



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

ANALYSING SPORTING GOODS MANUFACTURERS' ENVIRONMENTAL MANAGEMENT TOOLS

¹Gergely Rathonyi – ²Kinga Rathonyi-Odor

University of Debrecen

¹*Department of Agricultural Informatics
4032 Debrecen, Böszörményi 138.*

email: rathonyi.gergely@econ.unideb.hu

²*Department of Sporteconomics and Management
4032 Debrecen, Böszörményi 138.*

email: rathonyi-odor.kinga@econ.unideb.hu

Abstract: Organizations around the developed world are facing pressure from governments, international agreements, society and various stakeholders, to improve their behavior towards the natural environment. The application of environmental management tools may be an important step towards sustainability and the preservation of environmental values, however marketing could be the key – with the help of information and communication technologies (ICT) – in publicizing and spreading these ideas thus forming customers', stakeholders' attitude in this respect. The aim of this study was to define the concept of environmental consciousness and environmentally conscious behaviour, then to present the shift the traditional marketing philosophy towards the sustainable marketing approach, finally to analyse two top sporting goods manufacturers' (Nike, Adidas) environmental management tools with the help of data gained from their web sites, reports, case studies. Interpreting environmental consciousness is difficult without knowing the attitude to it. In spite of that it is important to distinguish between environmental consciousness and environmentally conscious attitude, because consciousness often appears in attitude influenced by other, outer effects. The environmental conscious attitude of companies in itself is not enough for making use of the advantages deriving from a positive environmental concern. They need to pursue more active communication, to „green” the whole of marketing activities. Thus marketing seems a possible means to naturalize and expand environmental protection both among customers and in company practice. According to the analysed companies, we need to say, that they are commitment with the environmental protection. They are used state-of-the-art technologies to make their activity greener and introduce these with full particulars, examples e.g. ColorDry technologies, Better Cotton, The Framaprene ECO heel. Either Nike, Inc., or Adidas Group realised that ICT have the ability to improve efficiency and cut the use of material goods, thus reducing energy demands and the burden upon the environment.

Keywords: *sporting goods manufacturers, environmental management tools, eco-marketing (JEL code: Q01)*

INTRODUCTION

Sustainable development is the key problem of our age in the solution of which all players of economy and society must take part in. Without the most important fundamental units of the economy, the companies it is unthinkable to realize the paradigm shift that is indispensable for the profound reform of social-economic processes. These processes such as the methods of production, its technological solutions, the design of products and their distribution, the changes of the structure of customer needs, the development of the current society's lifestyle and values – and the list could go on for long – should be reformed in a way that they correspond the global ecological restrictions. Obviously, in all phases of the accomplishment of this huge, overall complex mission companies should play a significant role in, as well.

In the past three decades companies all over the world, but certainly above all in the developed countries have paid more and more attention to understanding the problems of

environmental protection and its sustainability and especially to the practical duties related to them. Owing to the characteristics of companies the emphasis was put on the former, the practice that is, and it happened in a mosaic-like way, that is to say certain elements of the solution of environmental-sustainability issues – environmental management systems e.g. cleaner production, reduce waste, cut energy, producing environmentally friendly product, using ecolabel, the elements of ecological marketing, etc. – were integrated in the company practice mostly isolated from each other, accidentally. It seems that the expansion of sustainability factors of company policy has reached a critical level as a result of which the different sustainability means of companies are beginning to form an overall, more or less consistent system. All this reflects how companies have changed their attitude towards the natural environment and the ecological crisis and how it appears in the company object system more and more emphatically.

In our study we try to answer the following questions that our paper can articulate:

1. How define different literatures the concept of environmental consciousness and environmentally conscious behaviour?
2. How shifts the traditional marketing philosophy towards the sustainable marketing approach?
3. What kind of environmentally conscious activities do top sporting goods manufacturers (Nike, Adidas)?

MATERIAL AND METHODS

In the conceptual clarification of environmental consciousness, environmentally conscious attitude we relied on international and Hungarian special literature. (*Banerjee – Mckeage 1994; Dudás 2006; Huang et al. 2014; Nemcsicsné 2008; Odor 2009; Papaspyropoulos et al. 2012*).

