SPORTING GOODS MANUFACTURERS' RESPONSIBLE BEHAVIOUR IN SPECIAL REGARD TO ENVIRONMENTAL PROTECTION

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ABSTRACT

The condition of companies' long term viability and competitiveness is to realize that they have an indisputable and untransferable responsibility for their environment and for the society. In the last three decades the acceptance of corporate social responsibility (CSR) improved a lot, especially in the developed world. Organizations are facing pressure from governments, international agreements, society and various stakeholders, to improve their behaviour towards the natural environment. Companies try to reveal social and environmental connections proactively in order to the solution will be built in their good practise.

The aim of this study is the conceptual clarification of corporate social responsibility, next the analysis of two top sporting goods manufacturers' (Adidas Group and Puma) CSR activity in special regard to their environmentally conscious behaviour with the help of data gained from their web sites, reports, case studies.

1. Introduction

Nowadays no one calls into question the economic role of companies, however, it is not enough if a company successful only in economic terms. Because the problem of sustainable development comes to the forefront, it is expected the companies to integrate social and environmental concerns in their business operations as well as in relations with the stakeholders in addition to the profit and the satisfying customer. All economic actors have to contribute to the solution of the problem. The companies can only answer to the criteria of sustainable development (Ráthonyi, Ráthonyi-Odor 2015), if they redefine their roles and incorporate social and environmental requirements of sustainability in their strategies. The corporate social responsibility can define as a movement of corporate behaviour in a new direction. Corporate responsible behaviour increasingly gained attention in public debate, entrepreneurial networks, corporate communication and academic research (Hediger 2010). Today social responsibility goes far beyond the "philanthropy" of the past, it is about the business contribution to sustainable development and about proactive solutions to societal and environmental challenges (Vasilescu et. al. 2010).

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 behavior?
- 2). What kind of environmentally conscious activities do top sporting goods manufacturers (Adidas, Puma)?

2. Materials and methods

In the conceptual clarification of corporate social responsibility we relied on international special literature. (EC 2001; WBCSD 2002; Waddock 2004; Hediger 2010; Walker, Parent 2010).

For the analysis of Adidas Group and Puma 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.

3. What is corporate social responsibility?

Although the notion of corporate social responsibility (CSR) is prominent in some of the current discussions and investigations about the role of business in society, the concept is not new.

As an important proponent, the World Business Council for Sustainable Development (WBCSD) defined CSR in general terms as the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce (WBCSD 2002).

In an analysis of different interpretations of CSR from the business community, Hediger (2010) emphasizes that according to Holme and Watts (2000) CSR is no longer seen to represent an unproductive cost or resource burden, but, increasingly, as a means of enhancing reputation and credibility among stakeholders. Accordingly, they understand CSR as representing the human face of the highly competitive world of commerce and globalization.

For the European Commission (2001), CSR is a program where companies decide voluntarily to contribute to a better society and cleaner environment. It is seen as an option where, along with their prime responsibility of generating profits, companies can contribute to social and environmental objectives, through integrating corporate social responsibility as a strategic investment into their core business strategy, their management instruments and their operations. For Walker, Parent (2010), CSR implies that businesses are responsible for assessing their wider impact on society and regardless of specific labelling, the concept has been applied to how managers should handle public policy and other social issues.

Accordingly, Waddock (2004) claims that CSR is the subset of corporate responsibilities that deals with a company's discretionary relationships with its societal and community stakeholders. These demands on businesses to address and respond to social concerns have become an instrumental aspect of the majority of modern business models.

The different definitions are similar in that regards that healthy and sustainable balance among economy, society and environment must be created in the business.

4. Results

4.1. 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 (Statista Dossier 2014).

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.

4.1.1. Product

Since the company introducing the DryDye technology in the 2012 collection, they have increasingly integrated it into their Sports Performance products. 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' (Adidas Group 2013).

The Adidas low-waste initiative, which aims to maximise performance while minimising waste, made great progress in 2013. The programme focuses on pro-

ducing 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. 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 Group 2013).

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 (BCI 2015). 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.

4.1.2. Planet

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 'framas'. Adidas have had a long and fruitful business relationship with 'framas'. 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, 'framas' 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 (Maxine 2014).

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. 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 centres – bringing the total number of certified sites to twelve. They plan to extend certification to additional sites in 2014.

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. 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 (Adidas Group 2013).

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. 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.

In connection with IT infrastructure they highlighted the next milestone in 2013 (Adidas Group 2013):

- Workplace e.g.: 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.
- Data centre e.g.: 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 e.g.: 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' e.g.: 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, however, they don't notify so many true data. Even so there is no question their responsible behaviour.

4.2. Puma

In the Internet we found PUMA's up-to-date annual reports about 2013. The main chapters of the Report are about company overview (mission, brand, sustainability: strategy, social sustainability, environment, employees), group management report, consolidated financial statements, report by the administrative board, GRI index. 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 targets in different fields (e.g. consumer engagement, suppliers, raw materials, climate change and CO2 emission) and some of related action and specific examples.

