SUSTAINABILITY BENCHMARKING - THE CASE OF THULE



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EXECUTIVE SUMMARY

Climate change and scarcity of natural resources are the growing challenges for the present world. This results in a greater realization especially among the business communities to sustain the environment for future generation. The concept of sustainability is becoming a focal point for most of the companies. Organizations are more concerned about the ways to accomplish sustainability criteria but there is lack of commonly acceptable performance indicators for measuring sustainability which makes the situation more complex. Even the sustainability rating companies have no consensus on how to develop a joint sustainability measuring mechanism. The rating companies such as corporate knights, Newsweek, DEFRA(Department of Environment, food and rural affairs), EFFAS(European Federation of Financial analysts Societies, Dow Jones Sustainability Index, CRO, fortune, IFAC(International Federation of Accountants), Sustainability technologies initiatives, Green buildings and PERI(Political Economic Research institute) have identified different approaches to judge sustainable companies .So, a common set of key performance indicators based on the environmental and social issues have been finalized to benchmark sustainable companies. These KPIs (key performance indicators) and other activities have been analyzed in general sustainable companies such as IKEA, Starbucks, SCA, Nokia, H&M, E-ON and Adidas. It is concluded that these companies are considering the social and environmental aspects of sustainability as a part of their core business strategy. In the same way, the companies in the same business sector as that of Thule such as Patagonia, Shimano, Giant, Burton and Naturkompaniet have been explored. Among them Patagonia's performance regarding sustainability is worth mentioning. On the other hand, some companies are considering quality, durability advocacy etc to attain sustainability e.g. Burton, Shimano. Finally Thule's competitors such as Prorack, Montblanc, Atera, Uebler, Lowepro, Samsonite, Pewag, Yakima, Rud and Westfalia have been evaluated and it is revealed that Yakima is step ahead of others in dealing with environmental issues while some competitor are curious about the product innovation, safety recycling and community involvement.



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This thesis has been written as a part of the degree project course in the Masters program "Sustainable Business Leadership" at the School of Economics and Management, Lund University.

The course was based on the methodology of action learning and self-managed learning. The students were all assigned to an in-company project, having a role as consultants. This project constituted the main part of the course. As a minor part the students were responsible for organizing several learning events addressing relevant issues related to the in-company projects. The students continuously documented their learning in learning journals and participated in tutorials on these journals.

The assessments of the students were done partly on the written thesis, partly on the consultancy process and report to the client company, partly on performance in learning events and partly on ability to document and discuss the students' individual learning and development.



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1. MOTIVATION

Currently, there is a growing awareness among the general public about the environmental and societal issues. This is the reason apart from economical sustainability companies in different sectors of business are equally valuing the environmental and social aspects of sustainability. Some companies are far ahead of their competitors while considering the environmental and social responsibilities as a part of their core business strategy. Involving in these activities, companies not only earned good name for their brand but also promoted their products effectively. Realizing that sustainability would be a source of innovation in the future, motivated us to explore, how sustainable companies and Thule's competitors are taking measures to become environmentally and socially responsible.

2. INTRODUCTION

Climate change is one of the hottest debates of 21st century that is compelling the business world to change its traditional approach and take measures towards sustainability. A company is said to be sustainable if it is performing well from economical, social and environmental dimensions¹. In the traditional business approach the focus was how to increase the economic performance to become more profitable. Now situation is changed and there is dire need to think about the consumption of natural resources which wouldn't be abundant for future generations. Sustainability means different things for different people. According to latest Mckinsey survey more than 50 % of the managers consider sustainability as a management of environmental and social issues- which is important in a wide range of areas, including product development, reputation and business strategy ².

At present there is no clear vision about sustainability for most of the companies. Even some companies are going along in the right direction; still they are not fully aware off the entire sustainable process. Adoption of sustainability is a source of good reputation for most of the companies and every company is trying to argue that it is involved in the sustainable business practices. Some of the common reasons for considering the sustainability are as follows ²:

- Maintaining or improving corporate reputation
- Improving operational efficiency and lowering cost
- Meeting consumer's expectation
- New growth opportunities (new markets, products)



- Strengthening competitive position
- Leadership's personal interest
- Regulatory risk
- Attracting, motivating and retaining talented employees
- Meeting the expectation of distributors, retailers and others
- Pressure from non government organizations
- Alignment with company's business goals

2.1 Problem Statement

The quest for sustainability is compelling the companies to change the way they think about products, processes, technologies and business models. Companies lagging behind in the race of sustainability have convinced that it is vital for their future survival. Sustainability benchmarking is a broadly used technique to compare performances and practices in order to learn from the best. But, it is difficult to find 'who is the best', as sustainability ranking companies don't have generally acceptable KPIs (key performance indicators) to benchmark sustainability. So, benchmarking of sustainable companies and benchmarking of Thule's competitors is in itself a problem that we endeavour to address. For a company, like Thule which focuses on profitability and growth and not making sustainability as a part of its core business strategy, would face tough time if any of its competitors appeared to be the 'first mover' towards sustainability.

2.2 Research Objective

Our aim is to:

- Identify relevant sustainability benchmarking criteria for companies in general and for Thule's competitors
- 2. Identify the level of sustainability in leading, sustainable companies and in companies specifically relevant to Thule



3. METHODOLOGY

While writing this thesis our objective is to benchmark Thule's competitors based on sustainability criteria followed by the most sustainable companies. As we proceed, it is realized that there is no common mechanism to judge sustainability. So, we compelled not only to look for common KPIs (key performance indicators) used by sustainability rating companies to rank sustainability but also to explore various sustainable companies' efforts towards sustainability. A slight shift in the working approach is then carried to ensure that the work has not gone astray.

The appropriateness of a method depends upon the nature of the problem being investigated. The information extracted during the thesis study was not numerical in nature, so the suitable method was deemed to be *qualitative* (facts and claims presented in narrative form). The sources of information were written documents that include articles, research papers, companies' websites, annual reports and journals, on the basis of which *content analysis* is performed. "It is an approach to the analysis of documents and text that seeks to quantify content in terms of predetermined categories and in a systematic and replicated manner. It can be applied to a wide variety of unstructured information." ³

3.1 The Reliability and Validity of Thesis

In the generic context reliability and validity deal with issues about the quality of the data and aptness of the methods used in carrying a research project ⁴. Reliability tells how accurately research methods and techniques draw conclusion from the collected material. In our case we used inter-observe reliability which is applied to access the degree to which different observers show consistent estimates of same phenomena ⁵. This thesis is written by three authors and it decreases the possibility of misinterpretation of information and also we tried to cross check the information from multiple sources. Majority of the information is taken from reliable resources, such as Harvard Business review articles, books from Lund University library, articles form ELIN database, IEEE journals, official websites, sustainability reports from third party and master thesis conducted at Lund University.

Validity deals with the suitability of the method and addresses whether our research measures what we are suppose to measure ⁴. According to Mason "you should be asking yourself how well matched is the logic of the method to the kinds of research questions you are asking and



the kind of social explanation you are intending to develop." ⁶ The information we extracted is based on general conclusions derived on the base of subjective data, so qualitative method is more relevant for this thesis. At the same time the conclusion of our thesis reflects the appropriateness of our research method.

3.2 Limitations

- To some extent companies' information can be biased
- Restricted to the material available on the web
- Lack of information access through personal interactions with the companies
- Lack of numerical data over which quantitative analysis could be made
- Content analysis approach is inherently reductive, particularly when dealing with complex texts and can be difficult to automate or computerize

3.3Thesis Work Flow

The following approach is used:

- Analyzing how rating companies ranking sustainability
- Setting of most commonly used KPIs by the rating companies to benchmark sustainability
- Benchmark top sustainable companies regardless of the industry based on these KPIs
- Look for the activities on the basis of which companies claim to be sustainable
- Benchmark Thule's competitors and other companies belong to same sector around these KPIs and activities that perform regarding sustainability



4. CONCEPT OF SUSTAINABILITY & ITS CHALLENGES

The concept of sustainability is both very popular and ambiguous. It is considered as a strong belief of mutual care for the world, excluding unwanted environmental effects of development and more responsibility towards future generations⁷. However, this conception appears to be too vague to provide an adequate basis to build generally shared vision of sustainability ⁸. Defining and achieving sustainability has become one of the major policy debates in recent years. The term 'sustainable development' first came to public attention with the publication of the Brundtland Report (or 'Our Common Future') in 1987 and it has been widely discussed by international forums, academics, scientists, public sector institutions and private businesses ⁹. However, the focal point of the discussion was on the concept that has been structured around the World Commission on Environment and Development's ¹⁰ definition of sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" ¹¹. For the WCED, this process involves a change in which economic prosperity must be included with the environmental integrity in a way that preserves the culture of a society. Following the above interpretation, sustainability is a comprehensive approach which stresses the interdependence of the natural environment with economy and society – the 'triple-bottom-line'. So, ideally it is a strategy that supports economic benefits by taking into account environmental and societal impacts, as shown in figure 1, but for a long time in the past it was believed to be synonymous to environmental improvement ¹. In this thesis, as per our client's requirement, we emphasized on the environmental and social aspects of sustainability.

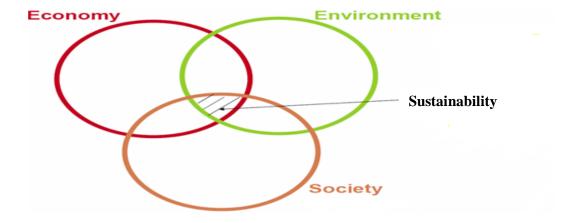


Figure 1: Three pillars of sustainability ¹²



In the existing world order, business corporations are making an impact on the society with a greater reach than ever before. Political leadership around the globe is convinced that only the productive economies could have better standards of living. A major thrust is on boosting economics and commerce. In today's modern business where knowledge based industries are beginning to dominate, it is widely accepted that more agile, customer focused, innovative and dynamic firms will have better future. Corporate world and academics are much closely coordinating for fast and systematic commercialization of latest researches. It is therefore imperative that corporations will have to get more inclusive with respect to aspirations of different stakeholders and more accountable towards society at large. These corporations will need to get integrated with society with an appeal for leadership. Leadership in sustainability can be analyzed in detail by understanding the dimensions and levels of sustainability shown in figure 2. The figure shows dimensions (ecological, social and economic) in the x-axis and levels (survival sustainability and maintaining & improving quality of life) in the y-axis.

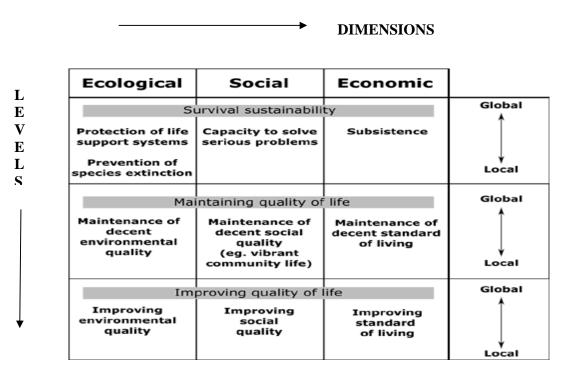


Figure 2: Dimensions and levels of sustainability¹³

In the survival sustainability some measures are imperative to protect life on planet, while at the second level, a minimum level of quality of environment and community is preserved. At third level, not only existing quality of life is maintained but also measures are taken to improve the quality of life.



For an industrialized nation technological advancement and increase in raw material has been a vital source for economic growth but in future some dynamics of production, such as labour seems declining as compared with rapid growth of the past. This upshot on growth depends upon the interaction of three factors, declining marginal productivity, finding alternatives and technological advancement. Declining marginal productivity favours the above argument but technological advancement and other alternatives interplay in another way. One way is to limit the technological advancement is to secure more resources, whereas modernized technologies can smoothly lead us to better alternatives for sustainable growth. According to Tietenberg, 14 environmental controls has not affected the market economy to a big extent and environmental policy has promoted a little increase in price and minor reductions in growth but controlling climate change can affect both price and growth. At the same time environmental policies has created more job than the cost it bears. So, general perception is that environment will contradict to the economy will not prove right. Economy can be transformed and current level of welfare can be sustained by two important factors decrease in population growth and increase in importance of information. There is a need of sound social behaviour as a stakeholder or social member for corporate sustainability to resist if something posing threat against sustainability. Another important question that needs immediate attention is whether industrialize countries made their citizen more prosperous and long lived? If yes, then what about the long lasting threat for their future survival and what is expected to happen in near future with conventional and hazardous pollutants? So, this growth may benefit a small portion of poor population but not to all. Developed counties provide equal opportunities in health, nature, economy, social education and in other welfare areas. The path of exclusive industrial countries cannot be followed blindly as it sets off brutal global environmental problems. For sustainable development, there is a need of common platform both for nations with high and low income. Conflicts and clash of objectives among the market systems (or industrialist) and environment protection agencies also need an immediate attention to meet the challenges of sustainability.



5. BENCHMARKING

Benchmarking is the process of comparing the business activities, techniques and methods to those that are believed to be the best. It is the most common activity that has been practiced by many organizations around the world. The aim of organizations to stay ahead of their competitors by outperforming in processes and being efficient in terms of using their resources which further elaborates the importance of benchmarking. New trends have been adopted by various companies as a result of continuous engagement in reviewing the outside environment and taking market changes into account ¹⁵.

Benchmarking facilitates to identify the deficiencies in the business activities of the organization and helps them to proceed with improved plans that other companies use to optimize their processes and procedures. It helps to align the improved activities with the goals and objectives once being set ¹⁵⁻¹⁶. It acts as a source of creating a learning culture and tells about the change. According to Randall Grayson "We continually seek to improve; we haven't cornered the market on good ideas; our existing systems, methods, and ideas are continually open to change; change is good and we welcome it; we continually look outside ourselves for fresh inspiration; we freely adapt and adopt the most useful ideas we find; we want to meet and beat the best known performance in any process" ¹⁶. The process of bench marking involves a series of steps that are mentioned below¹⁷.

- Identify the processes for doing benchmarking
- Agree on what to benchmark
- Agree who you'll benchmark against
- Analyze the chosen processes in your peers
- Develop a gap analysis
- Develop an improvement plan/activity plan
- Review progress and re-benchmark.