In the presentation and evaluation on the novelties of marketing tendencies focusing on social and ecological aspects, we trusted primarily findings of Swiss and German research and Hungarian publications. (*Belz 2001; Belz 2003, Billharz 2003; Kirchgeorg 2003; Karstens 2005; Meffert 1995; Leitner 2004; Peattie 2005; Szolnokiné 2005*)

For the analysis of Nike, Inc. and Adidas Group we applied a comparative analysis based on secondary databases. We compared the companies' environmentally conscious behaviour – e.g. cleaner production, reduce waste, cut energy, producing environmentally friendly product – with the help of data gained from their web sites, reports, case studies.

CONTEMPORARY DEFINITION OF ENVIRONMENTAL CONSCIOUSNESS, ENVIRONMENTALLY CONSCIOUS BEHAVIOUR AND ONLINE SUSTAINABLE MARKETING

The conceptual clarification of environmental consciousness and environmentally conscious behaviour

Defining environmental consciousness and environmentally conscious attitude is a very important question both from the point of view of individual- and that of organization-level studies. In both cases, however, it is hardened by the fact that such a subtle system of the studied factors is typical of environmental consciousness which is influenced by the subjective views of researchers on the subject.

Interpreting environmental consciousness is difficult without knowing the attitude to it. In spite of that it is important to distinguish between environmental consciousness and environmentally conscious attitude, because consciousness often appears in attitude influenced by other, outer effects, therefore we find literary definitions incorrect that identify environmental consciousness with the attitude towards environmental protection.

Although a great deal of studies is concerned with business environmental consciousness (*Banerjee – McKeage 1994; Dudás 2006; Nemcsicsné 2008; Odor 2009*), its exact

definition is often missing, regarding the multidimensional construction of its elements is surrounded with uncertainty, nor do empiric studies concern all its dimensions and components.

We define *environmental consciousness* as a specific value- and belief-system, the manifestation of which is environmentally conscious behaviour. The ecological behaviour of an organization is influenced by several components, which can be divided into two dimensions (individual and organizational) and into many groups (the environmental consciousness factors of an individual, factors - independent of the organization - relating to the behaviour of organization members, factors working its effects through the organization on the members of the organization and the whole organization).

We mean by *the concept of environmentally conscious attitude on company level* that environment-oriented way of thinking matures into concrete activities and reforms, on the basis of which a management operates an organization or a company, independent of the fact whether this reform was evoked by a market mechanism or an administrative regulation.

With the rise of environmental consciousness, environmental issues have become valued and mainstream. Many firms are concerned with the effectiveness of adopting green management tools and green marketing strategies (*Huang et al. 2014; Papaspyropoulos et al. 2012*). The environmental management tools may be an important step towards sustainability and the preservation of environmental values, however marketing could be the key – through information and communication technologies – in publicizing and spreading these ideas thus forming customers', stakeholders' attitude in this respect. That is why we find it important to analyse and introduce the shift in marketing philosophy.

From eco-marketing to sustainable marketing

As a result of the increasing economic competition the importance of marketing seems to be valorised, consequently new ways have had to be found. Due to the growing social expectations and the competition, a novel marketing approach and an innovative, distinctive management policy was to be implemented. (*Peattie 2005*)

That is to say, the environmental conscious attitude of companies in itself is not enough for making use of the advantages deriving from a positive environmental concern. They need to pursue more active communication, to „green” the whole of marketing activities.

Thus marketing seems a possible means to naturalize and expand environmental protection both among customers and in company practice. This type of marketing with a distinct object- and means-system representing an environmental conscious philosophy is called green-, environmental-, ecological- or eco-marketing.

