertisements and almost as much green advertisements.

**Table 15** Crosstabulation of ad greenness by magazine.

Variable	Tekniikan maailma	Tuulilasi	Teknikens värld	Total (%)	p-value, chi-square test
Greenness of the advertisement (% of total)	N=31 (39,24)	N=25 (31,65)	N=23 (29,11)	N=79	
Light green	26	18	8	52 (65,82)	$\chi^2 (4) = 18,306,$ $p=0,001$
Green	3	6	7	16 (20,25)	
Dark green	2	1	8	11 (13,92)	

## 5 CONCLUSIONS AND DISCUSSION

In this chapter the results of the study are briefly summed, conclusions are drawn and the original research problems are answered to. Possible explanations for the results are pondered. Some discussion about the study limitations, usefulness and suggestions for future research also takes place.

### 5.1 Conclusions

In chapter 1.2 the research problems were introduced. The main research problem of the research was: What is the role of green marketing in printed car advertisements today? Four essential research sub-problems were derived: 1) How big part of car advertisements in car magazines can be considered as green?, 2) How has the share of green car advertisements in car magazines changed over the past 16 years?, 3) What kind of green advertisements are there?, 4) Has the content in green car advertisements changed during the research period and if so, how? Next the results of the study are summed and the research problems are answered.

In the first part of the study, it was found out that the share of green car advertisements out of all car advertisements in the whole data of 962 magazine issues containing 5844 car advertisements was 14,46% (845 green car advertisements). In Tekniinkan maailma issues solely the percentage was 13,14%, in Tuulilasi 14,20% and in Teknikens värld 16,77% but the difference between magazines was not statistically significant. However, the shares of green car advertisements out of all car advertisements fluctuated strongly throughout the research period of 16 years (1995-2010) in all the magazines together and also separately in each magazine in a very similar way. This fluctuation between different time periods was seen to be statistically significant. During the first research period of years 1995-1999 the mean share of green car advertisements was 13,88%, during the second period of years 2000-2004 the mean share was only 3,27% and during the last time period of years 2005-2010 the mean share was 22,85%. Therefore the share of green car advertisements declined with 76,41% when comparing the change from the first year group to the second year group. From the second year group the share rose dramatically by 598,16% when compared to the last year group. Altogether it can be said that the share of green car advertisements has increased but the increase has not been linear. The year groups were noticed to explain 38,06% of the changes in green car advertisement shares.

In the second part of the study a smaller sample of 79 advertisements were examined. 39,20% of these were from Tekniikan maailma (31 ads), 31,60% from Tuulilasi (25 ads) and 29,10% from Teknikens värld (23 ads). When studying the chosen sample of advertisements according to the categorization model presented in chapter 3.1.3, it was noticed that 84,80% of the green car advertisements promote the product itself instead of corporate image (15,20%). This difference was pretty much the same throughout the whole research period and between different magazines. Neither the differences between year groups nor the differences between magazines were statistically significant. However, when comparing the sub-category of the product itself with different year groups there was a statistically significant difference. In the first year group most of the advertisements that promoted the product itself focused on promoting the overall product when again in the two latter year groups the focus had been shifted to emphasizing the outputs of the product. Emphasizing the product itself is clearly a trait that is characteristic for car advertisements since at least Iyer and Banerjee (1993), Carlson et al. (1993) and Iyer et al. (1994) noticed in their studies that the biggest ad objective group was image orientation.

In most advertisements the ad appeal was presenting technical information (64,60% of the ads), next being zeitgeist (24,10%). All the other ad appeal categories got very low shares: emotional 1,30%, financial 3,80%, organic 0%, management 2,50% and others 3,80%. The change in ad appeals between different year groups was noticed to be statistically significant. This might however be due to the small amounts of cases (from one to three) in emotional, management and others categories which caused dramatic differences in shares between year groups. It was more interesting to notice that the share of zeitgeist fluctuated from 38,50% in the first year group to 10% in the second to 21,20% in the third group. In technical information appeal there were slightly more mere technical information than specific but this difference was not statistically significant. The differences in ad appeals between different magazines was not found to be statistically significant. The ad appeal results gotten in this study are difficult to compare to the results from previous studies due to different categorization models used. There is no unequivocal model for categorizing green advertisements so many different kinds have been used in previous studies.