5.1 Benchmarking For Competitive Advantage

The start of 21st century triggered the technological advancements, brought new opportunities and initiated the liberalization of world markets. This resulted in demands for innovation, quality and speed. Different organizations in such a competitive atmosphere have to re-adjust and realign their operations to tackle all these challenges. The pace of change has



increasingly compelled organizations to be more outward looking, market oriented and knowledge driven. A useful way to build strong business capabilities facilitate an inward flow of ideas and establish true competitive gaps is benchmarking. A global survey, carried by the European Centre for Total Quality Management (UK) to assess the trends and future directions of benchmarking and the transfer of best practices. A total of, 227 organizations from 32 different countries participated in the study, all have involved in doing benchmarking. The organizations participated had a wide cross-section of sectors, ranging from private and government agencies to environmental management services and auto parts manufacturers. The survey focused on current trends in benchmarking and finalized some aspects that will affect its future; they are mainly from the area of information technology and globalization. These factors were taken an opportunity rather than threat by most study participants ¹⁸.

5.2 Problems With Benchmarking

The following are the problems with benchmarking ¹⁶.

- Data is not directly accessed for the process being measured and analysis becomes subjective
- No peer group/best practice is clearly identified (including data available)
- The gap between prevailing state and best practice is acknowledged but nothing is done about it
- The best practice supposed isn't proved to be the best practice
- Benchmarking comes as one of the events and not reassessed regularly

5.3 Companies Rating Sustainability- An Over view

We are taking the following sustainability rating companies to analyze general sustainability trends.

Corporate Knights

Corporate Knights is a quarterly Canadian magazine devoted to the promotion of responsible business practices within Canada and the progression of social and environmental sustainability wide-reaching with mission to bring together all the sectors to recognize ways to help the market to work for betterment of the environment, society and economy.



Corporation has good reputation for its annual rankings, predominantly 'the Best 50 Corporate Citizens in Canada' and 'the Global 100 Most Sustainable Corporations' ¹⁹.

Newsweek

It works in partnership with three research groups KLD Research & Analytics (tracks environmental, social and governance data on companies globally and served as leading partner) Trucost (specializes for measuring environmental performance) and CorporateRegister.com (the world's biggest online directory of CSR, sustainability and environmental reporting). Their major goal is to access each company's actual resource use and emissions, policies and strategies, along with its reputation. In the ranking list, 500 largest U.S companies are included which are divided into fifteen areas, based on the FTSE/Dow Jones Industry Classification Benchmark ²⁰.

EFFAS (European Federation of Financial Analysts Societies)

EFFAS is a Pan-European alliance of the National Societies of Financial Analysts. EFFAS's KPIs for ESG (economic, social and governance) are general i.e. can be applicable to all sectors and sector-specific i.e. applicable to specific sectors ²¹.

Dow Jones Sustainability Indexes

The Dow Jones Sustainability Indexes is a cooperation of Dow Jones Indexes, STOXX Limited and SAM Group. The DJSI family set foundation for trustworthy sustainability benchmarks. SAM Indexes GmbH acts as functional unit for the Dow Jones Sustainability Indexes (DJSI). ²²

DEFRA (Department for Environment, Food and Rural Affairs)

DEFRA serves as public department in the UK. Healthy environment is an overarching challenge for DEFRA to secure future generations. As to build a low carbon, resource efficient economy, DEFRA facilitates individuals to acclimatize to changes, deals with ecological threats to secure a sustainable society with healthy environment ²³.



CRO

CRO is a Corporate Responsibility Magazine publicized its 11th yearly '100 Best Corporate Citizens List', known as the world's top corporate responsibility rating based on widely available information. PR Week, which is one of America's top three most-important business rankings, recognised CRO ²⁴.

Fortune

Fortune is a global business magazine that holds good name and reliability since 1930. Fortune magazine is particularly known for trustworthy annual rankings of companies. The 'Fortune 500', and the 'Best Companies to Work For', both have become industry standard. Fortune is award-winner for its reliable source of integral knowledge ²⁵.

IFAC (International Federation of Accountants)

It is a global organization for the accountancy profession. It is known for developing high-quality international standards that encourages strong moral values and supports quality practice in the business world ²⁶.

Sustainability Technologies Initiatives

It provides free web-based service for companies to attain sustainability benchmarking. Companies are assisted how to measure finest practice and to get benefit from valuable management tool. The STI is a programme with objective of improving UK business in context of sustainability while focusing economic growth, environmental protection, natural resources utilizations and betterment of society ²⁷.

Green Buildings

Sustainable design is the prime concern of Green Building Pages, Inc. It provides web based decision making tool for environmental and socially responsible building industry. Since 2003, "its mission has been to create a clear, concise, public format for communicating comprehensive, current, and transparent information to enable users to make informed



decisions in choosing building materials that care for health and whose production and manufacture processes promote environmental responsibility, social equity and economic sustainability" ²⁸.

PERI (Political Economic Research Institute)

Research, broadcasting, policy advising, ecology and social welfare are focal point for the Political Economy Research Institute (PERI). PERI published a list of most toxic companies 'THE TOXIC 100' keeping in view environmental aspects ²⁹.

5.4 Sustainability Benchmarking KPIs

The following KPIs (Key Performance Indicators) are identified with a main focus on environment and society.

Energy Efficiency: Energy is an important factor for socio-economic growth, however energy generation and its use is also a key element from an environment perspective. Energy efficiency, is defined as percentage of total energy input to a machine or equipment that is consumed in useful work and not wasted as useless heat. So, for sustainable development, the major challenges requires in the world's energy system is to bring new technologies to the market for more efficient use of energy, increased utilization of renewable sources of energy, environment friendly transport mechanisms and the implementation of next generation technologies to use fossil fuels ³⁰.

GHG Emission: Green house gases in the atmosphere absorb and emit radiations within the thermal infrared range and its contribution greatly affects the temperature of earth surface. Climate change due to green house gases emission is one of the major issues that affect the entire planet. According to Stern review, "climate change will have massive impact on national economies worldwide if we are not able or unwilling to prevent it". ³¹ Since the economic, social and environmental impacts of climate change cannot be precisely measured; there is cause to act according to principle of caution, prevention and sustainable development ³¹.

Waste Efficiency: Waste materials do not add value to the finished products and customers don't want to pay for that. So, the objective is to reduce the waste by increasing the



proportion of value added activities. From this point of view, waste recycling is closely related to sustainable development and it focuses on re-usage of used resources ³².

Water Efficiency: It is an indicator of the relationship between the amount of water required for a particular purpose and the amount of water used or delivered. Water as a resource is undergoing stress around the world and that is a challenge for businesses which are based on water accessibility. So, as a matter of managing business it is necessary to recognize the importance of global water strategy ³³.

Environmental Goal/Policy: It is a public statement of an organization's philosophy, intentions and objectives regarding the environment. To make aware about the environment, business processes started managing data relevant to environment. This data is use to monitor energy consumption and green house gas emissions. The data from the environmental sustainability dashboard can help businesses to become aware of their impact on environment, so that they can choose environmentally sustainable business policies and practices. After these policies and practices are in place, business can use their dashboard to track and display their effects ³⁴.

Contribution in Social Activities or Corporate Social Responsibilities (CSR): The organisations involve in CSR practices are focusing on the societies' interest by enhancing community growth and try to eliminate harmful practices despite of legality issues. In today's scenario investors, employees, consumers and other stakeholders have become more aware about the good corporate behaviour. In this new business environment a company's reputation becomes one of its valuable assets and CSR becomes one of the key components of corporate reputation ³⁵.

Employees' Training/Education (Other Benefits): Employees should have access to comprehensive employee benefit plans & solutions available in the market through company's Employee Benefit Administration programs like training, education etc. A quality workforce is an important for business to be successful. In emerging markets to attract and retain well qualified and committed workers can be significant. Fair wages, clean and safe work environment, training opportunities and health and education benefits can help to make a company more profitable by increasing productivity, reducing absences and lowering cost of recruiting and training staff. ³⁶



Unethical Activities: Strong ethical policies that go beyond upholding the law can add great value to brand, where as failure to do right thing can cause social, economic and environment damage, undermining company's long term reputation and prospects in the process. Once they adopted ethical approach, companies will often find there are bottom line benefits from demonstrating high ethical standards ³⁷. This applies to all aspects of business conduct and is relevant to the conduct of individuals and business organizations as a whole like child labour, wage equity, transparency etc.



6. STUDY OF SUSTAINABLE COMPANIES

6.1 H&M

Hennes and Mauritz AB (H&M) involves in designing and retailing fashions for women, men, teens and children. They are taking responsibilities regarding effect on environment and society through their products. They continuously work on the quality of products from design stage to the whole manufacturing process by using sustainable material and always test the new ones. Right now, for them, the most important sustainable material is organic cotton which is extracted without using the chemical pesticides and fertilizers ³⁸. Recently H&M is criticized in the German edition of the financial times for using GMO instead of organic cotton; but the spokesperson from H&M says that there is no reason to believe that organic cotton used in the garments is grown with GM seeds, despite APEDA's criticism³⁹.

The growing demand for green products forced H&M to use sustainable material in their products which also add more profit for them. The product in the H&M's collection goes to number of quality test. H&M believes in open dialogue with customers, stakeholders, media and stock markets. They faced challenges for minimising their emissions in transporting goods. For achieving this goal they are working in partnerships with environment friendly transport companies by combining air freight with rail freight and optimizing the transport facilities by using renewable fuel and cleaner energy solutions. They have also drawn up environmental guidelines for the purchase of shop fittings e.g. PVC material is avoided in their interior design as much as possible. H&M uses all communication channels for advertising. H&M publishes magazines which offer readers mix of fashion, inspiration and latest lifestyle trends. It has its own face book page where they use to communicate with people. It also has contact with media to provide information about H&M. Their website also strengthens their brand value and act as a source of invitation for customers to visit their stores and shop online or by catalogue ³⁸.

These are the prerequisites for the H&M for continuing their growth and profit. They support communities at the time of crisis. They make direct contribution to emergency relief efforts and humanitarian aid. H&M always administrates its support through UNICEF which is one of long standing community partners. The donation includes samples and those garments which do not comply with H&M's quality standard; however they said they never donated clothes which don't meet safety requirements ³⁸.



H&M use to market their products and services through various channels but it seems that they are not showing much transparency about their activities and criticised about their production chain and unethical activities like child labour, employee benefits.

6.2 Starbucks

Starbucks cooperation operates retail locations worldwide and sells its own brand of coffee through its sales group, direct response business, supermarkets and on the World Wide Web. Their main goal is to grow coffee under highest standards of quality, using ethical trading and responsible growing practices. They are practicing fair trade coffee purchasing activities. They are working directly with farmers to develop responsible growing methods and investing in their communities for supplying coffee of good quality. They are increasing loan guarantees for helping the farmers to grow coffee in a sustainable way. Starbuck is also giving attention to reduce waste that is mainly involved in the recycling process. They are emphasizing simultaneously in two directions i.e. by developing recyclable cup solutions and encouraging customers for using their own reusable cups by offering them discounts mainly in the U.S and Canada ⁴⁰.

They support supplier diversity program through which various suppliers who are interested in doing business with Starbucks should meet some predefined criteria and starts working as their suppliers. As water is key ingredient in most of their beverages, so for using water efficiently they have started implementing dipper well systems for cleaning utensils. They are also continuously taking efforts for new water saving technology in their equipment specification like mechanical dish washer or by using a blast of higher pressure water to clean blender pitchers instead of an open tap. They are developing new strategies for energy conservation process by purchasing renewable energy for 20 % of electricity in US and Canada and also investing in new lighting and improving the efficiency of heating, ventilation and cooling systems. With the help of conserving international relationship they are facilitating farmers to access carbon markets and allowing them to earn additional income while helping to prevent deforestation. They are also strengthening their coffee supply chain by collaborating with others in the coffee industries, international parties, NGOs and public agency to address challenges to coffee farmers and their communities 40. They always conduct surveys to the customers for getting feedbacks and insights for the further opening of stores. After listening to their customers they decided to use milk which contains less fat.



This change was first implemented in US and Canada and now they are moving outside of North American markets ⁴¹.

Starbuck recently faced criticism for the fair trade and large environmental foot print i.e. they always tell that their all coffee brands are fair trade certified but in reality only one of coffee brand is fair trade certified ⁴² and secondly that company's disinterest for the recycling process by showing the display board for nearest recycling centre to decompose waste cups rather than supplying recycling bins on their own ⁴³. It seems that at some occasions Starbucks exaggerate about their environment related practices which can be considered as green marketing. For this reason they are criticised for wastage of water, fair trade coffee practices, recycling process etc.

6.3 Adidas

Adidas AG manufactures and markets sports equipment, including footwear, sports apparel, and golf equipment worldwide. In 2009, Adidas AG included in the Dow Jones Sustainability Indexes for 10th consecutive time. It was a thorough analysis of corporate economic, environmental and social performance, governance, branding, climate change improvement, supply chain management and labour issues. In views of Herbert Hainer, Adidas Group CEO and Chairman, this achievement was recognition of their efforts to work on making social and environmental needs an integral part of their business ⁴⁴.

Taking into consideration, energy, waste, carbon, and water efficiency, Knights ranked Adidas' as 28th among the list of most sustainable companies 2010. Waste productivity was the best in the consumer durables and clothing industry group, reporting figure of \$5,472,757 in sales per ton of waste produced. It also placed in the 96th percentile for water productivity ⁴⁵.

For Adidas green products means that it is not using raw material from any endangered animals and the company restricted policy states that suppliers must avoid using substances harmful to the human health and environment. Material used for green products are hemp organic cotton and recycled polyester. To get high level of satisfaction it began a project with five other companies to create a common tool to audit suppliers. It believes that the best way to influence the environmental impacts is to encourage its suppliers to use environmental management systems and has made it mandatory for all of its core suppliers. Adidas develops



training programs and guidelines for the suppliers (where 95% of its products are manufactured) to reduce environmental impacts that are produced by them. It has vision and strategy to reduce energy utilization and GHG emission by minimize usage of VOC (volatile organic compounds) and PVC along with wastes reduction and saving water. SEA (social, environmental affairs) is a department of the Adidas Group that develops sustainability policies and promotes social and environmental awareness throughout the company and its supply chain. Company focuses on material selection policy, sustainable cotton research, recycling rubber, laminating PVC and control and monitoring of restricted substances.

Adidas regulates labour law to provide the workers fair conditions and also a member of Fair Labour Association (FLA). Company's media campaign, especially TV commercial to market their sustainable brand is highly influential and effective to have good market share. In managing community affairs program, the Adidas Group has adopted a largely decentralized and brand-oriented model for community involvement practices, recognizing that people better understand the needs and cultural sensitivities of their local communities.