The aim of *eco-marketing* is to raise the environmental consciousness of the society to a level which creates an ecology-based environmental culture for all members of the society and also to provide customers with the possibility of consuming according to these principles. (*Szolnokiné 2005*)

The developed concept of eco-marketing – *integrative*

eco-marketing – is concerned with creating an environment-oriented competition and transforming the market. In this approach integrating ecological aims are also central, while the social aims emphasised in the question of sustainability are pushed to the background. (Belz 2001,a,b; Billharz 2003; Karstens 2005; Meffert 1995)

Keeping to and integrating the domains and objects of sustainable development in practice is another step, which leads to the *marketing of sustainable development (sustainable marketing)*. Thus the marketing of sustainable development, as a next level follows organically from these, but also diverges from them. The marketing of sustainable development is such an innovative theory that deals with environmental and social problems and customers' needs. As a starting point the valorisation of ecological and social aims can be mentioned that have to serve to satisfy customers' demands. (Belz 2003a,b; Kirchgorg 2003; Leitner 2004)

This branch of marketing – like the integrative eco-marketing – can be understood as a double level. This interpretation of marketing does not only focus on the market and rivals but a multi-direction orientation is formed taking all the three pillars into consideration, which expands to the whole company. We can not, however, leave out the traditional marketing provisions either, because these determine the future of the company. It is essential that the companies can take advantage of the changes brought on by environmental and social factors as market opportunities. The sooner a company recognizes and applies these future-oriented trends, the more effective it can be on the long run.

Nowadays is even spread the using of sustainable marketing on the Internet called online sustainable marketing. Companies try to let their partners and consumers know they deal with sustainable development including environmental protection and social responsibility which topics are in the agenda (Böcskei et al., 2015) these days and years to come as well. Even more company demands that their partners really deal with environmental and society so sustainable marketing is appeared on their web pages in order to they inform people widely about their activity.

In the next chapter we examined what kind of environment management tools are used by the analysed companies.

RESULT AND DISCUSSION

The NIKE Inc.

As the world's leading athletic footwear, apparel and equipment company, NIKE, Inc. doubled their revenue over the last 10 years. Since 2010 their overall employee base grew to approximately 48,000 at the end of 2013, including seasonal and part-time employees. They expect strong growth in Running, Basketball, Football, Men's Training, Sportswear, Women's Training and Direct to Consumer sales. As they look forward, they believe that sustainability is one of the key drivers that will catalyze innovation and lead them toward continued growth. (Internet 1)

In the Internet it was easy to find NIKE's reports about sustainable business performance. We analysed the up-to-date

Report about 2012/2013. The main chapters of the Report are about strategy (business, sustainability), governance and public policy, economic performance, design the future. The chapters are fairly detailed we can find the company's objectives related actions and data. In connection with environmental protection we are able to know their environmental policy and some of related action and specific examples.

Based on extensive analysis of the impacts of their business across the value chain, they know that materials and manufacturing represent the greatest areas of impact on workers, communities and the environment, and the greatest potential for sustainable innovation.

Materials and manufacturing must be a featured area because of the fact that approximately 900 million units produced annually through their supply chain are made from more than 16000 materials selected from more than 1500 different vendors, chosen from a staggering 80000 material options. From their analysis, the production of these materials – from growing cotton and harvesting rubber, to raising livestock for leather and extracting oil for polyester – represents 21% of the total energy use throughout their value chain, 73% of the water consumption and 33% of the greenhouse gas emissions. When they include materials processing activities, such as the dyeing and finishing of fabrics, those percentages increase to 54% of total energy use, 83% of water consumption and 56% of GHG emissions.

NIKE drives sustainable business innovation in three strategic ways:

1. Deliver a portfolio of sustainable products and services that enhance athlete performance.
2. Prototype and scale sustainable sourcing and manufacturing models.
3. Explore new sources of revenue not based on constrained resources.

In order to understanding the impacts, risk and opportunities by NIKE, Inc., they made a study. The purpose of this study was to determine the environmental footprint of NIKE, Inc. – including its products – across four impact areas: CO₂emission, energy, water and waste. They undertook this work by identifying and quantifying water and energy usage, CO₂ emissions and waste created at each stage of the value chain.

