

# **Green marketing in Croatia – research of experience and effects on the establishment of environmentally and socially responsible business**

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*Environmental care and preservation of environment have become very frequent topics and discussions of our everyday life. It is the fact that drinking water is increasingly less available, that 20 – 30 % of plants and animals will become extinct if we continue at this pace of temperature growth; that we are about to witness an increased risk of food shortage – famine; that there will be an increased risk of contagious diseases, all leading up to the most popular issues of our days - ecology, environment, recycling, both for the citizens and within a wider social and economic community. Furthermore, these issues result in the habit of buying a whole line of products, particularly if they boast attractive design and interesting advertising message or else if they are advertised by a celebrity, all aimed at following the world trend – being ecologically aware – living with nature. The subject of this research is the description and understanding of the model of green marketing through the prism of implementation and practical experiences in the Republic of Croatia. The objective of the research is the observation of trends and directions of development of socially responsible business in Croatian companies, their focus on ecological issues and all possible actions undertaken with that regard whose totality affects the entire marketing mix. All data have been presented in this paper and used for drawing certain conclusions about the implementation and practice of green marketing in the Republic of Croatia.*

*Key words: green marketing, socially responsible business, ecology, green products*

## *1. Introductory considerations*

Consequences of degradation of environment, harmful effects on human health, endangerment and extinction of plant and animal species, uncontrolled use of natural resources, development of industry, mechanization, traffic, urbanization, negligence and insufficient care of people and companies spurred developed countries back in the 1960s to start monitoring pollution and implementing concrete measures for environmental protection, which resulted in the introduction of ecological standards, adoption of international conventions about environmental protection, implementation of preventive protective measures, regulation of use of natural resources and definition of financial measures used in the regulation of polluters' behaviour. In fact, the concept of environmental protection was very *in* back in the 1970s. Unfortunately, in the late 1980s and early 1990s, the concept was forgotten. This particularly refers to countries of the former Eastern Block and to transitional countries, including Croatia. Considering the fact that Croatia suffered war as well, it is understandable that environmental care and social superstructure were not of primary concern in such extreme circumstances. In the late 1990s, a decade ago, a new “green resistance” was born throughout the globe and in Croatia as well against polluters and against countries that use world resources for the benefit of their own economy and thus cause global pollution.

Nevertheless, all these years marked by substantial and positive steps, particularly in terms of passing positive regulations in the field of environmental protection and in terms of understanding ecological problems, have not produced satisfactory results. World forests are still relentlessly destroyed, rivers are polluted, air is polluted, and millions of people lose their homes as a consequence of global warming. The United States and China are in the forefront of the process. We may well ask ourselves what we can do about that. One of the alternatives of changing the behaviour and influencing the public about changing our understanding of seriousness of problems of ecology and environmental protection is certainly everyday use of green marketing principle.

Globalisation resulted in disappearance of social responsibility. However, due to huge ecological catastrophes and problems such as global warming, today's consumers are becoming increasingly more aware when it comes to preservation of nature, so that even companies are trying to adjust their behaviour. With implementation of various measures of green marketing in production, packaging and other company activities, producers inform their consumers that they share their concerns, which considerably boosts their own credibility and their positive image.

By the same token, in this socially responsible and socially aware process marked by day-to-day growth, companies are considerably motivated by the very consumers who show their willingness to pay a higher price for green products. Actually, it is incredible how things can change by using merely three letters. Most consumers have perhaps never even heard about the International Organization for Standardization, but everybody is familiar with ISO standards. When a company uses the ISO mark, particularly ISO 14001, in its advertising campaigns, consumers believe that everything is done in conformity with standards, which in turn wins their trust.

At the end of the year 2004, more than 670 thousand ISO 9001:2000 certificates were issued in 156 countries. Nowadays, they serve as some kind of company passport, i.e. a minimum a

company has to show for the customers to even consider the option of buying its products<sup>1</sup>. In 1997, only one company in the Republic of Croatia was certified under the norm ISO 14001. By the end of 2004, the number reached 121 companies. Today's number of certified companies equals 322<sup>2</sup>. Growth in the number of certified companies is first and foremost a consequence of changes in the perception of environmental efficiency as a precondition of entering more demanding markets<sup>3</sup>. However, it is not all about acquiring ISO standards. ISO 14001 and similar standards are only a part of strategy of making business green. Therefore, along with acquiring internationally recognized standards in the field of environmental protection and sustainable development, we also need to acquire the following basic characteristics of “green business” that will produce green products: replacement of energy sources and raw materials with environmentally friendly solutions, development of production with less energy waste, reduction in the use of materials and raw materials and development of non-waste technology<sup>4</sup>.

All things considered, when discussing environmental protection, we should also consider the fact underlined by Anja Schaefer<sup>5</sup>, the eternal question and challenges that all “green” marketers have to face - how many consumers can actually recognize a “green” product or “green” packaging”, how many consumers genuinely care about their environment and seriously consider environmental problems and similar. By the same token, we do not have a proper standard for defining how “green” a product should be to be ecologically acceptable. Answers to these questions and these problems should be sought in permanent education, study and improvement of knowledge and profession in the area of green marketing.