Community involvement, which ranges from conventional community projects and cause-related marketing initiatives to immediate relief efforts for people in need employee involvement, which supports community affairs goals and objectives by providing meaningful opportunities for colleagues to engage with the communities, where donations can take the form of financial contributions, product contributions, know-how and services. Along with other community development programs, Adidas started 'Education and Infrastructure Program' in Pakistan from where it collects handmade foot balls and health care project in Vietnam ⁴⁶. At brand level, Adidas Group is intended to support children and young adults round the world by engaging with local communities. ⁴⁷⁻⁴⁸

Along with good reputation Adidas has been criticized by a major reports by Oxfam and trade unions released in 2004, cited that Adidas regularly violates the rights of workers. Report highlighted that during peak production periods workers worked for 16 to 18 hours a day while female worker faced sexual harassment and forced to work overtime without pay. During hearings in 2000 with the European Parliament's Development Committee, it was reported that two Indonesian companies that produce goods for Adidas practice child labour. The Asia Monitor Resource Centre and Hong Kong Christian Industrial Committee released a similar report on Chinese factory conditions of major sportswear firms. On 23rd November 2000, Adidas boycotts EU (European Parliament in Brussels) ethics hearing as it was accused



of using sweatshop labour to produce its sportswear ⁴⁹. Adidas also lost better ranking by Knights KPIs as the company does not have a sustainability committee and does not link the remuneration of its top officers to sustainability criteria, also it has low transparency (percentage of data point at which company provided data and level of GRI disclosure) ⁴⁵.

6.4 SCA

SCA (Svenska Cellulosa AB) is an integrated paper and packaging company that produces and markets hygienic products, packaging and forest products. It has implemented a quantified CO2 reduction objective of 20 percent between 2005 and 2020. Company achieved sustainability award 2010 and ranked as 63 among the world's most sustainable companies rated by Knights ⁵⁰. In September 2009, SCA also ranked by Dow Jones Sustainability Indexes as one of most sustainable companies. Outstanding performance in brand management, environmental management and human capital development set high score for SCA ⁵¹.

SCA uses Resource Management System (RMS) to analyze data that describes energy, water, transport and raw material, waste and emission levels. RMS is also used for internal auditing, external benchmarking, and as an evaluation tool for purchasing. ⁵²

SCA taking measures to maintain its reputation by shrinking carbon footprints, adopting LCA approach, maintaining clean factories and developing innovative products. Company's environmental agenda is to reduce organic content in wastewater, efficient energy use, renewable energy production and control of all fresh fibre based raw material. It has more than 117 million hectares of forest worldwide in 82 countries that are FSC-certified (Forest Stewardship Council). It has great concern of fuel efficiency; almost 53% of SCA's fuel consumption comes from natural gas and 40% from bio fuel. Oil and coal account merely 5% and 1%, respectively, while majority of SCA's electricity: 73% comes from national grids, 27% comes from electricity produced in the Group's cogeneration plants. Company is investing in wind power as well as increasing the capacity of the Group's power plants.

In social sector company ensures human rights compliance, develops policy and associated documentation for blood borne virus infections, assessment of suppliers, continuous improvement of health and safety, retains and develops employees with the right skills. Company has an active social agenda linked to code of conduct. It conducts business



practices reviews in different countries, like Russia (2008), to review the company business ethics. Also, it introduced a whistleblower pilot in Asia that is a third-party code of conduct compliance and provides an alternative method for reporting violations.

Company's awareness campaign is very sound; it focuses different segments of society at different time, recently it started a public campaign involving students to give them awareness about green products. It was about a lesson in puberty. In January 2010, company introduced a consumer awareness magazine 'Sense' to depict that SCA's business vision is to serve the society ⁵³⁻⁵⁴.

So, when we analyze economic dimension of company, every action related to sustainability favours company's economy on short and long term basis. Its claim of efficient production and lower costs; good long-term business relationships and compete success for orders where customers require high levels of sustainability, all this contributes customers' satisfaction and company's future growth and stability.

6.5 Nokia

Nokia is a world leader in mobile communications. Its ability to integrate effectively innovative features into its products and delivering of secure solutions made it more prominent in the world mobile industry. It is among the world top most sustainable companies for taking measures to improve environment and corporate social responsibilities. It is using an Environmental Management Systems (EMS) and the ISO 14001 standard to control and manage the environmental aspects of its production sites and large offices. It has a corporate level ISO 14001 certificate in place for all manufacturing sites and also made EMS a prime requirement for all of its suppliers. It has an internally verified EMS in its large offices and R&D sites. The aim of the Nokia's EMS is to improve the environmental performance focusing on energy consumption, water consumption, air emissions, ozone-depleting substances, waste management and packaging. They effectively involved their employees to share best practices and to follow up global environmental targets. It includes people responsible for EMS from manufacturing sites and a representative from office sites. In the year 2008, they have made EMS as part of their quality management system.

PricewaterhouseCoopers (Nokia statutory auditor) performed a limited assurance engagement on selected Nokia's 2008 corporate responsibility information containing environmental



indicators in the areas of Nokia's own activities, products and supply chain. The selected corporate responsibility information consists of the following performance indicators in the areas of Environment, HR and Supply Chain. The environmental area includes facility related direct and indirect energy consumption and related greenhouse gas emissions, energy savings, green electrical energy portion of total electricity consumption, status of ISO 14001 certifications for its site. In the area of HR, performance indicators were employees in production, total training cost, Injury/illness rate in production, women in senior management, non-Finnish nationalities in senior management and voluntary attrition. In the area of Supply Chain performance indicators was percentage of suppliers having Environmental Management System (EMS) in place for sites serving Nokia, percentage of suppliers having reduction targets for energy, CO2, water and waste in place and monitored, suppliers' compliance with Nokia supplier requirements and supplier satisfaction survey procedures. It concluded by saying "based on our limited assurance engagement, nothing has come to our attention that causes us to believe that the Selected CR information has not been prepared, in all material respects, in accordance with the Reporting criteria (PricewaterhouseCoopers Oy)" 55.

On the other hand a group of shop stewards at Nokia in January 2005 accused the company for violating workers' rights. "They alleged that Nokia has adopted such obstructive practices that it has been impossible for them to perform their role as trade union representatives. Moreover, they argued that the position of surplus workers at the company is too miserable". ⁵⁶ Nokia has turned down much of the criticism but has assured to improve the position of shop stewards.

On the basis of the information provided on the company website and other resources, it is revealed that Nokia is trying to devise mechanisms to avoid harmful effects on environment. Its highest market share in the mobile industry justifies its claim about the product quality, durability and low cost.

6.6 Ikea

Ikea a Swedish based private owned firm is the successful mass-market retailer, selling home furnishings and other house goods in different countries. Its aim is to offer good quality products at a cheap price but not at any price. It has considered sustainability as part of its corporate strategy and taken a number of steps for the betterment of environment and society.



It has invested a lot of money in the renewable resources with a plan to provide with renewable energy in all buildings it owns. It is also working to introduce new bulbs that would be more energy efficient and in this regard it has spent huge amount on the research and development. It is quite innovative in making smart packaging that benefited them in terms of fewer shipments and hence low emissions. It is also trying to minimize the consumption of water both at the suppliers end and at its own production units. For this reason it is spreading new management practices in cotton growing areas in India and Pakistan, at the same time it is increasing the availability of certified wood, especially in strategically important wood sourcing regions such as China and Russia. It is trying to make sure that the wood that is used for making products has not been harvested illegally and no harvesting would be done in high conservation value forests. It has plans not only to reduce the amount of raw materials required for their products, but also to find alternative materials to avoid the depletion of valuable resources. In the transport sector it has actively involved in projects with Preem, H&M and Volvo Logistics, to facilitate the transport service providers to make the transit from fossil fuels to renewable resources. As a result of that a number of Preem fuelling stations were opened in Sweden during the summer of 2009 and they provide alternative fuel, Bio30, which contains a 30% blend-in of rapeseed oil ⁵⁷.

On the other hand it has been criticized for illegal harvesting of forests, although it says it has employed fifteen forestry monitors, and eight of them work in China and Russia, but illegal logging is widespread in those vast countries, making it impossible to guarantee that all wood is legally harvested. It has declined to ensure that all timber is legally harvested, citing costs that would be passed along to the consumer. Also it is blamed to transfer transport and energy costs onto consumers. It is said about its products like bookcases and chairs that once they break or malfunction it becomes difficult to fix ⁵⁸.

6.7 E.ON

E-ON is one of world's largest investor-owned power, gas & heat providers. It is fully devoted to reduce the environmental impacts of its global operations. It is proceeding with the environmental policy where it is considering all of the environmental issues. Its environmental management system (EMS) is certified under the criteria of ISO 14001 which is enforced for most of its operational units e.g. The UK, Nordic and Pan-European Gas market units are certified under ISO 14001 standards. In addition to that the Central Europe market unit follows the ISO 14001 standard as well as some EMAS requirements. It is



continually assessing water pollution, waste handling at the disposal and decommissioning of operational units especially nuclear wastes. It is investing a lot of money in the research and development to improve the environment on regular basis. At the same time the use of raw material and other natural resources are made sure to be used efficiently. It is trying to arrange environment friendly training sessions for its employees aiming at to promote the corporate culture. In the supply chain it is continually making efforts to inform suppliers and contractors to comply with the environmental standards ⁵⁹⁻⁶⁰.

Its CR reporting is based on the guidelines (G3) of the Global Reporting Initiative (GRI), including the Electric Utility Sector Supplement Pilot Version 1.0, available in February 2009. Company self assessment revealed that the CR reporting 2008 fulfils application level 'B+' of the GRI guidelines. This reflects its commitment that it is reporting on the indicators required by the GRI. ⁵⁹

It announced in the year 2007 climate protection strategy where it sets target to reduce specific CO2 emissions (i.e., grams CO2 per generated kilowatt hour) by at least 50 percent by the year 2030, compared to 1990 levels. The key area of the strategy was expanding renewable capacity, enhancing the thermal efficiency of conventional power plants, and deploying CCS technology in coal-fired power plants and to increase investments in the research, development of climate-friendly technologies and playing an effective role in championing nuclear power.

Critics said that E.ON declares that it is investing more in the renewable energy sources. But, renewable resources (excluding hydropower) would estimated to make up only 7% the energy mix by 2015, so it is hard to analyze how targets for 2030 as renewable are put together along with nuclear energy and hydropower would make up 50% of the estimated CO2-free energy mix. Secondly it says that new wind power plants need new coal-fired power stations as backup which is against the renewable policy. Thirdly biomass and wind power, the two of renewable energy sources where E.ON is investing have various environmental impacts; however, no concrete policies were devised for avoiding that. Fourthly it was argued that E.ON buys about half of its electricity from other suppliers, but there is lack of information about energy sources for its supplier's .Finally no information was provided on disposal of nuclear waste in Germany, and even no information is available on the company's website about planned new nuclear power ⁵⁹⁻⁶⁰.



6.8 Summary

Sustainable companies are focusing on environmental and social issues of sustainability. They are mainly considering energy, water and waste efficiency, selection of raw material, and reduction in GHG emissions to become sustainable. H&M is giving attention to its basic raw material i.e. cotton. It has started making garments with organic cotton. It is continuously working on the quality of products from design stage to the whole manufacturing process. H&M is also taking measures for transportation of goods; it is in partnership with environment friendly transport companies by using both air freight and rail freight and efficiently using renewable fuel resources. It markets products and services through publishing magazines and face book. The company also invests in communities at the time of crisis.

Starbucks mainly focusing on the practices of growing coffee in a sustainable way by providing loan to the farmers and practicing fair-trade coffee purchasing activities. It is trying to improve the recycling process by developing the recyclable cup solution and encouraging customers for using its own reusable cups. For efficient use of water it makes efforts to implement new water saving technologies for cleaning utensils. The company is developing strategy for low energy consumption by purchasing renewable energy resources and improving the efficiency of current electrical appliances. E-ON is one of the leading organizations for generating and distributing energy resources in the form of electricity. Their main focus is on generating electricity through renewable sources of energy like wind, solar, nuclear, biomass.

Both SCA and Adidas not only have clear targets and strategies regarding energy, water, waste efficiency and GHG emission but also has long term environmental goals and policies. These companies use Environment management tools such as EMS (Environment Management System) or RSM (resource management system) for organizational structure, planning and resources for developing, implementing and maintaining policies for environmental protection. They are running strong media campaign about green products by involving and investing in community development programs. SCA left no room for criticism but Adidas has been criticized for violating workers' right and practicing child labour.

Nokia practices environmental management systems and the ISO 14001 standard to control and manage the environmental aspects of its production sites and large offices. On the other



hand the growing awareness in the public about scarce natural resources led these companies to drive effective mechanisms so that there would not be any abuse of these resources. So companies like IKEA have developed new management system in cotton growing areas in Asia to minimize the usage of water. IKEA is also making efforts to avoid illegal harvesting of forests, but it has been also criticized for not making sure that all of the wood is legally harvested. Both the companies Nokia and IKEA are working to be more socially responsible. They are trying not to involve in the unethical business practices i.e. they provide proper wages and facilities to the employees and donating to charities. To avoid harmful effects as a result of productions, they are properly disposing off the waste and using raw material that can easily be recycled. Nokia has been audited by PricewaterhouseCoopers Oy based on the information in the areas environment, HR and supply chain. The audit report affirmed Nokia's commitment to be a socially and environmentally responsible company.



7. STUDY OF COMPANIES BELONGS TO SAME SECTOR OF THULE

7.1 Burton

Burton is one of the first companies that uses Ski technology applications with an intention to gain its snowboards the reputation of having the highest quality in the industry which they claim as "... an image that has never been lost" ⁶¹. It is actively participating in snowboarding events for its advertising. The emerging competition in the snowboard products in the recent years has made it realize to be more efficient in their operations and innovative in the product design.

Burton acquired companies and brands in snow /non snow related industries such as eyewear, luggage and even recently, surfboards. Even competing snowboard manufacturers were also consulted simply for the use of their technology, for example, in patented bindings. A short list of these companies includes Anon, RED and Gravis Footwear. None of these made products carry the Burton label or logo, but their products are included prominently in Burton Snowboards catalogue and Website ⁶¹. Although product quality and durability is the prime focus of Burton yet there seems no strong measure taken by the company to handle environmental and social issues.