We would like to highlight some topics in which they managed to achieved development in recent years (*Internet 1*):

1. *Cut energy*

The aim was to drive innovation and collaboration and engage in public policy advocacy to deliver carbon reductions across the value chain. They want to achieve a 20% reduction in CO₂ emissions per unit from 2011 levels through 2015 (in aggregate from assessed footprint in the built environment, logistics and footwear manufacturing) At the end of 2013 they achieved 13% reduction. In order to this result they e.g.:

- ✓ increase contracted manufacturer participation in NIKE's energy and carbon continuous improvement program. In 2013, 41% of participating contract

footwear factories met the minimum requirements of the NIKE Energy and Carbon Program, representing 72% of NIKE Brand footwear volume.

- ✓ expand use of renewable energy in their built environment including all new retail stores. They also produce renewable energy at two key global distribution centers. Their European Logistics Center in Belgium, has six wind turbines with generation capacity of 1,5 MW each, as well as a solar installation. Together, they generated 17,6 million kWh in 2013. The NIKE China Logistics Center features a solar heating system that produces renewable energy for the facility, including 123,000 kWh in 2013.

2. *Reject Toxics*

Their aim was to minimize the impact of product ingredients throughout the lifecycle. They try to achieve zero discharge of hazardous chemicals for all products across all pathways in their supply chain by 2020. Executing according to plan.

Therefore they:

- ✓ established an industry-wide management coalition,
- ✓ expanded chemicals management and awareness training,
- ✓ expanded use of environmentally preferred chemistries.

3. *Slash Water*

The aim was to borrow water and use it responsibly. They would like to improve water efficiency by 15% per unit in apparel materials dyeing and finishing, and in footwear manufacturing, from 2011 through 2015. At the end of 2013 they managed to reduce it by 13% in connection with apparel and by 26% in connection with footwear.

Therefore they:

- ✓ increase participation in NIKE Water Program across NIKE, Inc. brands. In 213, 793 NIKE materials vendors and contract factories participated in the NIKE Water Program, up 50% from 527 in 2011. Participants self-report their water use related to the production of NIKE Brand product and beyond.
- ✓ drive industry change through expanded access to the use of NIKE-developed H2O Insight Tool.
- ✓ Assess geographic impact of water.

4. *Reduce Waste*

Their aim was to use less, buy less to reduce impact across the value chain. They try to achieve a 10% reduction in waste from finished goods manufacturing across NIKE, Inc. and in shoebox weight per unit from 2011 through 2015. On the score of footwear, it was 8,6% reduction at the end of 2013. In line with shoebox, it was 3% reduction.

Therefore they:

- ✓ reduce waste in manufacturing. In footwear manufacturing specifically, 85% of waste is now reclaimed through recycling or energy recovery.
- ✓ improve packaging. NIKE and Converse together create hundreds of millions of shoeboxes annually from 100% recycled content. The vast majority of these boxes are disposed of or recycled by the con-

sumer. Converse's 13% reduction in shoebox weight in 2012 saved 1,300 metric tonnes of corrugate fiber and \$1,5 million, compared to 2011. So far, they have reduced the weight of the NIKE Brand shoebox by 3%, building on a 6% savings from a previous box redesign.

- ✓ increase recycling, reuse, repurpose & compost of waste (manufacturing, retail, distribution, centers, offices). Since 1990, their Reuse-A-Shoe programme has recycled 28 million pairs of shoes into NIKE Grind. NIKE Grind includes not only recycled shoes but manufacturing scrap, with scrap representing 90% of the recycled material and recycled shoes the remaining 10%. The primary uses of NIKE Grind include turf in-fill (i.e., the fill material between the blades of artificial grass), sports surfaces, carpet underlays, and fitness flooring.

Finally we would like to mention three additional successful programmes. One of them is the ColorDry program which is a revolutionary water free dyeing process. Using this technology they mentioned the next environmental benefits (*Elks* 2013):

- ✓ Zero water is used to dye fabric. (By traditional dyeing 5,8 trillion liters water are used.)
- ✓ Nearly 100% of dye is used with ColorDry, practically removing the potential for wastewater pollution.
- ✓ ColorDry removes the need for additional process chemicals.
- ✓ This process is 40% faster as compared to traditional dyeing.