When ad greenness was compared with year groups it was found out that there is no statistically significant difference. In the whole data 65,80% of the advertisements were light green, 20,30% were green and 13,90% dark green which follows the findings of for example Iyer et

al. (1994). Wagner and Hansen (2002) however got results showing that a big part of advertisements were indeed very green but this can be explained by the fact that their study focused solely on forest products. The same order remained in all the year groups with most advertisements being light green, and dark green being the smallest group. However it was noticed that the share of light green advertisements has declined whereas the shares of greens and dark greens has grown. When the ad greenness was compared to magazines a statistically significant difference existed. When in *Tekniikan maailma* and *Tuulilasi* a great amount of the advertisements were light green (83,90% in *Tekniikan maailma* and 72% in *Tuulilasi*) the advertisements in *Teknikens värld* were divided very evenly between different shades of green so that light green, green and dark green all respectively covered about one third of the advertisements.

The main research problem of “What is the role of green marketing in printed car advertisements today?” could be answered based on the results and conclusions of the first part of the study presented above that the role has changed significantly throughout the years but during the last few years its significance has been growing. Content wise the role seems to be promoting the product itself through zeitgeist or technical information appeals mostly in a light green way.

## **5.2 Discussion**

The fluctuation rhythm of green car advertisements was clearly similar to the rhythm of published green books and articles. What has caused the change between years in the shares of green car advertisements is difficult to say for sure. One reason can be the changes in taxation or agreements on environmental protection. For example the EU published a strategy concerning diminishing the CO<sub>2</sub> emissions of passenger cars already in 1995. This might have played a part in the rise in the shares of green car advertisements from the mid 1990s towards the end of that decade. In 1998 the European commission made agreements with the European Automobile Manufacturers' Association (ACEA) and Japanese and Korean car manufacturers about diminishing the CO<sub>2</sub> emission of new cars by the year 2008 which naturally puts pressure more on the end side of the agreement and could have affected the high rates of green car advertisements around that time. Although, low-emission cars were agreed to be put on markets already in 2000, whether it happened or not, is beyond the scope of this study. In Sweden the CO<sub>2</sub> emissions have affected the taxation of a car already from October 2006 and

whereas in Finland the CO<sub>2</sub> emissions have affected the amount of car tax from the beginning of 2009 which might have had an affect in the increase of greenness in car advertisements during the late 2000s. (Ake, accessed on October 21<sup>st</sup>, 2010.) The renewal of gasoline taxation will follow in Finland in 2011 which would make it interesting to study further if this will have any affect on car advertisements.

One possible reason behind the cyclical pattern in the share of green car advertisements between different year groups could be the economic depression in the beginning of the 1990s and again at the end of 2000s. Usually during economic depressions so called soft values become generally more important to consumers which can be seen in the high shares of green advertisements in the first and third year groups. Economic depression is followed by economic growth when harder, monetary values are emphasized more than soft values which could explain the decrease in green advertisements during the second research time period. Yet Kalafatis et al. (1999, 443) writes referring to several other authors that during recession economic issues often replace environmental issues as more immediate concerns for consumers which is said to explain the cyclical patterns in consumers' green behaviour. These different views could be combined so that although environmental as well as other soft values become more important during recessions it however does not come out as green buying behaviour because scarce monetary resources are seen better to invest on something else then often more expensive green products. This again leads to the fundamental problem in green marketing, the green gap.

Content wise green car advertisements have not changed much and no clear pattern was noticeable. There were no statistically significant differences between year groups neither in ad objective nor in ad greenness and the difference in ad appeal was most likely caused by small case occurrences in variables emotional, management and others. The only statistically significant difference between magazines was in ad greenness so that car advertisements in *Teknikens värld* had a deeper shade of green than in the other two magazines. The fact that green car advertisements still today are mostly light green and appeal to consumers with only mere technical information tells that not much emphasis is put on promoting environmental issues. Green car ads seemed to be quite shallow throughout the whole research period. This gives the impression that car manufacturers are not green to the core but are just trying to act green as consumers wish by adding a few green words in their advertisements. Increase in the share of green car advertisements might also mean that car manufacturers are actually greener now

than before but since the contents in green car advertisements have not changed much it can be said that cars are still mostly seen as status-enhancing commodities marketed by their additional features rather than necessities that would be tried to make as little environment-harming as possible. According to the changes that have taken place in the share of green car advertisements as well as in their contents during this research period, it could be predicted that the share of green car advertisements continues to rise but no big changes will take place content-wise in the near future. Due to the nature of cars as commodities it is unlikely that they will ever be marketed using solely green claims.