## ***2. Term and definition of green marketing and socially responsible business and reasons for implementation of green marketing***

By definition, the term “green business” is used in entrepreneurship, trades and crafts, and in production (industry), following from the principle of sustainable development. Principles of green business are primarily related to basic infrastructure of an organization and its basic competences. From the standpoint of production technology, green business or companies considered environmentally minded should pay attention to development of production with less waste of energy and less total consumption of own energy. They should also strive towards reduction of total waste of materials and raw materials in production of the same quantity of products. Furthermore, they should try to develop and encourage their own internal non-waste technological processes with maximum waste reuse, reuse of useful components in the technological process and similar. Additionally, companies that consider themselves “green” undoubtedly have to mind about replacing energy sources and raw materials with some other alternative sources of energy. Together with everything we have already stated, reuse of equipment or some of its parts for other purposes or in some other place also contributes to both global and local sustainable development.

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<sup>1</sup> Bojana Božanić : “Green marketing: S oznakom zeleno prodaje se bolje”, [www.liderpress.hr](http://www.liderpress.hr), 03.01.2009

<sup>2</sup> [kvaliteta.inet.hr](http://kvaliteta.inet.hr), 04.01.2009

<sup>3</sup> Report about state of environment in the Republic of Croatia, Environmental Protection Agency, 2007, p.27, [www.azo.hr](http://www.azo.hr) , 04.01.2009

<sup>4</sup> Munevera Aganović, Esad Topalović: “Strategije ozelenjavanja biznisa”, Citizens' Association DDD, Sarajevo, BIH, [www.kvalis.info/dmdocuments/6\\_091.pdf](http://www.kvalis.info/dmdocuments/6_091.pdf) , 09.02.2009

<sup>5</sup> Anja Schaefer: Will green marketing save the planet”, Money & management, [www.open2.net/blogs/money](http://www.open2.net/blogs/money), 05.01.2009

Green marketing provides important opportunities for Croatian industry and Croatian companies in general. Development of creativity and vision and choice of total environmental approach are preconditions for using these opportunities. Today's products may significantly contribute to higher quality of life for all of us. On the other hand, however, their harmful effect occurring as a result of process of production on nature has to be neutralized, foreseen, and removed through the system of green marketing if we all want to move towards something we call global sustainability.

Nevertheless, a great part of our community is still unaware of problems we leaving to future generations and of the fact that our everyday decisions such as leaving the water running while brushing our teeth have serious consequences. This explains why the issue of green products is first of all only a trend in our close and wide environment. Green revolution in economy first appeared as a trend, but it has turned into necessity, indispensable need. It is no longer a secret that "making businesses green" is a demand turned into imperative both for market domination in Europe and worldwide and for market survival as well. Unlike world and European experiences, green marketing was first seriously discussed in Croatia only a decade ago.

Objectives of green marketing are at the core of planning process of each socially responsible company. They describe the direction and basic priorities any socially and environmentally responsible company aims at. Strategic plan of green marketing comprises a whole market performance strategy, linking its customers, organizations and suppliers into a new socially responsible chain. Packaging and products made of recycled and natural as opposed to synthetic materials do not suffice for successful green marketing. Companies have to constantly inform all their customers about characteristics of their products and their effect on our environment, so that customers may freely evaluate and decide whether a given product is truly "green". Customers are expected to have absolute trust in such products, and everything is done with that objective. The factor of mutual trust is crucial in green marketing. Successful development of green products and green production, besides everything else we have already stated, certainly also requires a high level of communication and integration, good and reliable information about customers, support of company leadership and total marketing mix, product, prices, distribution and promotion in conformity with ecological and socially responsible standards.

Such kind of green business has to be encouraged at all levels - local, regional, and state, through development of economically efficient and environmentally more acceptable business within the existing and planned industrial programmes. Moreover, it is possible and necessary to encourage the development of numerous small and medium entrepreneurs and craftsmen involved in processing waste materials and waste energy of large companies who thus create business results and revenue and at the same time increase cost efficiency of large systems who in turn purchase a large part of waste.

According to Levinson<sup>6</sup>, a study showed that 83 % of customers claim that they have chosen a different brand or different habits exclusively based on attitudes to environmental protection, and 80 % of them stated the importance of environmental reputation of a company. The same source illustrates that customers stated their readiness to pay more for green products. Environmental concern is particularly characteristic of customers aged 18-29, because they grew up surrounded by numerous ecological problems<sup>7</sup>. In his work, Coddington<sup>8</sup> states the

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<sup>6</sup> Jay Conrad Levinson: "Gerilski marketing", Algoritam, Zagreb, November 2008, p. 83