It is important, that ColorDry reduces energy consumption by 63% compared to traditional dyeing.

The other prosperous program is the BEST. In 2013 they developed a scenario tool to explore the impacts that climate change, and related water scarcity, could have on cotton, one of their main product inputs. They developed a Business and Environmental Scenario Tool which gives us the ability to assess overall and intersecting impacts from changes to different scenarios.

The Nike, Inc. works with stakeholders and experts from outside the company to validate this work, to develop a collective understanding of the systemic issues they face and to identify shared solutions.

BEST provides a 10-year quantified view of environmental and financial impacts from changes to scenarios such as materials used or changes in sourcing.

With the BEST they can (*Internet 1*):

- ✓ Input one scenario and receive data on simultaneous impacts to five criteria (financial, water, energy, CO2, waste);
- ✓ Complete the analysis quickly, with a turnaround in minutes, rather than weeks;
- ✓ Take a holistic view of all criteria and compare the return on investment for all criteria at the same time;
- ✓ Capture how changes to one criterion impacts others;
- ✓ Take into account a more complete view of the supply chain;

Finally, the Company joined to the Better Cotton Standard Programme (BCSS). This is a holistic approach to sustainable cotton production. Each of the elements – from the Production Principles and Criteria to the monitoring mechanisms which show Results and Impact – work together to support the BCSS, and the credibility of Better Cotton and BCI. The system is designed to ensure the exchange of good practices, and to encourage the scaling up of collective action to establish Better Cotton as a sustainable mainstream commodity. (*Internet 2*)

According to the published data, it seems that NIKE Inc. really does special efforts to environmental protection and took big step to use different environmental management tools. It was easy to find information, reports and case studies about these activities.

The Adidas Group

Adidas AG is the largest sportswear manufacturer in Europe and the second largest in the world. The companies employed approximately 50 728 people in over 160 countries and produce more than 650 million product units every year. The Adidas Group's global net sales amounted to about 14,49 billion euros in 2013. (*Internet 6*)

By Adidas we managed to analysed their Sustainability Progress Report 2013. The Report is really structured, pictures and tables help the easy perspicuity. In this 'FAIR PLAY' report – as they call it –, they use four pillars – people, product, planet and partnership – to explain their sustainability programme. By two of the pillars (product and planet) we could find data and information about their environmentally conscious behaviour, by the other pillars activities were dominant in connection with social responsibility. In this chapter we would like to show only their green activities.

Product

1. Zero water

Since the company introducing the DryDye technology in the 2012 collection, they have increasingly integrated it into their Sports Performance products. Adidas has expanded the colors and fabrics available in DryDye, and use it in more sports categories. While it usually takes 25 liters of water to dye a tee shirt, the revolutionary DryDye technology eliminates the need for water in the dyeing process.

By requiring no water, DryDye also uses 50% less energy and 50% fewer chemicals when compared to conventional fabric dyeing. To date, they have used more than 2 million yards of DryDye fabric, saving 50 million litres of water, or 20 Olympic-sized swimming pools. This technology received the Outdoor industry award for its 2014 Terrex Swift DryDye tee shirt. The award recognises 'products of high ecological and sustainable value'. (*Internet 3*)

2. Information technology for reducing environmental footprint

The Adidas Group is reducing their environmental footprint by using virtual images to sell-in their products to

their markets instead of creating physical samples. Between 2011-2013, Adidas produced almost 1,5 million fewer physical samples.

Overall savings were achieved across all product ranges, with the apparel (more than 950,000 pieces) and footwear (415,000 pairs) categories contributing most. The company aims to increase the amount of virtual sales samples used during the sell-in process every year.

By reducing physical sample production, Adidas not only save water, energy and greenhouse gas emissions in the production of samples, but also reduce their environmental footprint as fewer samples need to be transported globally.

The company is also increasingly using virtual images instead of product pictures on their eCommerce website. At the end of 2013, they had approximately 500 virtual images on the site and plan to gradually increase this number. By doing so, they are limiting the need for product photo shoots.