### **5.3 Reliability and Validity**

A scientific study should always be reliable. According to Krippendorff (1981, 21) the requirement of reliability in content analysis means that it has to be replicable so that when other researchers at different points in time use the same technique to the same data, the results will be the same. The ultimate aim of testing reliability is to establish if the data obtained from the researched can be trustworthily used to draw conclusions, make recommendations, support decisions or accept something as a fact (Krippendorff 1981, 146). In this thesis the used methods and categorizations were described specifically and the categorizations used are unequivocal to a large extent which enhance the reliability.

Validity of a research assures that the results represent what they claim to represent. In content analysis, reliability sets limits to the potential validity. It does not however guarantee the validity of the results but it is a necessary yet not a sufficient condition for it. The term reliability includes at least three distinct types of stability, reproducibility and accuracy. Stability, known also as the intra-observer reliability, means the degree to which a process is unchangeable over time and it becomes manifest during test-retest conditions. Reproducibility, also inter-coder reliability, means the degree to which a process can be recreated in different circumstances at different locations and with different coders. Accuracy is the degree to which a process yields what it is supposed to yield. Accuracy can be proven when for example the performance of one coder or measuring instrument is compared with what is known to be the correct performance or measure; however this last type of reliability criterion is rarely fulfilled in content analysis. (Krippendorff 1981, 129-132.)

The chosen measure instrument is valid if it measure what it was designed to measure. Validity of a research assures that the research findings are to be taken seriously. There are two types of validity: internal and external. Internal validity basically means the same as reliability and external validity assesses the degree to which variations inside the analysis process correspond to variations outside the process and if the findings represent the real phenomena in the context of the data as was claimed. In this thesis also sampling validity and construct validity are important. Sampling validity means if the chosen sample is an unbiased sample from the area of interest or sufficiently similar to another sample from the same universe of interest so that the data can be seen as a statistically representative sample of that universe. Construct validity “assesses the degree to which an analytical procedure models, mimics, or functionally represents relations in the context of data”. (Krippendorff 1981, 155-158.) This research succeeded in measuring very well what it was supposed to measure. The categories used are partially taken from previous literature which enhances validity. Sampling validity can also be seen to be the case in this thesis due to random, non-convenience sampling. The results from the first part of the study can be generalized to all magazines including car advertisements at least in these two countries, Finland and Sweden, from which magazines were included in this study. The results from the second part can be generalized to the whole population because they were achieved through a random sample that represents the population well.

Compared to previous researches, the size of this research data can be considered as adequate in order to be able to draw conclusions from the results. The research data covered altogether three magazines in two countries which is not enough to draw conclusions about differences between countries but since that was not even the purpose of this study, the data is adequate to draw general conclusions that apply at least on car advertisements in other similar countries, such as other Nordic countries.

There was only one researcher conducting the study and acting as the only coder as well. This should not present a problem of a bias because no hypotheses were set before the research that would have been tested. The researcher’s own interpretations can however always affect the results slightly but this was tried to be avoided by creating clear definitions and categorizations, partially based on previous studies, for the advertisements and their contents that were researched.

#### **5.4 Suggestions for Further Research**

The research problem turned out to be very interesting and it evoked ideas for several further researches. It would be interesting as well as useful to examine how well green car advertisements or green claims in car advertisements correspond to reality that is how true green car advertisements are compared to the real greenness of cars and the companies behind them. These type of researches have been made earlier (for example one by Kärnä et al. in 2001) but not concerning the auto industry. It would also be interesting to examine consumers' reactions and perceptions about green car advertisements and to which extent consumers say green claims affect their car purchase decisions. Also, a cross-cultural study using magazines from several different countries would be interesting to execute and that way see whether different countries differ from each other. It was also noticed during this study that while celebrity endorsement was not very common in car advertisements, testimonials from experts and 'John Does' were a lot more common which provokes the suggestion to include these two categories into the categorization model for future researches as was done in for example a research by Banerjee et al. in 1995.

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