<sup>7</sup> Bojana Božanić : "Green marketing: S oznakom zeleno prodaje se bolje", [www.liderpress.hr](http://www.liderpress.hr), 03.01.2009

number of approximately 10-25 % of true green customers in the United States, out of which 10-15 % are particularly dedicated “green” activists. A vast majority, around 50 %, are customers who care about the environment and understand environmental issues, but very rarely turn their beliefs into purchasing “green”. Finally, there are the remaining 20-30 % of customers who are not interested in environmental and pollution issues. Research of TNS Global carried out in 17 countries showed that 24 % of respondents worldwide think that green marketing has considerable or large effects on their buying habits<sup>9</sup>. In other words, these data witness a completely new and creative marketing platform with double benefits for everybody. On the one hand, it promotes environmental protection and fight against large polluters, namely socially responsible behaviour. On the other hand, it attracts attention of potential customers and creates their loyalty to “green” products/services with the objective of making profit, improving competitiveness and realization of fundamental company objectives. In this sense, green marketing has to be seen as a series of various activities that contribute to protection and preservation of environment, such as targeted ecological modification of products, changes of process of production due to environmental protection, change of packaging of products and modifications of public relations. Regardless of the type of activity carried out by green marketing, it always underlines ecological components of products and companies.

Green marketing is not easily definable. Numerous authors define it in a number of ways. However, the basic idea of green marketing is carrying out all regular marketing activities that facilitate and enable the exchange of products and services without harmful effects on the environment or activities that reduce one's own effects on the environment. The primary objective of green marketing is satisfying company objectives and company customers with simultaneous minimizing of effects on the environment.

Green marketing has numerous synonyms such as "marketing environment", "eco marketing", or "ecological marketing", and most customers associate it with terms “biodegradable”, “phosphate free”, "environmentally friendly" and similar, not knowing that it actually comprises a wider area than mere advertising of "green" products. Green marketing is undoubtedly a marketing concept that underlines the necessity of considering the importance of natural environment and shaping all marketing activities in conformity with marked necessity. Objectives of green marketing indisputably have to be a constituent part of the strategic plan of the company and to follow business activities in all their segments.

American Marketing Association (AMA) defines green marketing in the following way: "Green marketing is marketing of products that are presumed to be environmentally safe."<sup>10</sup> Green marketing can additionally be defined as "marketing that includes both the development and the marketing of products designed with minimal negative effects on the environment with the objective of improving its qualities".<sup>11</sup> Another definition states, "Green marketing includes all effects of organizations in carrying out, promoting, packaging, and selling products in a manner that expresses the concern for issues of environmental protection".<sup>12</sup> Green marketing may also be defined as "comprehensive management process of recognizing, forecasting and fulfilling the needs of customers and society in a profitable and sustainable manner".<sup>13</sup> One of the oldest definitions of green marketing states that it is a

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<sup>8</sup> Walter Coddington: "Environmental marketing: positive strategies for reaching green consumer", USA, McGraw-Hill, 1993

<sup>9</sup> Europski potrošači ne vjeruju zelenom marketingu, [www.javno.com/hr](http://www.javno.com/hr), 05.01.2009

<sup>10</sup> "Green marketing", <http://en.wikipedia.org>, 04.01.2009

<sup>11</sup> Bennett, D. P.: **Dictionary of Marketing Terms**, AMA, 1995., p. 104

<sup>12</sup> Ibid., p. 104

<sup>13</sup> McDonagh, P., Prothero, A.: **Green management: A Reader**, The Dresden Press, Dresden, 1997., p.

group of activities shaped in order to facilitate each exchange intended for the fulfilment of people's needs or desires, so that the fulfilment of these needs and desires causes minimal effects on the natural environment.<sup>14</sup>

The above definitions of green marketing clearly indicate that regardless of their authors and sources they all underline ecologically acceptable behaviour in the producer-customer domain. Green marketing unquestioningly comprises:

- a) Green products-production of ecologically acceptable products
- b) Green packaging
- d) Green prices –despite the fact that customers are sometimes willing to pay more for ecologically acceptable products, ecological features should not be an excuse to increase prices of products
- e) Green communication –deceptions of customers are unpermitted in terms of advertising non-existent “green” features.

Discussing socially responsible behaviour, we have to mention that in this day and age it is not sufficient for companies to merely state they care about the environment within their corporate strategy. Things have changed and customers express their interest, want to learn more about environmentally related issues and they want to act responsibly. Companies can no longer deceive them with stories about socially responsible behaviour unless they truly implement it. Deceptions and false green products may cause irreparable harm both for their reputation and image and for the overall turnover caused by loss of part of customers.

A growing number of today's marketing experts counsel companies not to use the term socially responsible behaviour (SRB) or ecologically acceptable product in their advertising campaigns unless they implement measures related to environmental protection primarily within their own company. Adidas provides a positive example-they started implementing SRB within their company at all levels without using any of it in their communication with customers. Ford also

launched green marketing relatively early and they still claim that all efforts related to environmental protection should not be seen in light of public relations, but that they should be implemented because they make sense and because they are justified. They say at Ford that the public is twice as likely to discredit them for not being “green” than to award them for being “green”. The ThinkPad x300 computer is advertised by the producer as using as much as 25 % less energy, another good example of underlining “green” advantages to potential buyers.