3. Low-waste

The Adidas low-waste initiative, which aims to maximise performance while minimising waste, made great progress in 2013. The programme focuses on producing footwear and sports apparel with fewer parts, recycled materials and maximum pattern efficiency. Pattern efficiency compares the amount of fabric in a piece of clothing to the amount of fabric from which it is cut, with the aim of wasting as little as possible.

One of the 2013 clothing collections achieved more than 95% pattern efficiency. They used squares and rectangles in recycled polyester, paired with stretchy inserts to guarantee a high performance fit, while minimising environmental impact. Not only are they reducing material waste; they are also saving energy and water that would have gone into creating that fabric. The small amount of waste that was created went to a recycling factory to be converted into stuffing for teddy bears.

In footwear, Adidas took on the challenge of creating a high performance shoe with the least amount of waste possible. The result was the Element Voyager, a streamlined, simplified running shoe that reached 95% pattern efficiency in the upper and contains 60% fewer components than a traditional running shoe. Adidas also opted for environmentally preferred materials, such as recycled polyester in the upper and recycled rubber in the midsole and outsole. (*Internet 3*)

4. Organic cotton use

In 2013, the Adidas Group sourced more than 23% of all their cotton as Better Cotton, clearly exceeding their milestone of 15%. This is a huge step towards their goal of using 40% Better Cotton by 2015. By 2018 Adidas has committed to source 100% of cotton in their products as sustainable cotton. Sustainable cotton in this sense means Better Cotton, certified organic cotton or any other form of sustainably produced cotton that is currently available or might be in future. (*Internet 2*)

The Better Cotton Initiative (BCI) aims to reduce the use of pesticides, and promotes efficient water use, crop rotation and fair working conditions. A recent study by IDH (the

Sustainable Trade Initiative) shows that the BCI is having a significant impact at the farm level. The study found a reduction in water use by up to 20%, a reduction in pesticide use of up to 67% as well as increased profitability for those farmers who have been licensed for Better Cotton.

Planet

1. *A supplier integrating environmental thinking into their business*

Not only do they try to reduce the environmental footprint from their own sites, they encourage their suppliers to do the same. One supplier that has successfully risen to this challenge is their footwear component supplier 'frammas'.

Adidas have had a long and fruitful business relationship with 'frammas'. In the last couple of years they have been facing rising prices for the thermoplastic rubber and polystyrene raw materials they use in the heel counter they make for them. These counter stabilise the heel and are present in almost every shoe. To address this, 'frammas' developed a new heel counter material, replacing the virgin polystyrene component of the compound with recycled polystyrene from food packaging.

The Framaprene ECO heel counter material passes the strict Adidas quality, fit and wear tests. Most of the shoes in the spring/summer 2014 ranges will now contain them – with a total of 110 million pairs of heel counter delivered per year. This will divert 1500 tonnes a year of polystyrene waste from landfill sites. (*Internet 5*)

2. *Investing in green company to reduce environmental footprint*

Adidas is looking for ways to reduce the environmental footprint of their own sites. In 2013 they drove forward their Green Company programme by extending their global shared environmental management system to more of their sites and by funding innovative carbon reduction projects through their sustainability venture capital fund. With the help of Green Company programme, they improved the environmental performance of their administration offices, manufacturing sites and distribution centres. Key to the success of Green Company has been the shared environmental management system for their sites, which has been certified to the international standard ISO 14001. In 2013, four more sites received certification – one administrative office and three distribution centers – bringing the total number of certified sites to twelve. They plan to extend certification to additional sites in 2014.

3. *A better way to make products water-repellent*

The majority of water-repellent chemistry is based on fluorocarbons. Some long-chain fluorocarbons (C8) can break down to chemicals that are known to be persistent, bioaccumulative and toxic. This is why in early 2013 the Adidas Group decided to phase out all long-chain fluorocarbons from their products by January 2015. In order to research the different possible alternatives to the C8 chemistry, they worked together several chemical manufacturers. By the end of 2013

they had already changed a large part of their production to the alternative water-repellent chemistry, without changing the aesthetics, the quality or the performance of the final product. (*Internet 3; Internet 4*)

4. *Three-quarters of audited material suppliers improving their environmental performance*

In 2010 they broadened their monitoring scope and audited material suppliers (fabric mills and dyehouses) for the first time. These audits cover a broad range of environmental topics. As well as reviewing the management systems and overall environmental controls in place, the audits look at waste, how waste water is treated and groundwater is protected, as well as health and safety issues and fire protection.