7.2 Naturkompaniet

It is a retailing company, trying to emphasize more about the environmental issues. In making business decisions, it highly considers the environmental aspects. It is following laws, regulations and restrictions prescribed by law on environmental issues not only at the company's level but also constantly convincing its suppliers to follow them at their end. It is also striving to reduce its energy consumptions and encourages the use of renewable energy ⁶². It managed to have its own green logo named 'A greener choice' that tells that producer has made the right choice to make the product more environmental friendly. It doesn't guarantees that the product is entirely environmental friendly but it definitely notifies that producer has chosen to work with recycled and organic materials, the manufacturing process are free from hazardous chemicals, the product is energy efficient and recyclable and finally it has less adverse effects to environment ⁶³.



It is trying to introduce innovative ideas to be more sustainable but it has not mentioned in detail about the whole process, especially when it says that it has green logo (which verifies the product is environmental friendly or not) it didn't talk about its main features and specifications.

7.3 Giant

Giant Bicycle is one of the largest companies in the field of manufacturing bicycles. It is working with Microsoft Certified Gold Partner Advanced System Integration for incorporating warehousing, financial and sale management systems. This helps Giant to forecast demand and track the delivery of the goods. Through this implementation, there is increase in sales and penetration into professional cycling retailers throughout the United States and Europe in the past three years. This system also facilitates Giant in reducing waste through less paper consumption. To improve the relations and communications with bicycle dealers, Giant U.S. and Giant Europe branch created enterprise portal based on Microsoft dynamics AX Enterprise portal module ⁶⁴. By using the portal their distributors can order directly while they can place order with their suppliers through web. Due to this integrated system their stock reduced by 80 percent, labour costs is also reduced and there is a 95% in delivery reliability. ⁶⁵

Giant bikes introduces a great innovation and alternative for cars Twist Freedom DX an electric bike which looks like a regular bike and has a torque sensor to monitor pedalling and control 250 watt DC motor which is located at front side of wheel ⁶⁶. Giant's aluminium frames are custom welded by hand and has never reported the aluminium failure. Heat treating is one extra step that Giant takes to ensure frame strength and reliability. Giant produces everything under one roof from drawing to final shipping ⁶⁷.

From above information, it seems that Giant is focusing on integrating its various departments for better information inflow and outflow but not giving attention much on practices related to environment and social aspects involved in product life cycle.

7.4 Patagonia

Patagonia designs the outdoor clothing, outdoor gear, footwear and luggage. It considers environmentalism, sustainability and protecting natural environment as its main strategy to reduce carbon footprint ⁶⁸. For them, quality is the most important factor which includes



building products and working with the process that have least impact on the environment. Company evaluates raw materials, invests in innovative process and also adopts methods to reduce waste materials by using fibre to fibre recycling system to make new garments from old and in this way it takes measures for collecting and storing recyclables. ⁶⁹ It is using recycled polyester in many of clothes and produces organic cotton without using artificial fertilizer ⁷⁰. It donates a small portion of sales to the groups which are working to make a real difference in terms of environment.

Company used LEED certification (Leadership in Energy and Environmental design) for expanding its distribution centre in Reno, Nevada, for environmental balance, resource efficiency, comfort and well being of its workforce. LEED provides a framework which is used for assessing performance of buildings performance and meeting environmental goals. Though LEED focus on many areas, but Patagonia mainly takes action for managing stormwater runoff, intelligent landscape and exterior design, water efficient landscaping, minimizing water use, reducing energy consumption – (by installing photo sensor and motion detectors on light fixtures, the highest efficiency commercial boilers drive their radiant heat system, installed R30 insulation in the roof and R12 rigid insulation on warehouse walls to retain heat in winter and cool in summer, they are not using air conditioning in the warehouse by employing night flush vent system that replaces hot air of the day with cool air in the night, buying carbon offsets from Bonneville environmental foundation that gives any profit it makes to support the growth of renewable energy and protected watersheds), all of their wood products are FSC certified (Forest Stewardship Council), using as much as possible little VOC (Volatile organic compound- which react with sunlight and nitrogen in the atmosphere to form ground level ozone that results in smog) materials in their buildings, substituting natural lights for electric lights by using skylights that track the sun and translucent roof mounted smoke vents to reflect natural light in to the service centre 71.

Patagonia uses green seal certified non toxic products to clean the service centre and their all paper products are recyclable. It encourages alternative transport system, like secure bicycle storage, hybrid car for business use, additional incentives to car-poolers and limited the service centre's parking capacity. It also reduces light pollution by installing high cut-off exterior light fixtures ⁷¹.

Patagonia trains its staff to give them knowledge and understanding about social responsibilities issue. It is conducting refresher sessions annually for both new and seasoned



employees. Company hired a manager for monitoring company's social responsibilities activities. Patagonia's effort towards corporate responsibility is by making good relationships with the people who work in the factories that gear the work they trying to do and to ensure that Patagonia's products are produced under safe, legal, fair and humane working condition ⁷². Patagonia has shared his information about green mechanism of the supply chain with the Wal-Mart for free. It helps Wal-Mart for developing sustainability index ⁷³.

Although Patagonia is committed to implement environmental friendly strategy for new distribution centres yet it is not clear what are the plans and strategies it has for its existing centres. Its monitoring and transparency mechanisms occur in a closed system; this leaves room for corruption and collusion.

7.5 Shimano

Shimano manufactures and sells bicycle components, fishing tackle, and cold-forged products. Shimano is committed to advocate the prudent recreational use and conservation of natural environment keeping in view long term benefit of customers and company. It promotes cycling as an 'environmentally friendly' mode of transportation that can help to reduce urban traffic congestion. Recently, a research effort between industry (Shimano), university researchers (Arizona State University and Northern Arizona University) and government (Bureau of Land Management) was made and it provided model for resolving natural resource use problems. The study addresses the scientific understanding of recreation impacts in the development of sustainable environments, provides practical advice for sustainable riding and offers clear advice for policymakers ⁷⁴⁻⁷⁵.

Shimano started advocacy program to highlight the importance of properly designed trails. This is how the company connects itself closer to the sustainability. Shimano believes the science of trails that are properly designed and maintained. Company cashes the nature of product as riding a mountain bike is a healthy way to enjoy natural company's outdoor heritage.

Shimano's approach towards sustainability seems a bit different from other companies, as it started an advocacy program about environmentally responsible and sustainable use of public lands but it does not take serious measures to handle environmental and social issue through



its processes. Company has no environmental agenda regarding carbon emissions, wastes handling, recycling and energy efficiency.

7.6 Summary

These companies are manufacturing products related to outdoor activities. Giant manufactures bicycles and is responsible for the production life cycle activities. It has integrated all the departments through Microsoft Certified Gold Partner Advanced System Integration, so that they can have better forecast demand, tracking the delivery of goods, improving the relations and communication with the distributors. This system also helps to reduce the paper consumption which intern reduces the waste material for decomposition. Giant is implying in the production activities one extra step i.e. heat treating which helps to ensure the frame strength and reliability.

For Patagonia protecting natural environment is main strategy aimed at to reduce carbon foot prints. Quality through environment friendly raw materials is the most important concern for which it is continuously working. Patagonia follows the LEED certification as a guide for environment balance, resource efficiency, comfort and well being of its workforce.

For Shimano, sensible recreational use and conservation of natural environment to promote cycling as an 'environmentally friendly' mode of transportation can help to reduce urban traffic congestion. Shimano believes that properly designed and maintained trails leads to sustainable use of public lands and in this context company introduced an advocacy program.

Naturkompaniet makes effort for being more environmental friendly. It has managed to have its own green logo named "A greener choice" that tells that the producer has made the right choice to make the product more environmental friendly. It doesn't guarantees that the product is entirely environmental friendly but it definitely tells that producer has chosen to work with recycled and organic materials, the manufacturing process are free from hazardous chemicals, the product is energy efficient, the product is recyclable and finally it has less adverse effects to environment.



8. STUDY OF THULE'S COMPETITORS

8.1 Yakima

Yakima is a major player in the outdoor industry. Its products include rack systems, cargo boxes trailers etc. It has been engaged actively to drive means for the betterment of the environment. Recently it is executing a plan called Planet Payback where it has to compensate for the carbon footprint for all of its operations, products and their distribution, as well as its marketing activity, while company's remaining corporate activities is expected to be carbon neutral in the near future.

At the company's level the Planet Payback initiative not only facilitated to devise an obvious sustainability strategy but also enables its associates, consumers and channel partners to join hands to support the very important goals of carbon reduction and sustainability. It is also in cooperation with Carbonfund.org, which is a non-profit organization, dedicated to reduce carbon output and supporting renewable energy. Carbonfund has calculated Yakima's annual energy usage based on information provided about its products, product weight and distribution methods. The company is also considering buying carbon fund credits that would be equal to taking 1,675 passenger cars off the road for a year ⁷⁶.

It is also committed to wipe out the unethical practices throughout its operations. For packaging it is using recycled paper and its cargo boxes are made of seventy five to eighty percent (75-80%) recycled material. It is also arguing that its steel and plastic parts are actually recyclable materials. In marketing products, it is trying to attract eco-conscious consumers by putting carbon neutral stickers on its products; in addition, the point-of-purchase materials such as hangtags also act as to promote the company's commitment to sustainability. All its aim is that the customers should know about their efforts for improving the environment ⁷⁶.

Yakima is taking significant efforts for the betterment of environment by strongly emphasizing on carbon footprints, energy water and waste efficiency but on the other hand, it seems that it is not much involved in community development.



8.2 Rud

Rud is involved in snow chain business. It has an internal production quality system in the entire manufacturing chain. Later on, it has modified the quality and environmental management system according to DIN/ISO 14001 standards. It is also actively working for the promotion of education and awarding annually sponsorship prize to young talents. At the same time, it is donating money to charities and supporting children welfare projects. All of these activities are funded through the Trude Eipperle Rieger-Foundation ⁷⁷.

It has first-class training and schooling institution for all employees of the RUD Group to keep them update about the technical knowledge. Based on this reason, RUD with skilled and well trained manpower has managed high level ranking of its brands internationally ⁷⁷.

Rud is involved actively in the social activities specially donating money to charities and supporting welfare projects. It has maintained high quality standard for its products. However it is not fully considering the environmental impacts of its products.

8.3 Westfalia

It is manufacturing tow bars for use with cars and light commercial vehicles. The commercial success of Westfalia-Automotive depends on products quality, employees' performance and its obligation to fulfil the requirements of customers. That is the reason its management system is certified as per DIN EN ISO 14001:2005 standards. Westfalia is trying to prevent environmental damages caused by its operational activities while its aim to strive continuously towards constant improvement and increased efficiency in all processes is an important part of its corporate culture ⁷⁸.

Westfalia is working continuously to improve its product quality. It claims that it is trying to prevent harmful effects on environment but it has not clearly identified what mechanisms it has derived for environmental improvement e.g. energy strategy, disposing of waste, water efficiency etc.

8.4 Lowepro

Lowepro produces protective cases and backpacks for cameras, notebook computers and personal electronics. Its designers are very curious, passionate, disciplined and deeply involved in studying the photographers movements and try to invent solutions by



understanding the challenges faced by photographers like climate conditions, remote locations etc. According to them, for making long lasting and durable products require sourcing the toughest fabrics and material which are mostly non-renewable. But now trends are changing due to the awareness of global warming, so company's effort is to integrate materials that reduce the negative impact on environment. In 2007 they produced world's first camera backpack with 100 % post consumer recycled cyclepet. In this way they are increasing the environmental friendly product which contains 95% of recycled materials. ⁷⁹

When the life cycle of products comes to an end, they dispose them in the landfills. In case of fabrics, recycled PET fabrics are now available; these fabrics are much more costly than virgin fabrics, though the quality of two fabrics is same ⁸⁰. Company supports diverse group of non-profitable organizations whose mission is to protect and create awareness about creatures and communities. Lowepro also engage in partnership with Polar Bears International to raise awareness among the people about endangered polar bear habitats and effects of global warming. It involves and participates in many other programs like Amazon watch, Canadian Parks and Wilderness Society (CAPWS), Healing the Children, Native Planet, Conservation Alliance etc. Company also encourages photographers from Brooks Institute of Photography ⁸¹. In this way it is supporting photographers to document the effects of climate change having in our planet.

From the above information, it seems that Lowepro has initiated sustainable practices by using recyclable material but not considering other aspects of environment in the value chain e.g. transportation, efficient use of energy etc.

8.5 Samsonite

Samsonite involves in manufacturing and distributing luggage products ranges from large suitcases to small briefcases. Samsonite joined growing list of companies that are using SAP's (System Analysis and Program Development) Safe Passage Program - tailored package of solutions, technologies and incentives- to migrate to SAP (the world's efficient business software solution provider). Samsonite will leverage SAP's industry- leading retail, consumer packaged goods manufacturing and financial solutions to enhance its critical business processes, including global sourcing, distribution, transportation/logistics, product innovation, inventory visibility financial transparency and compliance ⁸². In this summer Samsonite has declared that they will release a new line of bags seemingly aimed at on- the-



go- green techies. For creating this, Samsonite will work with Ascent Solar, a Colorado company that has introduced itself in flexible and light weight thin-film PV technology. The CIGS (Copper Indium Gallium Diselenide) modules to be used in the Samsonite products which is light in weight and produces enough electricity to recharge small mobiles devices like cell phone, GPS navigator and media players according to Ascent Solar. The bag will be an eco friendly in nature not only because of the solar charging capabilities, but it will also made up of RPET (Recycled Polyethylene Trephthalate), a plastic that takes two-third energy less to utilize, two-third less of sulphur dioxide, 50% less of nitrous oxide and almost 90% less water usage than virgin plastic.[84] Last year Samsonite, the U.S retail sought bankruptcy protection from creditors, citing a decline in demand for travel due to recession ⁸³.

Samsonite has announced about its upcoming plan for the betterment of the environment e.g. making solar bags in this summer. But it is not sure when it will be going to implement it. Also it is not so much involved in social activities.