Raw material stage accounts for 57% of the environmental impact measured in 2010 (Meyers, Waage 2014). The raw materials of leather and cotton had high impacts on biodiversity and CO2 (leather) as well as biodiversity and water (cotton). That is why they looked into options to reduce the negative impact from the creation of these raw materials. Puma advised their footwear suppliers to purchase leather from nominated leather manufacturers who are certified members of the Leather Working Group, an industry led association of tanneries and leather manufacturers. The Group has developed a certification and traceability system and rates their member tanneries accordingly. Puma was named the 4th largest consumer of organic cotton worldwide in 2013 by the industry association Textile Exchange. 38% of all the cotton used in Puma's apparel produced in Asia was of organic origin, and over one third of all cotton used on a global scale by Puma was organic cotton.

According to the fact that products are manufactured in Asia and consumed in various markets around the globe, including the USA and Europe, the transportation of goods remains a key source of indirect CO2 emissions. There was a slight increase of 3,5% in 2013 vs. 2012 on a global scale across all transport categories. In the Report they analyse the different means of delivery (roadfreight, railfreight, seafreight, riverfreight, airfreight) (Puma 2013b).

In November 2011, Adidas Group, C&A, H&M, Li Ning, NIKE, Inc. and PUMA released a joint roadmap towards zero discharge of hazardous chemicals in the supply chain by 2020 (Puma 2014). Puma made its contribution by delivering a case study on the substitution of hazardous chemicals with a more environmental friendly alternative. The full case study about their results and efforts can be found in the Internet. Puma has regularly updated its product related environmental standards to ensure that international product safety regulations are complied with appropriately. Puma requires testing of materials before they are delivered to production sites. In the Report we can find detailed information about what kind of chemicals were used and how many rate they managed to reduce them from 2012 to 2013.

In 2013, Puma's total energy consumption increased by 7,5% compared to 2010 due to increased business activities. On a per FTE (full time employee) level it decreased by 4,2% and energy consumption declined by 2,5% over the last three

years when measured against turnover. The energy share from renewable sources remained relatively stable at 10,8% (Puma 2013b).

The main input material that turns into waste for their offices, stores and warehouses is paper and cardboard. Compared to their baseline, overall waste production per employee decreased by 35% in 2013, while the recycling rate of their waste remains high at a level of 59,6%. They have already reached their 2015 waste reduction goal in 2013, so they now focus on reducing waste at their supplier factories.

The consumption of paper for office purposes has been reduced by 29,7% compared to 2010 baseline. More than half of Puma's office paper and the vast majority of cardboard used in packaging is already either sourced from recycled paper or paper from certified sources.

In 2013, PUMA continued collecting environmental key performance indicators including energy, waste, water and CO2 emissions for their footwear, apparel and accessories product divisions. In order to do so, they engaged with their key production partners and asked them to complete online questionnaires linked to Puma's environmental management software Enablon. In addition to this, Puma supports its key suppliers in establishing their own sustainability strategies as well as reporting to the public on the progress and challenges while implementing them (Puma 2013b).

PUMA tries to increase their costumers' responsible behaviour with the help of the next activities:

- Bring me back program: By taking old clothes and reusing, recycling, or repurposing them, Puma mitigate the amount of virgin material that would otherwise be used to make new products. About 98% of goods returned are recycled or reused, with only 2% (those in very bad condition) sent for incineration. This is a significant improvement on the usual destination for footwear and apparel that has reached the end of its useful life, namely landfills. Puma has collected approximately four tons of used goods so far (Puma 2015).
- Plastic bags recycling: The 2013 America's Cup Finals in San Francisco was an opportunity for an initiative to recycle plastic polyethylene bags. Over the course of this three-month event, retail staff and customers collected approximately 50.000 polybags. These used plastic polybags were recycled into four park benches and will be donated to two San Francisco schools.
- InCycle collection: After an InCycle product owner has worn the item, they can return it to a Puma Bring Back Bin. From there, InCycle products in the biological cycle are sent to an industrial composting facility, and those in the technical cycle are sent to a recycling facility where they can be reprocessed into raw materials that will be used to make new products. Puma conceived InCycle as an innovative challenge to be the first in the industry to launch a full collection of Cradle to Cradle certified apparel, footwear and accessories and they are thrilled with the media, industry and consumer reception. In November 2013, Puma was awarded the New Innovator Award by the Cradle to Cradle Product Innovation Institute (Pasolini 2013; Puma 2013b).

In addition to the mentioned activities, in 2011 Puma established – as the first company ever – their environmental profit and loss account (E P&L) (Puma 2013a), which is a company's monetary valuation and analysis of its environmental impacts including its business operations and its supply chain from cradle-to-gate. This study also help them to focus on that areas (mentioned in this chapter) where the highest environmental impact can be.

According to the published data, it seems that Puma does special efforts to environmental protection in a different field. It was easy to find information, reports and case studies about these activities.

5. 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.

By the analysed two 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 and the Internet inform us detailed about their long term targets, activities related to them and the achieved results. Materials, reduce waste, cut energy, minimize water use, transportation are those areas which are taken into consideration. In addition to their own activities, in the last years companies began to monitoring their partners green efforts as well.

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