## ***2. Differences between classical marketing approach and green approach***

We have already pointed out that the rhythm of changes, global ecological problems, global business, growing dependence on networking and mutual exchange of various organizations, without obvious and fixed borders, sets new challenges before marketing both professionally and scientifically. For this reason, classical marketing, defined as "social and management process whereby, through creation, offer and exchange of products of value with others, individuals and groups get what they need or what they want",<sup>15</sup> can no longer meet growing market needs of "green" customers. Classical marketing is based on discovering, developing, and sale of products and services whose price, quality, and characteristics will best fulfil

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<sup>14</sup> Davor Dujak, Marija Ham: "Integracija načela green marketinga u upravljanju opskrbnim lancem", [www.efos.hr/index.php?option=com\\_docman&task=doc\\_download&gid=661&Itemid](http://www.efos.hr/index.php?option=com_docman&task=doc_download&gid=661&Itemid), 16.02.2009

<sup>15</sup> Kotler, P.: **Upravljanje marketingom – Analiza, planiranje, primjena i kontrola**, Informator, Zagreb, 1994., p. 4

customer needs without taking into consideration a wider social sensitivity<sup>16</sup>. As opposed to classical marketing, green marketing has much more complex objectives that cannot be realized using classical marketing strategies:<sup>17</sup>

1. Developing a product that will simultaneously satisfy needs and desires of customers in terms of quality, price, efficiency, with minimum impact on the environment.
2. Projecting high quality image with ecological sensitivity of the product and customer.

The implementation of green marketing changes the relationship between the company and the customer. Customers increasingly decide on "green" lifestyle, with respect and in appreciation of the environment, they value not only material aspects of life, but also those spiritual, they are concerned about circumstances in which they live and similar. To satisfy new demands of customers, companies develop "green" products that offer both functional and psychological pleasure due to the fact that their use will not be harmful for the environment.

**Figure 1 NEW "GREEN" MARKETING APPROACH**

|                   | Classical marketing  | Green marketing  |
|-------------------|--|--|
| Customers         | Customers with their lifestyle   | Human beings with their lives  |
| Products          | "From the cradle to the grave"<br>One size fits all products   | "From the cradle to the cradle"<br><br>Flexible Services   |
| Marketing concept | Sales orientation<br>Final values  | Educational Values   |
| Company           | Reactive<br>Independent<br>Competitive<br>By department<br>Short-term orientation<br>Profit maximizing | Proactive<br>Interdependent<br>Cooperative<br>Holistic<br>Long-term orientation<br>Double final target |

Source: Ottman, J. A.: Green Marketing: Opportunity for Innovation, [http://www.greenmarketing.com/green\\_marketing\\_book/Exhibits/3-1.html](http://www.greenmarketing.com/green_marketing_book/Exhibits/3-1.html).

In short, basic differences between classical and green approach have to be sought in the proactive opinion of "green" companies, one of the sources of its competitive advantage. The essence of proactive "green" approach lies in continuous learning, specialization, research, introduction of new technologies, use of new alternative materials, discovering and fulfilling still undiscovered desires and needs of customers at the same time complying with ecological standards. This is where we have to look for basic differences between green and classical approach. In fact, "green" companies, as opposed to "classical" companies, carefully choose

<sup>16</sup> Marija Tomašević Lišanin, Mirko Palić: "Marketinški doprinos u približavanju Hrvatske Europskoj uniji u području zaštite okoliša i gospodarenja otpadom", magazine Ekonomski Pregled, 2004

<sup>17</sup> Marušić, A.: **Zeleni marketing u suvremenom gospodarstvu**, Zagreb, 2003, p. 12., according to Ottman, J. A.: Green Marketing: Opportunity for Innovation, NTC Business Books, Lincolnwood, IL, 1998., p. 45

their partners, suppliers, and distributors with whom they will make business taking environmental friendliness as one of the criteria of their choice. Partnerships and collaborations of "green" companies also enable compliance and integration of ecological values into the whole chain of production. By all means, the results will be better if the whole system (design, transportation, reuse, or recycling) is suited to preservation of environment. "Green" companies give priority to long-term goals. Together with the realization of profit, they also want to contribute to society and protect the environment.

### ***3. Strategies of green marketing***

Ecological approach to business activities will produce long-term benefits for the company if green marketing within the company develops into a complex, integrated, comprehensive, strategic and tactical process of minimizing negative effects of the company and its exchange with the environment. Simultaneous fulfilment of social obligations and business objectives may be difficult or almost impossible for a company with no developed appropriate strategy. In developing a successful green strategy, the company must consider the following questions:<sup>18</sup>

1. How to teach consumers to responsibly use, spend and dispose our products?
2. How to make the company green?
3. Who can collaborate and do business with us?
4. How to develop a new generation of products?
5. How can we contribute to regeneration of environment?

Authors Aganović-Topalović<sup>19</sup> claim that there are five key factors for green marketing strategy: clarity of objectives, collaboration with third parties such as governmental organizations, ecological and similar associations and other "green" non-profit organizations, communication, motivation for the customer to buy "green products" convinced of their advantages and of the fact that the whole company is "green."