8.6 Pewag

Pewag manufactures different kind of chains. Company involves in manufacturing three main products i.e. industrial chains, traction chains and tire protection chains. The value of its demands is due to the good quality, innovations and their good communication methods. Company tries to adapt strategies, organizations and actions according to market demand and change in environment. It is also committed towards the environment by reducing the use of energy and raw materials, by ensuring the longevity of their products and making them recyclable ⁸⁴. Pewag is very concerned about the quality and safety. It is ISO 9001 certified, ISO 14001 certified and its products meet all international standards. Further company uses an ecological orientation for its product development, processes and distribution channels and include in their business planning ⁸⁵.

It is taking measures for reducing emissions, energy consumption during production, low weight chain which results less to transport trips and less material to be recycled⁸⁶. Thule was clearly the most active consolidator on hard good side with acquisition deal with companies like German trailer Rental Company, Pewag Schneeketen group an Austrian snow chain company, star industries a Swedish trailer manufacturer etc. But the company ran into some road blocks with EU cause Thule to cancel this agreement with Pewag due to trust concerns ⁸⁷.



Pewag's winner chain may be combined with all other competitors' chain and components if they are according to EN818 and EN1677 ⁸⁷. Most of the Pewag's chains are built with Titan Grip Technology like ASV truck chains, Brenta-C 4x4 light truck chains, Sportmatik SMX car chains etc ⁸⁸. Pewag's Grade 120 chain is an innovative new design chain that will likely revolutionize the industries i.e. 50% higher workload limits than Grade 80 chain, higher wear resistance, higher bending resistance, higher safety factors, and corrosion protection. But it was said that if domestic chain producers begin to produce Grade 120 chain, they would have to create new tooling for all various sizes of chains as well as all the associated hardware. By investing in the product development and mechanical engineering helped Pewag to design a chain-link with a wave profile. With this tooth effect the chain is more effective in frozen roads and its life time is also increased which gives a huge benefit to the customers ⁸⁹.

From the above discussion, it seems that they are pretending to be environmentally conscious but while looking at the information related to their innovative mechanism, it doesn't convey that they are actually implementing sustainable practices in their production cycle.

8.7 Atera

Atera is a German based company that deals in roof rack systems, bicycle carriers, roof boxes, snowboard carriers and water sports. Atera has ISO 9001 certification and claims that its products are environmentally friendly because plastic parts are completely recyclable by the EG-rules DIN ISO 1135 and certified by DIN ISO 75302 and TÜV ⁹⁰.

Atera doesn't talks about environment and social issues but it insists that its products are good in design and quality. It is not clear how Atera thinks about the quality, may be in terms of reliability and warranty but it is difficult to say that it is taking serious measures regarding sustainability.

8.8 Uebler

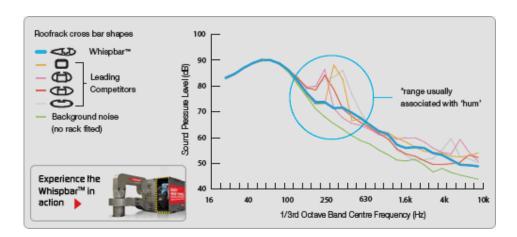
Uebler started its business by manufacturing ropes and later moved to tow bars, guards, assembling scooters, ramps, and finally ski racks and bikes. Today the company is one of the most innovative companies in Germany and provides customers the highest quality and ISO 9001-2000 certified products. For Uebler, product quality is the main focus as it received many awards in the recent years. "Most recently winning the clutch carrier Uebler P31 major ADAC comparison test in 2009 and goes against his seven rivals as a test winner in



confidence. In order to guarantee an excellent protection for years, bicycle rack is the same Primavelo protected twice: either high-grade aluminium with anodized finish or galvanized inside and outside and with a powder coating permanently sealed. The powder coating is UV-resistant and thus retain their natural splendour" ⁹¹. Uebler is focusing on product's quality but it is not valuing the social and environmental issues.

8.9 Prorack

Prorack-Australia mainly deals in roof racks. Company believes that it sells worlds quietest and most fuel-efficient roof racks. Prorack takes environmental issues seriously. It focuses on wind science and its engineers are working closely with consultants and universities to develop a technology that reduces noise. That is why its roof rack systems are extremely quiet and much better for fuel economy, saving consumer money while protecting environment ⁹². On an average, Prorack's Whispbar produces less than half the drag of its competitors. WhispbarTM is considered to be the world's greenest most adaptable roof rack system. Its aerodynamic design radically reduces drag and improves fuel efficiency.



Hubco whispbar vs competitors noise reduction ^{r93} Note: ProrackTM and WhispbarTM are trademarks of Hubco Automotive Ltd.

The above figure shows, Hubco's roof rack crossbars were found to perform better than its competitors in wind drag testing at the University of Canterbury's engineering school. "The Hubco WhispbarTM crossbar produced 69% less wind drag than the Thule bar, 62% less than Rola's crossbar and 42% less than the preceding Hubco product i.e. the S-Bar". This result confirmed the exhaustive research into aerodynamic drag reduction ⁹³. Another benefit to Prorack's carriers is that these systems can be transferred from vehicle to vehicle with the purchase of only a kit, rather than an entirely new set-up. Prorack's Smartfoot designs fits



more than six hundred various kinds of vehicles and allows quick transferring of the entire system to another car 92 .

So, Prorack's claim of sustainable roof rack crossbar design is justifiable when it compares its aerodynamic design with its competitors. Innovative product design is a major focus of company. It is trying to put emphasis on energy efficiency but it is not equally considering other KPIs related to environment and society that we have selected.

8.10 Mont Blanc

Mont Blanc is one of the leading manufacturers of different types of load carriers targeting both the consumer market and the automotive industry. These load carriers includes roof racks, roof boxes, bicycle holders etc. Mont Blanc believes that it has highly motivated management and well-positioned products featuring good design, safety and quality. Mont Blanc is looking for long term reputation and competitiveness. It follows environmental management system. Staffs are educated to increase understanding in meeting environmental targets. Company is conscious to make future investment in techniques, products and processes that have very less impact on environment. It uses recyclable raw materials and products when possible. Mont Blanc is ISO 14001 certified and SP certified (Technical Research Institute of Sweden) ⁹⁴.

Although Company highlights that it follows the procedures of EMS but there is no information about environmental targets, strategies to achieve those targets and how company thinks about sustainability. It seems Mont Blanc believes that it is good for the company to make investments keeping in view future trends and consumer awareness about environment. We could not get any useful information about company's involvement in CSR and measures for efficiency in energy, waste, water and GHG emission.

8.11 Summary

Thule's competitors started thinking about the importance of environmental and social issues. In this regard Pewag is adapting strategies to address environmental concerns. It takes measures for reducing the use of energy and raw materials, by ensuring the longevity of its products and making them recyclable. It is also focusing on retaining employees by giving them feedbacks and other benefits. It is ISO 9001, ISO 14001 certified and its products meet all international standards. It is taking measures for reducing emissions, energy consumption



during production, low weight to transport, less material to be recycled. It is innovating new design chain which comprises of higher workload limits, higher resistance, safety factors, corrosion protection. It also uses new welding technology for high strength and high wear resistant conveyor chains while manufacturing snow chains and other technical chains.

Lowepro is trying to make long lasting and durable products. It believes that durability can be achieved by sourcing the toughest fabrics and materials which are mostly non-renewable resources. It is using recycle PET fabrics which are more costly than virgin fabrics though the quality is same. Lowepro supports non-profitable organizations to raise awareness among people for endangered polar bear habitat and effects of global warming.

Samsonite joined a growing list of companies that are using SAP's (System Analysis and Program Development) safe package program tailored package solutions, technologies and incentives- to migrate to SAP. It declares that it is going to produce new line of bags working with Ascent Solar by using light weight CIGS (Copper Indium Gallium Diselenide) modules in near future which would generate electricity for recharging small electronic devices like mobile phones. Samsonite's bag will be eco friendly in nature not only because of charging capabilities but also for having RPET (Recycled Polyethylene Trephthalate), a plastic that takes less energy, sulphur dioxide, nitrogen oxide and water than virgin plastic.

Atera's focus is on product design and quality. It claims that it is using sustainable practices because its products' plastic parts are completely recyclable. Uebler highlights excellent protection, high-grade aluminium and durability. For Uebler environment and CSR seems to be less imperative. Prorack takes environmental issues seriously and highlights that it sells quietest and most fuel-efficient roof racks to the customers. Its aerodynamic design radically reduces drag and improves fuel efficiency while its crossbar produced 8% less wind drag than the Thule bar.

Mont Blanc is looking for long term reputation and competitiveness and follows in procedures in their Environmental Management System. It is ISO 14001 certified and believes in product design, safety and quality. Mont Blanc believes that it is good for the company to make investments keeping in view future trends and consumer awareness about environmental issues.

Yakima is executing a plan where it is supposed to calculate the carbon footprint for all of its



operations, products and their distribution, as well as its marketing activity. It is also committed to wipe out the unethical practices throughout its operations. For packaging it is using recycled paper and its cargo boxes are made of seventy five to eighty percent (75-80%) recycled material. It is also arguing that its steel and plastic parts are actually recyclable materials. Rud believes that proper training and schooling for employees, working for the promotion of education and awarding annually sponsorship prize to young talents is the way to attain sustainability



9. SUSTAINABILITY IN CONTEXT OF LEADERSHIP AND CHANGE

In the recent years the business world is in a transition phase where it has been pushed by the social actors to be more responsible for all of its actions that effect local and global environment and make greater contribution for the society. To be in a competition, it is necessary for leaders to meet social and environmental challenges that help in business growth, innovation techniques and change in organization. Over the past years it seems that some companies have made notable progress by recognizing the importance of environmental issues. Societies are changing perception about the acceptable practices and now they are more concern towards the environment and community development. There are three dimensions of business: economics, environmental and societal aspects called the 'triple bottom line' which has set a foundation for a new business paradigm. Companies taking responsibilities for this 'triple bottom line' have to commence a process that requires change, learning and developing a new way of thinking ⁹⁵. The change is towards sustainability that can be acquired with people having high quality of leadership. They are supposed to be experts in understanding complex systems and have the vision to actualize company's future demands.

Leadership is proficiency for getting success in the business by encouraging others who are planning to pursue their career in this field. The most important behaviour in good leadership is the ability to change which is necessary to achieve objectives. "Being willing to take risks by trying new ideas and involving others in the process of change is a key quality of strong leaders" ⁹⁶. Leaders who proceed with organizational changes commit themselves to a journey of personal transformation. According to Richard Barrett (Consultant), "organizational transformation begins with the personal transformation of leaders because the culture of an organization reflects leadership values and believes. So, who you are as leader directly impacts the organizational results. The leader's development creates employee fulfilment which creates customer satisfaction which creates share holder value." ⁹⁷ This means that leadership is the prime requirement to proceed with a change in any organization.

Companies have to go through three phases to attain leadership and sustainability competencies. These phases are learning, aligning and embedding. 98



Learning: Competition and internal pressure compel majority of companies to draw attention to sustainability. In the early stage of *learning*, perspective of sustainability is limited for both executives and organizations to understand what sustainability mean for their company. CEO's talk about sustainability in corporate presentations is a sign showing that company has started thinking about sustainability. Further, CEO's public statement is an indicator for employees to be aware of the imperativeness of sustainability. As sustainability is a cross-functional and cross-organizational challenge, so creation of 'eco' or sustainability teams across the organization is considered as the best change. All the business units try to learn the impact of their actions on other functions. Sustainability champions emerge within business units and savvy leaders motivates employees by highlighting the vitality of sustainability issues for healthier world around them.

Aligning: At the end of learning stage not only employees have improved their practices but also programs like wastes reduction and recycling has almost started. Coordination in action and alliance to achieve sustainability goals is the next step to follow. Leaders express clear vision for organization to address social and environmental impacts created by the company. Some companies strengthen existing functional duties by adding specific sustainability roles. For example "Fargo, created the role of sustainability officers in each of its offices and branches, identifying employees that the company was eager to retain." ⁹⁸. Some Companies like McDonald illustrated diplomatic kind of leadership by aligning and coordinating with partners, stakeholders, NGOs, supplier and competitors towards common sustainability goal i.e. protection of Brazilian Amazon rainforests.

Embedding: Rarely companies reach the final stage i.e. *embedded* stage. At this stage sustainability is embedded in company activities, culture and practices. Sustainability based product innovation and entire product line design is an outcome of this stage. Preferably, at this point, sustainability leadership is entrenched and mangers mainly focus in customers' problems and competitive edge ⁹⁸.

Culture also influences the process of organizational change. It adds to employee's creativity and productivity. It tells about their values, beliefs, behaviours, way of thinking and perceiving. For an organization to perform well, its culture should be able to directly support its future targets and help to attain its goals and objectives. So, company culture affects its performance. In some organization culture emerges with the passage of time, in such a case if



organizations fail to align their future designs with their culture, it results in a lot of problems for them. Again there comes the role of leadership whose major responsibility is to constitute, monitor and take care of corporate culture. A company culture helps to move towards sustainable development and encourages people to try their best.

Sustainability is a driving factor for the business world. It demands for change in attitudes and mindset that has been because of our prevailing old culture. The organizational changes put greater responsibility on the leadership, who has to start transformation from their own. According to Capra Fritjof "The great challenge of the twenty-first century will be to change the value system underlying the global economy, so as to make it compatible with the demands of human dignity and ecological sustainability" ⁹⁹. To implement sustainable practices in the business is sometimes difficult. Organizations that focus on the rising norms are getting more time for doing experiment in process, technologies as compared to others. In future, only those companies will able to survive who are considering sustainability criteria as a part of their business strategy. "The ultimate key is to transform the governance system of an organization so that, it embraces sustainability in leadership" ¹⁰⁰.

If we consider the example of some sustainable business organizations like H&M, Starbucks, E-ON etc. they are able to realize the consequences of global warming, started working for the raw material requirements like cotton, coffee, renewable sources respectively in their production process. They have also comprehended the importance of corporate social responsibility and started working for the society by participating in various non profitable organizations (NGOs) and donating some parts of their sales to charities. Organizations that have started taking action towards change have to go through five stages: ⁹⁹

Viewing compliance as an opportunity- Compliance with law helps in innovating new technologies and also for working with other companies for implementing good solutions.

Making value chain sustainable- means to reduce the carbon emissions, improving water efficiency, waste efficiency etc. All these objectives can be achieved by considering the environment friendly materials and process in the whole life cycle of the product.

Designing sustainable products and services- At this stage it is necessary to know which products or services are not environment friendly and how to adopt new mechanisms for making them eco friendly. Public encouragement towards sustainable offering is also one of the main factors that should also be explored to avoid the perception of green washing.