Results from dedicated audits with 24 material suppliers in 2013 showed that more than 75% of them improved their overall environmental performance within a year. Comparing results to the previous year, the score is also derived from assessing each supplier's business plans and their commitment to setting targets to limit their waste, energy and water use.

5. *Reduce the environmental footprint of IT infrastructure*

In connection with IT infrastructure they highlighted the next milestone in 2013 (*Internet 3*):

Workplace:

- ✓ Use game-like experiences to encourage employees to reduce their carbon footprint.
- ✓ Ensure workplace Green IT best practices are applied.
- ✓ Explore the use of paperless processes.
- ✓ Introduce green printing settings by default and printer energy management.
- ✓ Identify energy consumption and carbon footprint related to emails and employee data storage.

Data centre:

- ✓ Introduce storage on demand at headquarters.
- ✓ Identify the carbon footprint of applications.
- ✓ Decommission physical servers (track percentage of decommissioned servers in regions EMEA, Asia Pacific and Americas).
- ✓ Improve virtual server ratio by 5%.

Communication, awareness:

- ✓ Run awareness campaigns including posters, tips and media assets.
- ✓ Continue employee communication to raise awareness on how to save energy.

Cloud computing and 'data as a service':

- ✓ Evaluate the potential of cloud computing and 'data as a service' to further reduce carbon footprint, energy and paper consumption.

By 2015 they would like to reduce the environmental footprint of IT infrastructure by 20%:

- ✓ 80% of all PCs to have 'green' power management options,
- ✓ 30% less energy consumption by PCs,
- ✓ 100% of requests for proposals to evaluate 'green' performance of possible vendors,
- ✓ Virtualisation of servers and data centre consolidation.

All in all we can see that the Adidas Group does special efforts to environmental protection as well, however, they don't notify so many true data as the Nike, Inc. Even so there is no question their responsible behaviour.

CONCLUSION

In the future of every company it can be crucial whether their leaders realize the possibilities of environmental challenge and to what extent they are able to create an environmental-conscious company management.

Companies have to find a balance between their profit-hunger, satisfying government, stakeholders and customer needs and the matters of the environment. Owing to the ever-increasing market rivalry and the customers being more and more aware of their environment, in case of environment friendly products and management activity a more object-oriented, powerful marketing strategy is necessary, which is in concord with the whole of the company's profile. Even more company demands that their partners really deal with environmental and society so sustainable marketing is appeared on their web pages in order to they inform people widely about their activity.

By the analysed companies it was easy to find information about their green activities and their state-of-the-art technologies. In connection with environmental protection, reports, studies inform us about their long term targets, activities related to them and the achieved results. Materials and manufacturing, reduce waste, cut energy, minimize water use are those areas which are taken into consideration. Companies realised the importance of ICT, which could be key in, for example, reducing the amount of paper used in offices and the need to move people or goods about, and in making possible the transition from mechanical systems to software.