In Polonsky's<sup>20</sup> view, the following is needed successful green marketing:

#### *1. Successful segmentation of the market and focus on selected market segment*

Today's companies can use a much larger quantity of information about psychological, demographic and sociological characteristics of consumers, their needs, desires and preferences. Numerous "green" companies use the Internet for better and more efficient contacts with their target segment. For example, Ecomall ([www.ecomall.com/biz/](http://www.ecomall.com/biz/)) advertise a wide range of "green" companies.

#### *2. Developing a new generation of "green" products*

Inadequate production process and bad design of products can be very harmful for the environment, and this is why companies have to consider possible harmful effects on the environment and minimize them at the very beginning of New Product Development (NPD).

#### *3. "Green" positioning*

Companies that want to position themselves in the market as "green" have to comply with accepted ecological principles from the very beginning. This means that all their activities

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<sup>18</sup> Ottman, J. A.: "Green Marketing: What To Do Next?", **In Business**, , Vol. 24., No. 5., 2002., p. 31

<sup>19</sup> Munevera Aganović, Esad Topalović: "Strategije ozelenjavanja biznisa", Citizens' Association DDD, Sarajevo, BIH, [www.kvalis.info/dmdocuments/6\\_091.pdf](http://www.kvalis.info/dmdocuments/6_091.pdf) , 09.02.2009

<sup>20</sup> Polonsky, M. : "Reevaluating Green Marketing: A Strategic Approach", **Business Horizons**, Vol. 44., No. 5., 2001., p. 24

have to reflect their "green" image. "Green" positioning requires strategic, not only tactical approach.

#### *4. Deciding about "green" prices*

Introduction of "green" products may sometimes be expensive due to expenses of introducing a new technology, new manner of production, use of alternative raw materials and similar. Precisely due to high costs of production, "green" products may be more expensive. In deciding whether products shall cost the same, more, or less than "brown" competitors, the company has to take into consideration sensitivity and readiness of customers to pay the premium for a "green" product.

#### *5. Applying "green" logistics*

The application of ecological values in the process of distribution may result in reduction of business expenses and environmental impacts. The trend of reduction of packaging and wrapping has immediate effect on reduction of expenses of distribution. Unfavourable effects of distribution on the environment may be reduced by developing an integrated system of transportation, using the Internet and other innovations in the field of distribution. The greatest progress has been realized in the application of the "Reverse Logistics" system, through which customers return empty packaging and used products to the company.

#### *6. Changing the attitude to waste*

Waste does not necessarily have to be a negative consequence of the process of production, it may be used as input in further production, but it requires implementation of changes within the company.

A new understanding of waste results in the creation of a new market of recycled products where waste producers act as purchasers of their own processed and recycled waste. Some American wineries use services of companies specialized in collecting and processing post-production waste that they buy after processing and use it as fertilizers.

#### *7. Applying "green" promotion*

Success of "green" promotion depends on proper choice of information and means of communication. Communication has to comprise only complete, correct, and valuable information based on actually undertaken ecological activities of the company. Dissemination of superficial or incorrect information will result in creation of negative image.

#### *8. Creating "green" partnerships*

Sometimes the company may lack fundamental knowledge and experience in applying green marketing. Such lack may be resolved by creating "green" associations with companies that already apply green marketing. "Green" partnerships are the source of necessary knowledge and information for the development and implementation of appropriate strategies and tactics of green marketing.

Disadvantages of "green" associations are contrasting interests and objectives of partners, which may reduce company benefits, harm its image and its ability to realize its long-term objectives.

### **4. Green Marketing Mix**

If we define green marketing as a particular form of development, pricing, promotion, and distribution of products that do not harm the environment, then companies that apply "green" marketing philosophy are expected to take into consideration ecological aspects of each element of marketing mix before they develop and place products in the market.

a) Green product – a product is "green" if it fulfils customer needs, if it responsibly uses energy and resources, and if it is socially desirable due to the fact that neither the product nor the company producing it have endangered the habitat, flora and fauna, people and countries,

and whose use and disposal do not harm human health and environment. In developing "green" products, it is necessary to consider influences of the product on the environment (its use and disposal) and influences of production process (used raw materials, materials, and sources of energy, produced waste and similar). Eco innovations or new "green" products try to fulfil customer needs in a new and exciting way, and to promote social values and ecological feasibility. New "green" products are increasingly simpler, with smaller packaging and reduced use of materials, they try to use the force of nature and solar energy and their life cycle does not end with their disposal—after use, they are used as raw materials in production of new items.

b) Green price – transformation into "green" company that tries to minimize its harmful effects on the environment may be very expensive. In his book, Ottman<sup>21</sup> draws attention to the fact that numerous consumers are actually not ready to pay more for the product declared green. For this reason, ecologically more acceptable products must have competitive prices or particular competitive advantages to succeed in the market. Development of new renewable sources of materials and raw materials, conformity with legal regulations, replacement of old, dirty technology with new, green, and other expenses are related to transformation of company and they produce an increase of costs. This is why companies have to adjust all their expenses, expenses of application of new ecological standards and development of green products to all market conditions. They should also try to compensate higher prices with improved quality and stronger emphasis on “green” in their promotional campaign.