Developing new business model- At this stage knowing the customers' demands and to come up with the new plans for meeting those demand is carried out. Designing model that use to develop new technologies which bring change in the value chain relationships i.e. related to services rather than products.

Creating next practice platform- Creating business platform in such a way that it helps customers and suppliers to use energy, water efficiently. It requires good knowledge about non-renewable and renewable resources affecting the business and environment.

Setting goals and targets and understanding working methods are equally important to make a sustainable change and according to Robert, K.H. "Once we have a solid understanding of the rules of the game and what constitutes a successful outcome for that game, we can develop strategies, evolve processes, take specific actions, employ useful tools, set targets and assign metrics that contribute to achieving our ultimate goal: winning the game—creating a sustainable global society" ⁹⁶.



10. ANALYSIS

Keeping in view current sustainability trends, it is difficult to answer which is the most sustainable company because sustainability rating companies uses a variety of methodologies. The findings, approach and KPIs used in the most recent sustainability rankings organisations are 'The Global 100 Most Sustainable Corporations' by Corporate Knights, Fortune's '100 Best Companies to Work for', CRO's '100 Best Corporate Citizens List' and Political Economy Research Institute's (PERI) 'Toxic 100', show different types of methodologies to benchmark sustainability. For example Corporate Knights used eleven sustainability benchmarking KPIs(energy, CO2, water, waste productivity, leadership-diversity, CEO to average worker pay, % of tax paid, sustainability leadership, pay-link to sustainability, innovation capacity, and transparency) while the CRO used only eight (environment, climate change, human rights, employee relations, philanthropy, financial, governance and lobbying).

Selection of the companies varies when we analysed in more detail, Kevin Wilhelm (CEO of Sustainable Business Consulting and the recent author of "Return on Sustainability) and Alexia Diorio (a researcher for SBC) are expecting that "Fortune will use its 'Fortune 500' for rankings, however, the CRO ranked only companies based on the Russell 1000 index. Corporate Knights used a list of 100 publicly traded companies listed on the MSCI World index—which is often used as a benchmark for global stock funds—while the 500 companies analyzed by Newsweek's rankings were included because they were the largest U.S. companies in terms of revenue, market cap and employees" ¹⁰¹. In this situation, small private companies such as Patagonia and Interface which are routinely recognized as some of the "most sustainable/green" are ignored.

Ranking sustainability, through different approaches may lead to surprising results, e.g. among the most sustainable companies rated by Corporate Knights and Newsweek Green Ranking, only nineteen companies are in list of both. More surprisingly, only five (HP, Dell, Intel, State Street, Nike) out of top fifteen are similar in both the lists. It is understood that PERI's Toxic 100 companies should not be there in the list of most sustainable companies by the Newsweek or Corporate Knights, but there are three companies (Alcoa, United Technologies and Procter & Gamble) appearing on all three lists. Comparing Fortune with



Newsweek and Corporate Knights ranking, only 28 are included in both the Fortune and Newsweek rankings while only two are part of the Fortune and Corporate Knights list ¹⁰¹.

So, it is hard to assume 'what are the exact KPIs' while benchmarking general sustainable companies. At the same time due to lack of numerical data, relevant information access through personal interaction with companies and problems in evaluating the best practices for sustainability, increases the complexity and lowers the credibility of benchmarking. However, it is an endeavour to finalize sustainability benchmarking KPIs keeping in view general sustainability trends. Sustainability benchmarking criteria of the companies such as Corporate Knights 'The Global 100 Most Sustainable Corporations' 102, CRO's 'The Global 100 Most Sustainable Corporations, Newsweek 'Green Rankings' 104, Fortune '100 best companies to work for, ¹⁰⁵, EFFAS ¹⁰⁶ (European Federation of Financial Analysts Societies), Dow Jones 'sustainability Indexes' 107 DEFRA (Department for Environment, Food and Rural Affairs) 108, IFAC (international Federation of Accountants) 109, Sustainability Technologies Initiatives ¹¹⁰ (a programme of collaborative research and development aimed at improving the sustainability of UK business) and Green buildings 111 (Green Building Pages, Inc. is a sustainable design and decision-making web database tool for environmentally and socially responsible building industry professionals and consumers) is taken into consideration while finalizing sustainability benchmarking KPIs. These KPIs would help Thule to analyze its position with respect to the companies in general and competitors in specific. The rating companies are contributing to sustainability benchmarking, mainly focusing areas such as society, environment and economics. Some of the companies also look other areas, for example, EFFAS takes long-term viability while EFFAS and CRO takes governance into consideration. A few KPIs are difficult to categorize such as leadership diversity sustainability leadership, sustainability Pay Link, Innovation capacity, transparency etc. by Knights corporations.

Keeping in view general sustainability trends regarding social and environmental issues, the following KPIs have been identified that we find relevant to Thule are shown in the table 1 below.



KPIs	SUSTAINABILITY RATING COMPANIES								
	STI	DEFRA	Knights	EFFA S	CRO	Green Buildings	Dow Jones	IFA C	
Energy efficiency	Y	Y	Y	Y	Y	Y	Y	Y	
GHG emission	Y	Y	Y	Y	Y	Y	Y	Y	
Waste efficiency	Y	Y	Y	Y	Y	Y	Y	Y	
Water efficiency	Y	Y	Y	N	Y	Y	Y	Y	
Environmental goal	Y	Y	Y	Y	Y	Y	Y	Y	
CSR	Y	N	Y	Y	Y	Y	Y	Y	
Employees' benefits	Y	N	Y	Y	Y	Y	Y	Y	
Unethical Activities	Y	N	Y	Y	Y	Y	Y	Y	

Table 1: KPIs followed by Sustainability rating companies

[Y- Yes, N-No]

Although, we previously considered some factors measuring economic performance such as operating costs, return on investment, transportation cost, life time assessment of the product etc. while setting the KPIs, but realizing Thule's interest, we have ignored them entirely. The KPIs finally set are considered by most of the rating companies mentioned in the Table 1. We suggest that Thule must evaluate its activities based on these KPIs.

In the next step, we have benchmarked general sustainable companies on the common KPIs as suggested above. These KPIs are energy efficiency, GHG emissions, waste efficiency, water efficiency, environmental goal/policy, CSR, employees' training and unethical business practices. As expected, the sustainable companies are considering these indicators as a prime source to survive in the changing global market. At the same time companies' business area matters a lot while weighing these indicators e.g. E-ON puts more emphasis on energy efficiency to be environmentally responsible, as the company deals with renewable energy production. Starbucks, H& M, SCA, and IKEA are more concerned about selection of eco friendly raw material and recycling of wastes. The overview of the activities and KPIs for the sustainable companies is shown in table 2,

Table 2: Overview of general sustainable companies

Companies KPIs	⇒ SCA	ADIDAS	STARBUCKS	H.M	IKEA	E.ON	NOKIA
Energy efficiency	Electricity from national grids, natural gas, bio fuel.	Targets to reduce energy consumption.	LEED standards, Investment in equipments & lightening.	Clean Shipping Project & Clean Cargo.	Geothermal system.	Zero-emission generation technologies.	Nokia Siemens energy solutions project.
GHG emission	Reduce emissions from fossil fuels.	Reduction of PVC and emission of volatile organic compounds (VOC).	No significant information.	Transportation, raw materials.	Transportation, raw material, participated in GHG protocol.	Expansion of renewable capacity.	Claim to reduce C02 emissions.
Waste efficiency	Delivers dry recyclables to material resource facilities (MRFs).	Product virtualization recycling.	Recycling, composting biodegradable materials. Paper purchasing.	Hazardous material, plastic bags, recycled PE.	Waste recycling and its use on energy production.	Recycling hazardous material.	Bio-plastics in the Nokia 3110.
Water efficiency	Waste water treatment plants.	Water saving target	No significant information	Training suppliers, wet processes to treat waste water; Working with BSR, signed CEO Water Mandate.	Class A dishwashers save water.	No significant information.	Claim to use less water.
Environmental goal/policy	Extensive resource management system (RMS).	SEA (social, environmental affairs) department.	Goals to achieve LEED certification.	Long term goals and policies.	Banned the use of chlorofluorocarbons (CFCs / HCFCs)	EMAS for suppliers.	EMS
Contribution in social activities	Considers: Employee relations, Community development.	Education and Infra structure Programmes.	Fair certified coffee, practices (C.A.F.E), encourages young entrepreneurs & investments in NGOs.	Use employee communication channels to provide information about CSR.	Together with WWF, running Farmer Field Schools.	E.ON UK is working with the British national charity Age concern.	Support UNICEF through their annual Seasons Greetings Cards campaign.
Employees' Training/Educat ion (Other benefits)	Training programs.	Work-life balance program.	Implemented wage adjustment, completed international Total Pay assessment.	Employees training department.	Safety training before operating machines.	Variety of training courses and programs rewards and benefits.	Internal training programs.
Unethical Activities	Ethical business practices.	Member of Fair Labour Association (FLA).	Work with FTO, ethics training.	Constituent of Ethical Partners: ECPI and EIG	Strict policies to monitor child labour.	No significant information.	Highest standards for employees.
Criticism	Low leadership diversity.	Low leadership diversity &data transparency criticized for unethical practices.	FTO, large environmental foot prints and recycling.	Recycling and organic cotton	Illegal harvesting of forests.	Issues regarding disposal of nuclear wastes.	Violation of employees' rights



Most companies have enforced a proper environmental management system to monitor the factors related to environment e.g. Nokia has an EMS where it targets energy consumption, water consumption, air emissions, ozone-depleting substances, waste management and packaging.SCA is proceeding the same activities with different name called RMS(Resource Management System).

Most of the sustainable companies have been criticized for unethical practices like child labour, workers' rights etc. For example, Adidas has got allegations that it is abusing the workers' rights and involved in child labour at suppliers' factory sites also a group of shop stewards at Nokia accused the company of abusing workers' rights. Some of the sustainable companies have also been criticized for two reasons. For exaggerating their activities while marketing their products e.g. H & M's claim of producing 100% organic cotton and Starbucks' claim for fair trade certified coffee and giving the interpretation of sustainability for its own benefits. It is difficult to judge to what extent this criticism is valid but companies' efforts towards sustainability cannot be neglected.

Among the companies in the same business sector as that of Thule especially in the outdoor activities, Patagonia is considering most of the KPIs we have set. It is following LEED (Leadership in Energy and Environmental Design) certification which includes water efficiency, energy efficiency, raw material quality and reduction in GHG emissions. Patagonia is using it as a guide for environmental balance along with an active societal participation. On the other hand some companies are considering quality, durability advocacy etc to attain sustainability e.g. Burton, Shimano which is predicted clearly in the table 3 below.



Table 3: Overview of Companies within Thule's sector

		0.312	GT 1		
Companies KPIs	Giant	Patagonia Patagonia	Shimano	Burton	Naturekompaniet
Energy efficiency	Electric bikes consumes tiny amount of energy as compared to other 2 wheelers.	Installed photo sensors, light detectors, R30 insulation in the roof, and R12 rigid insulation on warehouse walls, highest efficiency commercial boilers, use no air conditioning in the warehouse, using night-flush vent system, Substituting natural lights by skylights.	No significant information.	No significant information.	Considers energy efficiency and renewable resources.
GHG emission	No significant information.	Using regional building materials, using no or low VOC compounds, buying carbon offsets.	No significant information.	No significant information.	No significant information.
Waste efficiency	Batteries can normally be recycled when they have expired.	Using Fibre to fibre recycling recycled polyester, organic cotton, building materials in the Service Centre from post-consumer and post-industrial recycled materials.	No significant information.	No significant information.	No significant information.
Water efficiency	No significant information.	Design a Xeric landscape plan	No significant information.	No significant information.	No significant information.
Environmental goal/policy:	No significant information.	Following LEED certification for opening distribution centre in Reno, Nevada, FSC certified wood.	No significant information.	No significant information.	Considers environmental goals and policies.
Contribution in social activities	Lighting pedals.	Member of FLA, donate sales to the environmental groups manager for social responsibility.	No significant information.	No significant information.	No significant information.
Employees' Training/Education (Other benefits)	No significant information.	Employees are paid fairly, fresher session for seasoned and new employees annually.	No significant information.	No significant information.	No significant information.
Unethical Activities	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.
other activities	Working with Microsoft Certified Gold Partner Advanced System Integration.	Shared green mechanism of the supply chain with Wal-Mart for free.	Advocacy program for trails design.	Actively participating in snowboarding events for advertising.	Green logo named "A greener choice" tells the product more environmental friendly.
Criticism	Not so much concerned about environment.	Green marketing without transparency.	Just an advocacy program is not enough to be known as a sustainable company.	Not concern about environment.	No detail description about the how environmental are implemented.



In order to gain insight of what Thule's competitors are doing for sustainability, it is important to know what are the KPIs and activities they are following to be sustainable. Yakima is step ahead of others in dealing with environmental issues. Its planet pay back plan efficiently drives mechanisms to compensate carbon footprint for all of its operations. It is trying to capture more market by putting carbon neutral stickers on its products. Some of the competitors are quite curious about product innovation e.g. Prorack's aerodynamic design of roof racks, Samsonite's green bags and Pewag's Grad 120 chain may lead them to grow rapidly. Product design, quality, safety and recycling are prime focus of Atera, Uebler and Lowepro while along with these measures Montblanc also employing EMS (Environmental Management System). Many of the competitors are not so much involved in societal welfare projects except for Pewag and Rud. All of these activities of Thule's competitors have shown in the table 4 below.