REFERENCES

- Banerjee, B. – McKeage, K. (1994): How Green is My Value: Exploring the Relationship between Environmentalism and Materialism. *Advances in Consumer Research*, Vol. 21. No. 1, 147-152. p.
- Belz, F. – M. (2001a): Nachhaltiges Marketing, *Thesis*, 18. Jg., Heft 2, S. 24-28.
- Belz, F. – M. (2001b): Integratives Öko-Marketing, Erfolgreiche Vermarktung ökologischer Produkte und Leistungen, Deutscher Universitäts-Verlag, Germany S. 7-57
- Belz, F. – M. (2003a): Nachhaltigkeits-Marketing: Grundlagen & Potenziale, Kundenmehrwert durch Motivallianzen, Institut für Wirtschaft und Ökologie Universität, St. Gallen, S. 5-20.
- Belz, F. – M. (2003b): Nachhaltigkeits-Marketing, Präsentation im Rahmen des Workshops Sustainability Marketing Switzerland, Zürich
- Billharz, M. (2003): Umweltmanagementsysteme für ökologischen Konsum? Möglichkeiten und Grenzen in Theorie und Praxis, St. Gallen, S. 6-19
- Böcskei E. – Fenyves V. – Zsidó K. – Bács Z. (2015): Expected Risk Assessment – Annual Report versus Social Responsibility. *SUSTAINABILITY* 7:(8) pp. 9960-9972.
- Dudás K. (2006): A környezettudatos vásárlói magatartás elemzése. *Marketing & Menedzsment*, 2006/5-6. 106-113. o.
- Elks, J. (2013): Nike, Inc. Unveils ColorDry Technology and Facility That Eliminate Water, Chemicals In Dyeing, *Sorce*: downloaded 10. february 2015. http://www.sustainablebrands.com/news_and_views/clean_tech/jennifer-elks/nike-inc-unveils-colordry-technology-facility-eliminate-wate
- Huang, H-C., Lin, T-H., Lai, M-C., Lin, T-L. (2014): Environmental consciousness and green customer behavior: An examination of motivation crowding effect, In: *International Journal of Hospitality Management* 40 (2014) 139-149 p.
- Internet 1: http://www.nikeresponsibility.com/report/uploads/files/FY12-13_NIKE_Inc_CR_Report.pdf
- Internet 2: <http://bettercotton.org/about-better-cotton/better-cotton-standard-system/>
- Internet 3: http://www.adidas-group.com/media/filer_public/2014/04/14/2013_sustainability_progress_report_fair_play_final_en.pdf
- Internet 4: http://www.elelmiszer.hu/eletmod/cikk/az_adidas_sem_szenyez_tovabb
- Internet 5: <http://www.edie.net/news/5/Adidas-supplier-upcycles-food-packaging-into-new-trainer-parts/>
- Internet 6: <http://www.statista.com/topics/1257/adidas/>
- Kirchgeorg, M. (2003): Nachhaltigkeits-Marketing: Eine internationale Perspektive, Lehrstuhl Marketingmanagement, HHL – Leipzig Graduate School of Management S. 21-31.
- Karstens, B. (2005): Vom Öko zum Nachhaltigkeits-Marketing, Eine kritische Literaturanalyse, Marketing und Management in der Lebensmittelbranche Diskussionsbeitrag Nr.2, München, S. 5-50.
- Leitner, K. E. (2004): Nachhaltigkeits-Marketing in der Schweizer Lebensmittelindustrie, IWÖ-Diskussionsbeitrag Nr. 106, Institut für Wirtschaft und Ökologie Universität St. Gallen, S. 1-16
- Meffert, H. (1995): Marketing, *Handwörterbuch des Marketings*, Bd. IV. 2, völlig neu gest. Aufl. S. 1472-1490.
- Nemcsicsné, Zs. Á. (2008): Consistency and „awareness gaps” in the environmental behaviour of Hungarian companies. *Journal of Cleaner Production* 16. 322-329. p.
- Odor, K. (2009): Analyzing environment-conscious attitudes in food economy companies, *Environmental and social responsibility*, VDM Verlag Dr. Müller, Saarbrücken, Deutschland,
- Papaspyropoulos, K. P. – Blioumis, V. – Christodoulou, A. S. – Birtsas, P. K. – Skordas, K. E. (2012): Challenges in implementing environmental management accounting tools: the case of a non-profit forestry organization, In: *Journal of Cleaner Production* 29-30. 132-143.p.
- Perrini, F. (2005): Building an European Portrait of Corporate Social Responsibility Reporting. *European Management Journal* Vol. 23, No. 6, pp. 611-627
- Szolnoki Gy. né K. M. (2005): Az ökomarketing szerepe, jelentősége (1. rész) *Gazdálkodás*, XLIX. évf. 3. sz. 31-47. o.