c) Green distribution – physical distribution is one of the first functions whose modification may minimize unwanted effect on the environment. Among all elements of distribution, transportation is the first element whose application may contribute to environmental protection in a relatively cheap way. Numerous transportation companies have already made their transportation “fleets” green aimed at reducing their negative effects. Reduction of dimensions of products, packaging and wrapping enables a more rational use of space and transport. By using ecologically more responsible logistics, companies are trying to reduce effects of physical movement of products from producers to consumers. Application of “reverse logistics” system is a revolutionary approach to distribution of products. "Reverse logistics" is the process whereby consumers return empty packaging, wrapping and used products to the producer<sup>22</sup>. Application of “reverse logistics” does not necessarily have to imply higher costs for the company, it can even be a source of saving. The company may use returned used products and packaging as inputs for the production of new products.

Furthermore, green distribution also encompasses planning construction and location of distribution centres in areas in harmony with nature and the environment, the ones whose procedure of distribution and manipulation will not cause pollution.

d) Green promotion - green promotion comprises all forms of marketing communication, namely advertising, publicity, sales improvement, personal sales, and public relations. The importance of "green" promotion is a result of its ability to present “green” products in the market, to provide additional information, develop customer tendency to purchase certain brands and to contribute to the creation of a positive perception of a "green" company and to underline the importance of ecological problems. The choice of objectives and tasks of

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<sup>21</sup> Jacquelyn A., Ottman: “Green marketing: opportunity for innovation”, Illinois, NTC Business Books, USA, 1997

<sup>22</sup> Note: since 2008, obligation of all companies with ISO 9001 standard

"green" promotion will by all means depend on the manner of promotion, plan of promotional activities, choice and plan of the media, and promotional system as a whole.<sup>23</sup>

Beside the classical 4P of marketing mix, other 3 P elements may also be considered in the light of green marketing- Process, People, and Physical evidence<sup>24</sup>. In green marketing, "people" refers to all activities and services related to green products. The term "people" also implies knowledge, experience of educated employees with direct influence on the structure and the quality of products, whose ecological awareness contributes to direct reduction of pollution. "Process" comprises all various procedures and mechanisms and it actually represents a total flow of all activities related to production of green products and services. "Physical evidence" is a more implicit factor, present in green marketing through characteristics and abilities of the environment in which green products or services are produced, and it comprises all tangible goods and known experiences of customers who facilitate production and offer of green products and services.

### ***5. Results of research of representation of "green" companies in the Republic of Croatia***

For the needs of the present paper, we have surveyed Croatian companies using a questionnaire distributed to randomly selected addresses of companies by e-mail, by fax, and by regular mail. The survey was launched on 15 January 2009, and the procedure of gathering responses ended on 01 March 2009. We have sent a total of 750 questionnaires to addresses of companies throughout Croatia, in equal proportions in all regions. Unfortunately, at the end of the entire procedure of collecting responses and after numerous repeated calls, we have managed to collect only 151 properly completed questionnaire. Based on their business activity, 54 % of production companies participated in the survey together with 46 % of service companies. Of all companies-respondents, 58 % employed up to 50 persons, 23 % from 50 to 250 persons, and 19 % of surveyed companies employed over 250 persons at the time of research. The complete questionnaire is attached as annex to this study.

To the first question (Can you estimate the negative impact of your business or your products and services on the environment?), respondents responded as follows:

**Table number 1 – results of question number 1 from the survey**

| Can you estimate the negative impact of your business or your products and services on the environment? | N   | as percentage (%) |
|---|-----|-------------------|
| No impact at all  | 40  | 26.49             |
| There is impact, but not particular   | 59  | 39.07             |
| Has some impact   | 38  | 25.17             |
| Has large impact  | 4   | 2.65              |
| Has huge impact   | 2   | 1.32              |
| I do not know   | 8   | 5.30              |
| Total:  | 151 | 100.00            |

Source. Research of green marketing in the Republic of Croatia, 2009, N=151.

<sup>23</sup> Maderić, D.: **Promocijske aktivnosti u zaštiti okoliša**, Ekonomska biblioteka Birotehnika, Zagreb, 1987, p. 101

<sup>24</sup> [www.12manage.com](http://www.12manage.com), "Usage of extended marketing mix" 22.03.2009

65 % of surveyed companies maintain that their business activities have no or little negative impact on the environment, and 29 % of them claim that their company has negative impacts on the environment ranging from some to huge.

The following results were obtained to the second question (Does any of your products or services have a special sign guaranteeing ecological acceptability?):

**Table number 2 – results of question number 2 from the survey**

| Does any of your products or services have a special sign guaranteeing ecological acceptability | N   | as percentage (%) |
|---|-----|-------------------|
| Yes   | 43  | 28.48             |
| No  | 100 | 66.23             |
| I do not know   | 8   | 5.30              |
| Total:  | 151 | 100.00            |

Source. Research of green marketing in the Republic of Croatia, 2009, N=151.