Table 4: Overview of Thule's competitors

Companie KPIs ∏	Samsonite	Pewag	Atera	Uebler	Prorack	Mont blanc	Lowepro	Yakima	Rud	Westfalia
Energy efficiency	Solar luggage by using light weight CIGS material.	Grade 100 chain- Low weight products resulting less to transport.	No significant information.	No significant information.	Aerodynamic design radically reduces drag and improves fuel efficiency.	No significant information.	No significant information.	Neutralizing yearly energy usage. Reduced the fossil fuel.	No significant information.	No significant information.
GHG emission	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	The company is also considering buying carbon fund credits.	No significant information.	No significant information.
Waste efficiency	RPET	Using fewer raw materials for recycle.	Plastic parts are recyclable by EG rules DIN ISO 1135, certified DIN ISO 75302 TÜV.	No significant information.	No significant information.	No significant information.	Recycled PET fabrics.	Recycling waste and cargo boxes are made up of recycled ABS plastic.	No significant information.	No significant information.
Water efficiency	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	Reducing water contamination not using white card boards.	No significant information.	No significant information.
Environment al goal/policy:	No significant information.	Certified ISO14001, 1SO 9001 components follow EN1677 and proof test follows AS 3775.1.	ISO 9001 Certified.	No significant information.	No significant information.	ISO 14001 and SP certified, EMS.	No significant information.	Planting 400000 trees.	ISO 14001 certified.	EMS as per DIN/ISO 14001 standards.
Contribution in social activities	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	Donate to polar Bears International & other NGOs.	Helping organizations to keep earth beautiful.	Stipend to young talents.	No significant information.
Employees' Training/Edu cation	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	Employees' training institution.	No significant information.
Unethical Activities	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.	No significant information.
other activities	SAP's safe package program.	Welding technologies.	No significant information.	ISO 9001- 2000certifie d products	Smart foot designs.	No significant information.	Primus photo bag pack .	Planet pay back mechanism to calculate carbon foot prints.	No significant information.	No significant information.



Above study for Thule's competitors and companies belong to same sector reveals that most of them are realizing the importance of sustainability but the interpretation of sustainability criteria varies among them. Question arises why companies want to be sustainable? The reasons behind is to attain leadership position in the industry and good reputation in the market. While achieving this objective they have to cross many hurdles mainly financial instability and lack of investments for long term benefits. Theory of Sustainability based on long term business plans that could benefit stakeholders, environment and society without compromising the needs of future generations. Companies have to implement true essence of sustainability to cope with leadership and change.

Realizing the importance of leadership to bring about sustainable changes, some of the companies have put in place sustainability managers e.g. IKEA has a sustainability manager who is responsible to deal with the challenges of sustainability specially in dealing with carbon footprints, energy efficiency etc. On the other hand, companies like H &M, Nokia, SCA, Starbucks and E-ON have sustainability committees, which help in analyzing the companies' performance and suggest mechanisms for the improvement of environment and society. They are also responsible to constitute, monitor and take care of corporate culture because a company's culture helps to move towards sustainable development and encourages people to try their best to promote sustainability.

As discussed previously, companies have to go through three phases i.e. learning, aligning and embedding, to attain leadership and sustainability competencies. Among the general sustainable companies, almost all of them are at aligning stage. At this stage, not only programs such as wastes reduction, recycling, GHG emission reduction etc. are started but also leaders express clear vision for organization to address social and environmental impacts. Some companies strengthen existing functional duties by adding specific sustainability roles while other illustrate diplomatic kind of leadership by aligning and coordinating with partners, stakeholders, NGOs, supplier and competitors. In the absence of generally acceptable KPIs to measure sustainability leadership, it is hard to realize which of the general sustainable companies are at embedding stage. At this stage, sustainability leadership is ingrained and mangers mainly focus in customers' problems and competitive edge. Among Thule's competitors and companies in the same sector as that of Thule, Yakima and Patagonia are in between learning and aligning stage. Companies such as Samsonite, Lowepro and Prorack seem to be at 'learning stage' as they have taking a few measures to



attain sustainability. Mont Blanc claims to be at learning stage, as it is taking initiatives to attain sustainability but there seems an exaggeration when its products and processes are critically analyzed. In the race of sustainability leadership, companies should take initiatives towards change, by viewing compliance as an opportunity, designing sustainable products and services and developing new business model.



11. CONCLUSIONS

- General sustainable companies are considering sustainability as of part of their core business strategy
- For Thule's competitors, it is hard to realize that they are considering sustainability as a core business strategy
- Some of Thule's competitors are conscious about environment friendly products and focusing on product innovation; Samsonite, Prorack, Yakima and Pewag are good examples of it
- Patagonia belongs to same sector as that of Thule, performs comparatively better regarding environmental issues
- Yakima outperforms compared to other Thule's competitors
- General companies are realizing the role of leaders in bringing about sustainability
- In the context of sustainability leadership, general companies are in the 'aligning stage' and none of them seems to be at 'embedded stage'
- Yakima and Patagonia are in between learning and aligning stage while Samsonite, Lowepro and Prorack seem to be at 'learning stage'
- Some of Thule's competitors such as Rud, Pewag, Wesfalia, Atera, Uebler and companies in the same sector like Shimano, Burton etc are not fully aware of about sustainability leadership and change.
- Companies criticized mostly for practicing unethical acts such as child labor, workers rights etc
- Benchmarking is viewed as competitive advantage by most companies
- It is hard to benchmark sustainability without predefined KPIs
- There is no set of predefined KPIs to benchmark sustainability
- Rating companies have different selection criteria to rank sustainability
- Taking advantage of not having commonly agreeable KPIs, companies interpret sustainability benchmarking differently
- Without commonly agreeable KPIs, companies will remain ambiguous about sustainability.
- Unlike social sustainability it is hard for critics to judge issues regarding internal (processes) transparency.
- Involving in the social and environmental activities helps companies to promote their product effectively and it earns good name for their brand.
- Companies sometimes exaggerate about activities which lead them to sustainability i.e.
 product marketing



- Critical views are more public mostly for those companies who are involving in some sustainable activity.
- Companies would not survive in the long run if they only focus on economic benefits.
- Financial stability and long term business plans are key to attain sustainability.
- Keeping in view general sustainable trends, consumer awareness about green products,
 Thule's competitors' move to take environmental issues into consideration,
- Thule has to take sustainability challenge as an opportunity to compete in the business market
- Without considering sustainability there is possibility that Thule's would lose its market share.
- Although none of Thule's competitors are at good level of sustainability but their continuous progress toward green products development can be a threat for Thule in long term.



12. REFERENCES

- Anna Lindh foundation Euromed Sustainable connections Policy analysis 3:4 Benchmarking Sustainability: the use of indicators, April 2008 http://www.awishhellas.org/images/Benchmarking%20Sustainability.pdf [Accessed on: 09/06/2010]
- Mckinsey's Global Survey result: How companies manage sustainability? Page1
 http://download.mckinseyquarterly.com/sustainability.pdf [Accessed on: 13-05-2010]
- 3. Alan Brymen. Emma Bell, Business research methods, United States, Oxford university press Inc. New York, published 2003, Page 193,207 [Accessed on: 25-05-2010]
- 4. Dr. Virginia Cano, Reliability and validity in qualitative research http://www.qmu.ac.uk/psych/rtrek/study_notes/web/sn5.htm#biblio [Accessed on: 25-05-2010]
- 5. William M.K. Trochim, Research methods knowledge base, Types of Reliability, 20/20/2006 http://www.socialresearchmethods.net/kb/reltypes.php [Accessed on: 25-05-2010]
- J. Mason, Qualitative Researching. London, Sage, 1996, page-147
 [Accessed on: 27-05-2010].
- 7. Wheeller B., Sustaining the ego, Journal of sustainable tourism 1(2), Page121-129, [Accessed on: 07-06-2010]
- 8. R. Butler, Sustainable tourism- Looking Backwards in order to progress? In C.M. Hall & A.A Lew(Eds.) Sustainable Tourism: A Geographical Perspective, Essex: Longman, 1998, Page 25-34, [Accessed on: 07-06-2010]
- S.Eber, Guidelines for integrating Sustainability into the Undergraduate Curriculum: Leisure and Tourism, London: University of North, London and Tourism Concern, [Accessed on: 07-06-2010]
- 10. World Commission on Environment and Development(WCED) (the Brutland Report), Our common future, London:Oxford, 1987, Page -43, [Accessed on: 07-06-2010]
- 11. S.Milne Tourism and sustainable development: the global-Local nexus, In C.M. Hall & A.A.Lew(Eds.), Sustainable Tourism: A geographical perspective, Essex: Longman, 1998, Page-35-48, [Accessed on: 07-06-2010]
- 12. Anu Ramaswami and Debbi Main with Rachelle Macur and Matt Gibbs, Defining and measuring sustainability,

www.ci.broomfield.co.us/environment/.../Anu_Defining_Sustainability.pdf, [Accessed on: 07-06-2010]



- 13. Philip Sutton, Director Policy and Strategy, Green Innovations Inc., Sustainability: What does it mean?, http://www.green-innovations.asn.au/sustblty.htm#contents,
 [Accessed on: 07-08-2010]
- 14. Tietenberg and Lewis, environmental and natural resource economics, 5th edition,ch 24, [Accessed on: 07-06-2010]
- 15. Dr. Rick L. Edgeman, Client, Enterprise & Competitive Intelligence for Product, Process & Systems Innovation University of Idaho [Accessed on: 10-04-2010]
- 16. Randall Grayson, Ph.D. Social, developmental, & organizational psychology applied to camp http://www.visionrealization.com/Resources/Organizational/Benchmarking.pdf [Accessed on: 11-04-2010]
- 17. Introduction to Bench marking, March 27 2009,

 http://hampreston.com/general/introduction-to-benchmarking/ [Accessed on: 11-04-2010]
- 18. Yasarf .Jjarrar' & Mohamezda iri, 'Centre for Business Performance, Cranfield School of Management, Cranfield MK43 OAL, UK & 'European Centre for Total Quality Management, University of Bradford, Bradford, UK http://pdfserve.informaworld.com/506778 751304644 713600621.pdf

[Accessed on: 14-04-2010]

- 19. Corporate Knights, http://en.wikipedia.org/wiki/Corporate_Knights
 [Accessed on: 14-04-2010]
- 20. Green Rankings 2009: Methodology, Newsweek Web Exclusive, Updated: 6:28 p.m. ET Sep 16, 2009, http://www.newsweek.com/id/215522#RS [Accessed on: 14-04-2010]
- 21. European Federation of Financial Analysts Societies,

 http://effas.net/index.php?option=com_content&view=article&id=50:effasorganisation&catid=34:effas&Itemid=64 [Accessed on: 14-04-2010]
- 22. Dow Jones, http://www.sustainability-index.com/07_htmle/other/aboutus.html [Accessed on: 15-04-2010]
- 23. DEFRA over view, http://www.defra.gov.uk/corporate/index.htm [Accessed on: 15-04-2010]
- 24. 100 Best Corporate Citizens, http://thecro.com/content/100-best-corporate-citizens [Accessed on: 16-04-2010]
- 25. Fortune magazine, http://www.magazine-agent.com/fortune/magazine [Accessed on: 16-04-2010]
- 26. IFAC, http://www.ifac.org/ [Accessed on: 16-04-2010]



- 27. Sustainability Benchmarking: measuring up, http://www.ohlsti.co.uk/ohl/stipdfs/ohl_sti41.pdf [Accessed on: 16-04-2010]
- 28. Green Building Pages,

Inc., http://www.greenbuildingpages.com/2009GBPBenchmarkSustainability.pdf [Accessed on: 17-04-2010]

- 29. PERI, http://www.policyinnovations.org/innovators/organizations/data/00169
 [Accessed on: 17-04-2010]
- 30. Agenda item 10 IIIEE board meeting 27 April, Strategies for sustainability, (page 6, 7) http://www.iiiee.lu.se/site.nsf/wwwpages/350B13389F89440AC12573FE0032DACE/\$File/St rategies%20for%20Sustainability.pdf [Accessed on: 22-04-2010]
- 31. Finland convention bureau in association with visit Finland, Environmental responsible meetings, *http://www.fcb.fi/?pageid=212* [Accessed on: 22-04-2010]
- 32. Kieun Kim, Hankuk Academy of foreign studies, Effect of waste recycling on sustainable development by; http://www.iswa.it/materiali/iswa_apesb_2009/5-294paper_long.pdf [Accessed on: 21-04-2010]
- 33. MIT Sloan: A management review, Making sustainability the real thing- interview with Jeff Sea bright: Coca-Cola company's vice president of environment and water resources. http://sloanreview.mit.edu/beyond-green/making-sustainability-the-real-thing/
 [Accessed on: 23-04-2010]
- 34. Steve Ballmer, Chief executive officer Microsoft office, Environmental sustainability dashboard for Microsoft Dynamics AX, "Addressing global warming is a responsibility we take very seriously at Microsoft." http://www.microsoft.com/environment/business_solutions/articles/dynamics_ax.a spx, [Accessed on: 24-04-2010]
- 35. Singapore Compact, What is CSR?

 http://www.csrsingapore.org/whatiscsr.php [Accessed on: 25-04-2010]
- 36. Mr. Seng Phally, Business Issues Bulletin, Director of Cambodian Labor organization (CLO), (Page-3) http://www.ifc.org/ifcext/mekongpsdf.nsf/AttachmentsByTitle/BIB-4-CAM-ENG/\$FILE/BIB-4-CAM-ENG.pdf [Accessed on: 25-04-2010]
- 37. Chartered Institute of management accountants (CIMA), Incorporating ethics in to strategy: developing Sustainable Business model, Discussion paper February 2010, page 4 http://www.iblf.org/~/media/Files/Resources/PressCoverage/CIMAethicsreport.ashx [Accessed on: 23-04-2010]



- 38. H&M sustainability Report,

 http://www.hm.com/filearea/corporate/fileobjects/pdf/en/CSR_REPORT2008_PDF_1240240
 530209.pdf [Accessed on: 17-04-2010]
- 39. Jasmin, Malik Chua, H&M other Brands Guilty of "Organic cotton Fraud", 01/25/10 http://www.ecouterre.com/10478/hm-other-brands-guilty-of-organic-cotton-fraud/ [Accessed on: 17-04-2010]
- 40. Starbucks Corporation Fiscal 2007 corporate social responsibility Annual Report, (p-27) http://www.starbucks.com/assets/starbucks-csr-fy2007.pdf [Accessed on: 18-04-2010]
- 41. Starbucks Corporation Fiscal 2007 corporate social responsibility Annual Report, (p-62) http://www.starbucks.com/assets/starbucks-csr-fy2007.pdf [Accessed on: 18-04-2010]
- 42. Kristen Romilly, Starbucks' Shared Planet Campaign™: Good PR or Too Little, Too Late? April 3, 2009, http://kristenromilly.wordpress.com/2009/04/03/starbucks-shared-planet-campaign%E2%84%A2-good-pr-or-too-little-too-late/ [Accessed on: 19-04-2010]
- 43. Ryan Mickle, Starbucks Shareholders Vote Down Recycling, Company Resists Cooperation, April 3rd 2010, http://www.triplepundit.com/2010/04/starbucks-shareholders-vote-down-recycling-company-resists-cooperation/[Accessed on: 19-04-2010]
- 44. Adidas Group, Adidas AG included in Dow Jones Sustainability Indexes for 10th consecutive time; sep. 4 2009, http://www.adidas-group.com/en/pressroom/assets/pdfs/2009/2009-DJSI-press-release-e.pdf [Accessed on: 23-04-2010]
- 45. 2010 Global 100 List: Company Profile; Most Sustainable companies in the world http://www.global100.org/annual-reviews/2010-global-100-list/77.html?comp_id=129 [Accessed on: 22-04-2010]
- 46. Case Study Ongoing: Education and Infrastructure Programme with Sudhaar in Pakistan http://www.adidas-group.com/en/sustainability/community_affairs/case_studies/sudhaar_pakistan.aspx [Accessed on: 07-05-2010]
- 47. Adidas group; http://www.adidas-group.com/en/SER2008/index.asp [Accessed on: 22-04-2010]
- 48. Adidas Group, community Involvement, http://www.adidas-group.com/en/sustainability/community_affairs/default.aspx [Accessed on: 21-04-2010]
- 49. Adidas AG, http://www.knowmore.org/wiki/index.php?title=Adidas_AG [Accessed on: 18-04-2010]



- 50. 2010 Global 100 list SCA company profile: http://www.global100.org/annual-reviews/2010-global-100-list/77.html?comp_id=164 [Accessed on: 07-05-2010]
- 51. Double honours for SCA in Dow Jones Sustainability Indexes, Press release 2009-09-03 http://www.sca.com/en/Press/Press-releases/Press-releases/2009/2009-09-03-Double-honours-for-SCA-in-Dow-Jones-Sustainability-Indexes/ [Accessed on: 23-04-2010]
- 52. Resources and discharges,

 http://www.sca.com/en/Sustainability/Environment/Resources_and_discharges/
 [Accessed on: 07-05-2010]
- 53. SENSE magazine, 1/2010 http://www.sca.com/en/Sustainability/SENSE-magazine/
 [Accessed on: 22-04-2010]
- 54. SCA Sustainability Report 2008,

 http://www.sca.com/Documents/en/Env_Reports/SCA-hr2008-ENG_FINAL.pdf

 [Accessed on: 20-04-2010]
- 55. Nokia Connecting People, www.nokia.com [Accessed on: 18-04-2010]
- 56. Aleksi Kuusisto, Nokia Accused of Labour rights Violations, European industrial relations observatory On-Line(eironline),14/03/2009

 http://www.eurofound.europa.eu/eiro/2005/02/feature/fi05022 [Accessed on: 19-04-2010]
- 57. IKEA, The never Ending Job: Sustainability report 2009

 http://www.ikea.com/ms/sv_SE/about_ikea/pdf/IKEA_Sustainability_Report_2009.pdf

 [Accessed on: 20-04-2010]
- 58. Ellen Ruppel Shell, Buy to last,

 http://www.theatlantic.com/magazine/archive/2009/07/buy-to-last/7513/

 [Accessed on: 21-04-2010]
- 59. E-On global Climate change and Environment policy statement http://www.eon.com/en/downloads/E.ON_Global_Climate_Change_and_Environment_Policy_EN.pdf [Accessed on: 24-04-2010]
- 60. Emma Duncan, E.ON due diligence report Prepared for IUCN, 29 September 2008 http://cmsdata.iucn.org/downloads/eon_due_diligence_report_final.pdf [Accessed on: 23-04-2010]
- 61. Heine, R. Peter, Journal of Case Research in Business & Economics; Dec2009, Vol. 2, p1-10, 10p
 - http://search.ebscohost.com.ludwig.lub.lu.se/login.aspx?direct=true&db=bth&AN=4904017
 3&sit=ehost-live [Accessed on:08-05-2010]



- 62. If Naturkompaniet,.http://www.naturkompaniet.se/Info/ReadMore.aspx?id=5676 [Accessed on: 10-05-2010]
- 63. A Greener Choice, http://www.naturkompaniet.se/info/readmore.aspx?id=7072 [Accessed on: 10-05-2010]
- 64. Bicycle Manufacturer connects its Facilities and Expands with Business Management Solution "Microsoft Dynamics customer case studies, (Page3)

 http://www.advancedsystemsintegration.com/uploadedFiles/Media_and_Resources/ASI%20

 Case%20Study%20Giant%20Bicycles%20Axapta%20%20POS.pdf [Accessed on: 10-05-2010]
- 65. Giant Bicycles, Bicycle Manufacturer Connects its Facilities and Expands with Business Management Solution, 02/09/2006

 http://www.microsoft.com/casestudies/case_study_detail.aspx?casestudyid=49314

 [Accessed on: 10-05-2010]
- 66. Electric Bike Goes 75 Miles per Charge from Giant Bike http://www.igreenspot.com/electric-bike-goes-75-miles-per-charge-from-giant-bike/ [Accessed on: 11-05-2010]
- 67. S.Phineas UPham, Innovation and interrelatedness of core competencies: How Taiwan's Giant bicycles broke in to the US Bicycle market, (Page 11)

 http://www.fm-kp.si/zalozba/ISSN/1581-6311/4_041-062.pdf, [Accessed on: 13-05-2010]
- 68. Patagonia, http://www.patagonia.com/international [Accessed on: 15-05-2010]
- 69. Patagonia, common thread recycling Program,

 http://www.patagonia.com/web/us/patagonia.go?assetid=1956 [Accessed on: 17-05-2010]
- 70. Patagonia, Our reason for being,

 http://www.patagonia.com/web/us/patagonia.go?assetid=2047&ln=24
 [Accessed on: 16-05-2010]
- 71. Environmentalism: what we do? What Makes a Building Green?

 Patagonia's Reno Service Centre,

 http://www.patagonia.com/web/us/patagonia.go?assetid=12080 [Accessed on: 17-05-2010]
- 72. Company: Info, Corporate Social responsibility,

 http://www.patagonia.com/web/us/patagonia.go?assetid=37492 [Accessed on: 12-05-2010]
- 73. Green Economist, Wal-Mart and Patagonia: Changing the Global Supply Chain. Maybe, May 6 2010, http://greenconomist.com/2010/05/06/news-analysis/walmart-patagonia-changing-the-global-supply-chain-maybe.htm [Accessed on: 15-05-2010]



- 74. Shimano Environmental Stewardship Message, Team Shimano Commitment to Environmental Stewardship
 http://advocacy.shimano.com/publish/content/advocacy/en/us/index/who_we_are0/environme
 ntal_stewardship.html [Accessed on: 06-05-2010]
- 75. Dr. Pam Foti, Dr. Dave White, Grant Bodehl, Troy Waskey, Elladee Brown, Planning and managing Environmentally friendly, Mountain bike trails; Bureau of Land Management, Arizona State University, Northern Arizona University, and Shimano American Corporation http://advocacy.shimano.com/publish/content/advocacy/en/us/index/conservation_-_bike/environmentally_mtb_trails.download.-mainParsys-0002-downloadFile.html/Mtn.%20Bike%20Guidebook.pdf [Accessed on: 30-04-2010]
- 76. Hong, Sean, Business Source Complete, "Yakima Unveils Company Wide Initiative to Pay Back the Planet. Bicycle Retailer & Industry News, 10698493, 4/1/2007, Vol. 16, Issue 5." http://search.ebscohost.com.ludwig.lub.lu.se/login.aspx?direct=true&db=bth&AN=24741828stie=ehost-live [Accessed on: 13-05-2010]
- 77. Rud, The objectives, http://www.rud.com/en/ter/objectives.html [Accessed on: 14-05-2010]
- 78. Westfalia quality, http://www.westfalia-automotive.de/index.php?id=46&L=1 [Accessed on: 11-05-2010]
- 79. Lowepro, The Environment, http://www.lowepro.com/about-us/environment [Accessed on: 13-05-2010]
- 80. Maxwell International Australia, Our environment and sustainability commitment http://www.maxwell.com.au/aboutus/environment.html [Accessed on: 08-05-2010]
- 81. Lowepro, sponsorships, http://www.lowepro.com/about-us/sponsorships [Accessed on: 14-05-2010]
- 82. Samsonite makes Safe passage to SAP, Samsonite Selects SAP and Takes Advantage of SAP's Safe Passage Program to Transform Its Global Retail and Wholesale Operations http://www.sap.com/press.epx?pressid=334 [Accessed on: 09-05-2010]
- 83. Phil Milford and Dawn McCarty, Samsonite Enters Bankruptcy Shelter From Creditors (Update3), http://www.bloomberg.com/apps/news?pid=20601103&sid=aPR0bde2t3so [Accessed on: 10-05-2010]
- 84. Pewag, Mission statement, http://www.pewagchain.com/mission.php [Accessed on: 09-05-2010]
- 85. Pewag, Environmental management & ecological policy http://www.pewag-group.com/Nachhaltigkeit-(2).aspx [Accessed on: 08-05-2010]



- 86. Active lifting equipment CO PTY LTD, Winner Lifting Gear in G100 quality for chain and fittings, 25% percent higher load capacity and 30% weight saving over grade 80 http://www.activelifting.com.au/PDF/PewagWinner100opt1a.pdf [Accessed on: 06-05-2010]
- 87. Bicycle, outdoor and snow sports trade news letter January 1 2007. http://www.sportsonesource.com/news/examples/boss.pdf [Accessed on: 07-05-2010]
- 88. Traction chain catalogue 2009-2010, http://www.pewagchain.com/traction%20catalog%2009.pdf [Accessed on: 04-05-2010]
- 89. Pewag, Innovation in snow chains,

 http://www.pewag-group.com/Produkte/Innovationen/Innovationen/InnovationenSchneeketten.aspx [Accessed on: 06-05-2010]
- 90. Atera, Questions & Answers, http://www.atera.de/_en/questions-and-answers.php [Accessed on: 10-05-2010]
- 91. Uebler, About us;

 http://translate.google.com/translate?hl=en&sl=de&u=http://www.uebler.com/&ei=4yHsS6

 vINNClOOrZ_P4H&sa=X&oi=translate&ct=result&resnum=1&ved=0CBgQ7gEwAA&pre

 v=/search%3Fq%3Duebler.%26hl%3Den [Accessed on: 11-05-2010]
- 92. Prorack Roof Racks and Accessories, http://roofrackcity.net.au/prorack_roofracks.htm [Accessed on: 12-05-2010]
- 93. Prorack, New generation roof rack systems,

 www.prorack-international.com/nz/Brochure/Whispbar_Brochure.pdf

 [Accessed on: 02-05-2010]
- 94. Mont Blanc, http://www.montblanc.se/default.asp?fla=Y
 [Accessed on: 12-05-2010]
- 95. Manuel Manga, Center for Evolutionary Leadership Tirza Hollenhorst, ifPeople, 21 April 2004 version 1.2, http://www.evolutionleader.com/topics/papers/EvoLeaderSusOrg.pdf [Accessed on: 28-05-2010]
- 96. World Wide Learn, business career article, Leadership: A necessary skill in today's business world http://www.worldwidelearn.com/business-career/article/leadership-necessary-skill-in-todays-business-world.html [Accessed on: 2705/2010]
- 97. Cultural Transformation Tools Part 3: with Richard Barrett http://www.youtube.com/watch?v=jKpsRu8b8jk [Accessed on: 28-05-2010]
- 98. Gregory Unruh, The Three Phases of Sustainability Leadership, 21 April 2010. http://www.environmentalleader.com/2010/04/21/climate-change-insurance-hope-is-not-a-strategy/ [Accessed on: 28-05-2010]



99. Ram Nidumolu, C.K. Prahalad, M.R. Rangaswami, Why sustainability is now the key driver of Innovation, Harvard Business review, Page-6, 8

http://graphics8.nytimes.com/images/blogs/greeninc/harvardstudy.pdf

[Accessed on: 30-05-2010]

- 100. Bob Doppelt, Leading change towards sustainability: A change management guide for Business, government and civil society, Green leaf publishing limited 2003, page 38 http://books.google.com/books?hl=en&lr=&id=I5AoUYoGG4wC&oi=fnd&pg=PA7&dq=le ading+towards+globally+sustainable++and+responsible+organization&ots=pu30og91PW &sig=GHa0R_cj_6N4_U68YDeL3DJq7bw#v=onepage&q&f=false [Accessed on: 01-05-2010]
- 101. Sustainablity rankings craziness, kevinwilhelm march 19, 2010, by Kevin Wilhelm & Alexia Diorio,

http://blog.sustainableindustries.com/2010/03/19/sustainability_rankings_craziness/ [Accessed on: 18-04-2010]

- 102. 2010 Global 100 list, http://www.global100.org/list/global-100-2010-review-results.html [Accessed on: 04-04-2010]
- 103. 100 Best 2009 Methodology & Penalty Box, http://www.thecro.com/node/783 [Accessed on: 26-04-2010]
- 104. Green Rankings 2009: Methodology, Newsweek Web Exclusive, Updated: 6:28 p.m. ET Sep 16, 2009, http://www.newsweek.com/id/215522#RS [Accessed on: 26-04-2010] 105. Fortune '100 best companies to work for',
- http://money.cnn.com/magazines/fortune/bestcompanies/full_list/ [Accessed on: 05-04-2010]
- 106. EFFAS KPIs for ESG, http://ec.europa.eu/enterprise/policies/sustainable-business/corporate-social-responsibility/reporting-disclosure/swedish-presidency/files/workshop_2/frank_-_esg_kpis_banks_en.pdf [Accessed on: 15-04-2010]
- 107. Dow Jones sustainability indexes, http://www.sustainability-indexes.com/djsi_pdf/publications/DJSI_STOXX_Guidebooks/02_DJSI_STOXX.pdf [Accessed on: 19-04-2010]
- 108. Environment key performance indicators,

 http://www.defra.gov.uk/environment/business/reporting/pdf/envkpi-guidelines.pdf
 [Accessed on: 10-04-2010]



109. Sustainability Performance Metrics and KPI,

http://web.ifac.org/sustainability-framework/imp-sustainability-performance [Accessed on: 10-04-2010]

110. Sustainability benchmarking: measuring up, http://www.ohlsti.co.uk/ohl/stipdfs/ohl_sti41.pdf [Accessed on: 10-04-2010]

111. Green Building Pages,

http://www.greenbuildingpages.com/2009GBPBenchmarkSustainability.pdf [Accessed on: 16-04-2010]