Most surveyed companies, 66.23 %, stated that their product or service does not have any particular sign or mark that guarantees their ecological acceptability. However, as many as 28 % of them recognize the importance of following ecological trends and the importance of caring for the environment, and they mark their products or services with recognizable ecological trade mark.

The third question referred to possession of quality and environmental protection standard ISO 14001. Among surveyed companies, 75.50 % still have not adopted this business standard, and 20 % of them are already certified. Out of 118 (75.50 % of total sample) companies that do not have the standard, 11.86 % are planning to adopt the standard within one-year period, and 15 % within the two-year period, and 7.65 % are planning to do so over the following three years.

The fourth question related to the issue of promoting recycling and return of own packaging and suppliers' packaging as one of key elements of green marketing mix.

**Table number 3 –results of question number 4 from the survey**

| Does your company promote recycling and return of your packaging as well as the supplier's packaging? | N   | as percentage (%) |
|---|-----|-------------------|
| I do not know   | 10  | 6.62              |
| Yes   | 83  | 54.97             |
| No  | 58  | 38.41             |
| Total   | 151 | 100.00            |

Source. Research of green marketing in the Republic of Croatia, 2009, N=151.

The results relating to promotion of recycling and return of own packaging in Croatia are quite good, considering that as many as 83 % of surveyed companies use this segment in their promotion and in marketing mix.

Along with the above stated questions, the survey also comprised and focused on general “green” measures actually implemented by companies that thus prove their ecological choice. The following table presents the results:

**Table number 4 –results of question number 5 from the survey**

| Do you implement some of the following passive measures of environmental protection within your company  | N   | as percentage (%) |
|--|-----|-------------------|
| a) Intense and organized selection of all types of waste   | 90  | 30.82             |
| b) Separate collection of used paper for further use in all offices  | 71  | 24.32             |
| c) You only order environmentally friendly products or services  | 23  | 7.88              |
| d) Does your company intensely carry out at least one of energetic efficiency and electric energy saving programmes (energy saving bulbs, automatic lighting, control of use of electric energy, installation of energy saving devices and appliances and similar) | 74  | 25.34             |
| e) Do you yearly and actively participate in the promotion of important days related to environmental protection such as Planet Earth Day, Water Protection Day and similar  | 29  | 9.93              |
| h) I do not know   | 5   | 1.71              |
| Total (possibility of multiple answers)  | 292 | 100.00            |

Source. Research of green marketing in the Republic of Croatia, 2009, N=151.

The largest number of companies intensely selects their own waste and the waste of their suppliers on an organized basis, and implements measures for collection of paper in their offices and intensely implements one of energy efficiency programmes.

Among surveyed companies, of 151 company, 54% responded negatively to the 6th question (Do you think that environmental protection, additional regulations regarding environmental protection, as well as all additional direct and indirect duties related to environmental protection additionally increase business expenses and reduce your overall competitiveness?), while 34 % of surveyed companies maintain that additional mandatory investments in environmental protection and other regulations in that field create additional (higher) costs. 12.58 % of surveyed companies were not able to provide and answer to this question. Results are positive both for Croatian companies and for the state, insofar as most companies maintain that additional investments in environmental protection do not present extra financial burdens.

The following question refers to evaluation of development of green marketing mix in the context of green products. The results and the text of the question are presented in the below table.

**Table number 5 –results of question number 7 from the survey**

| If you introduced a new ecologically acceptable green product into your products/services, can you estimate how these new “green” ecologically acceptable products might affect the strengthening of your future competitive advantage? (Please circle) – | N   | as percentage (%) |
|---|-----|-------------------|
| I do not know   | 11  | 7.28              |
| Poorly (1)  | 54  | 35.76             |
| Satisfactorily (2)  | 16  | 10.60             |
| Averagely (3)   | 35  | 23.18             |
| Considerably (4)  | 22  | 14.57             |
| Quite considerably (5)  | 13  | 8.61              |
| Total:  | 151 | 100.00            |

Source. Research of green marketing in the Republic of Croatia, 2009, N=151.

Results shown in the above table indicate that the majority of 46 % surveyed companies in Croatia shares the opinion that introduction of ecological products creates new competitive advantages. A positive step in this area is the fact that Croatian companies have growing understanding of advantages of displaying and development of ecologically more acceptable products or services.

The following table presents tendencies of Croatian companies with reference to improvement of processes of production aimed at making them ecologically more acceptable.

**Table number 6 –results of question number 8 from the survey**

| Do your business plans and business strategy for the following three years comprise development plan of improvement of business processes to make them ecologically more acceptable and to reduce your total pollution? | N   | as percentage (%) |
|---|-----|-------------------|
| No answer   | 8   | 5.30              |
| Yes   | 75  | 49.67             |
| No  | 45  | 29.80             |
| I do not know   | 23  | 15.23             |
| Total:  | 151 | 100.00            |

Source. Research of green marketing in the Republic of Croatia, 2009, N=151.

Results of table number 6 reveal particularly positive tendencies among Croatian companies. In fact, as many as 50 % of them have development plan of improvement of all business processes in their business plans and strategies for the upcoming 3-year period with the objective of making the company ecologically more acceptable, later to be used in the promotion and presentation of the company in the market and in the improvement and creation of competitive advantages. Lower expenses for ecology and better protection should provide overall relief for companies in terms of large pollution fees, which would reduce their costs and increase their competitiveness.

Relation of Croatian companies, their business processes, and communication with the community and estimated total contribution to environmental protection are presented in the below table.

**Table number 7 – results of question number 9 from the survey**

| Please try to evaluate your company, your business processes, your relation to environmental protection or your entire relation and contribution to environmental protection in the near and wide community? | N   | as percentage (%) |
|--|-----|-------------------|
| I do not know  | 5   | 3.31              |
| Poor 1   | 13  | 8.61              |
| Satisfactory 2   | 17  | 11.26             |
| Good 3   | 36  | 23.84             |
| Very good 4  | 65  | 43.05             |
| Excellent 5  | 15  | 9.93              |
| Total:   | 151 | 100.00            |

Source. Research of green marketing in the Republic of Croatia, 2009, N=151.

It is true that most surveyed companies underline their “protective green” (ecological) orientation in their overall business activities, particularly in their advertising methods (propaganda, PR, publicity, personal sales...). 50 % of all companies does it occasionally (sometimes), and as many as 19 % of surveyed companies does it always. In other words, approximately 20 % of surveyed companies constantly promote and stress their green orientation and ecological acceptability of their products to attract customers and to position themselves in the market competitive in the field of ecology.

By the same token, it is interesting that 65 % of surveyed companies are ready to look for “ecologically more acceptable” suppliers. These results are presented in the following table:

**Table number 8–results of question number 11 from the survey**

| Are you ready to integrate ecologically acceptable products into your products or services regardless of the fact that they are more expensive than competitive and non-ecological ones? | N   | as percentage (%) |
|--|-----|-------------------|
| I do not know  | 32  | 21.19             |
| Yes  | 99  | 65.56             |
| No   | 20  | 13.25             |
| Total:   | 151 | 100.00            |

Source. Research of green marketing in the Republic of Croatia, 2009, N=151.

Finally, we have asked all respondents to try to evaluate lower limits of acceptability of higher prices for ecologically more acceptable products if they had to choose them and prefer them to (non-ecological) cheaper competitors’ products. Up to 5 % increase of base price would be accepted by 36 % of companies, up to 10 % increase would be accepted by 28 % of companies, up to 15 % increase would be accepted by only 8.61 % of companies, while above 15 % increase would be accepted by the smallest number of surveyed companies - 6.62 %.

## ***7. Final considerations***

The problem of environmental protection, waste management, and growing pollution is omnipresent in contemporary society. The resolution of this complex problem requires strategic thinking at the level of state, region, and wider. For Croatia as a country with predominantly small companies with scarce resources and relatively underdeveloped market, it would be very important to launch a significant initiative aimed at more responsible behaviour of local companies in terms of environmental protection at the institutional level and at the level of positive legislative, tax benefits and similar modalities and to stimulate the development of ecologically acceptable products that could become one of agents of future export potential of our country. Implementation of green marketing requires proactive approach to customers, stakeholders and employers. Economic subjects that implement green marketing care and express their concern for environmental problems. In recent, increasingly more difficult global conditions of business activities in the market, prices, quality and deadlines of delivery are no longer sufficient. Care for the environment and sustainable development, the so-called “green behaviour”, will act as more important factors thanks to which some customers will choose products marked and recognized as ecological. Companies that will implement green marketing, companies that already implement the 3R concept (the “Reduce, Reuse and Recycle” concept) will certainly be more competitive in the market and reap higher profits. Our research indicates that a majority of Croatian companies acknowledges their partial or great negative impact on the environment (66 %). Most Croatian products do not bear special marks guaranteeing their ecological acceptability (66.23 %). By the same token, the research indicates that as many as 20 % of companies in the Republic of Croatia possess recognized ISO 14001 certificate guaranteeing certain procedures related to environmental protection, and among those companies that still do not have it, 35 % are going to work on its adoption in the following period not longer than 5 years. In 55 % of cases, Croatian companies promote and stimulate the return of their own packaging and suppliers' packaging. The largest part of Croatian companies individually selects waste at their plants and has various energy efficiency programmes. 46 % of Croatian companies maintain that additional investments in development of ecological products (green marketing mix) would strengthen their competitive position in the market, and they also maintain in 55 % of all cases that stronger regulations in the domain of environmental protection and greater insistence on environmental protection would not reflect on their expenses. 50 % of surveyed companies will be improving their business processes with the objective of reducing pollution in the following three years. 68 % of Croatian companies stress their green component and environmental protection in their promotional activities, and they try to persuade customers that their production and their products pollute less than the competitors' ones. 65 % of Croatian companies are ready to install more expensive and ecologically more acceptable components in their products. The results we have presented in this study lead to the conclusion that in terms of green marketing, sensitivity to ecological products, and promotion of green component, Croatian companies do not fall behind competitive western countries in terms of their considerations and their practices.

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