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FACTORS INFLUENCING GREEN SOURCING IN FOOD
RETAILING

Case study: Finnish food retailers

Master's Thesis in
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TABLE OF CONTENT

LIST OF FIGURES	3
LIST OF TABLES	3
ABSTRACT	4
1. INTRODUCTION	5
1.1 Background of the study	5
1.2 Research question and the objectives of the study.....	7
1.3 Research gap	8
1.4 Structure of the thesis.....	9
2. LITERATURE REVIEW	10
2.1 What is green sourcing?.....	10
2.2 Drivers for Green Sourcing actions in food retailing.....	15
2.2.1 Sustainability	16
2.2.2 Fair Trade	18
2.2.3 Regulatory constraints.....	19
2.3 Benefit of green sourcing.....	21
2.3.1 Long-term cost saving.....	21
2.3.2 Employee enthusiasm.....	23
2.3.3 Competitive ability	24
2.4 Factors influencing green sourcing in food retailing	25
2.4.1 Internal factors.....	25
2.4.2 Industry factors.....	33
2.4.3 National factors	40
2.4.4 Theoretical framework	46
3. RESEARCH METHODOLOGY	47
3.2 Research strategy	50
3.3 Data collection	51
3.4 Data analysis	53

3.5 Validity and Reliability of the Study	55
4. GREEN MANAGEMENT IN SOURCING IN KESKO FOOD AND SOK.....	57
4.1 Kesko food retailer.....	57
4.1.1 Kesko food background.....	57
4.1.2 Green management in Kesko food	58
4.1.3 Green sourcing practice.....	61
4.2 SOK.....	63
4.2.1 SOK background	63
4.2.2 Green management in SOK.....	64
4.2.3 Green sourcing practices	66
5. FACTORS INFLUENCING GREEN SOURCING IN FINNISH FOOD RETAILERS.....	69
5.1 Internal factors	69
5.2 Industry factors	79
5.3 National factors	84
6. DISCUSSION AND CONCLUSION	87
6.1 Discussion of key findings and limitations	87
6.2 Practical implications	91
6.3 Conclusions.....	95

LIST OF FIGURES

Figure 1. Consideration for Environmental issues	07
Figure 2. Classification of Green Purchasing Strategies	12
Figure 3. Delimiting the Green Supply Chain	14
Figure 4. Factors influencing Green Sourcing in food retailing	47
Figure 5. Factors influencing Green Sourcing in food retailing	88

LIST OF TABLES

Table 1. The impact of internal factors on Green Sourcing implementation on K-food retailer and SOK's view	78
Table 2. The impact of industry factors on Green Sourcing implementation on K-food retailer and SOK's view	83
Table 3. The impact of national factors on Green Sourcing implementation on K-food retailer and SOK's view	86

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ABSTRACT:

This study takes a look at factors that have influence on Green Sourcing in food retailing. More importantly, it focuses on factors with the positive impacts that direct retailers' strategy in Sourcing and other Supply chain processes forward Green management. Influencing factors are studied based on three main levels: internal level (company level), industry level and national level. The theoretical part of the study not only presents theories on Green Sourcing and factors influencing Green Sourcing, but also takes a look on drivers for Green action in Sourcing and benefits of Green sourcing. Based on theory, a framework is developed which presents the impact of typical factors on three levels of management on Green Sourcing process. Theories of Supply chain management and Procurement process are presented in order to identify the different dimensions of the study. The study is qualitative in its nature and case study is used as the main source of data. Based on the discussion a framework, the case study of two food retailers in Finland – Kesko group and S group is analyzed. The theoretical frameworks of real factors with real impact form the basis of the empirical part of the study. Interviews are conducted to get their answers to see the differences in responses.

With comparative research, the findings of this study show that major factors having influence on the Green Sourcing implementation include internal factors, industry factors and national factors. Most of them have positive impact and just a few of them have negative impact. The Green Sourcing is mainly driven by potential cost savings, green consumers or regulatory requirements in place. The rest factors which have indirect impact address to a much less degree on both negative and positive impact, although they often represent a more profound environmental threat and consequent challenge of addressing them. This study also demonstrates that most Finnish food retailers have started to systematically work with sustainability issues. However, the study is involved with two large food retailers who have a significant market share, there are still many more medium and small-size retailers that further researches on them are required.

KEYWORDS: Green Purchasing, Sustainable Sourcing, Corporate Sustainability, Supply chain management

1. INTRODUCTION

1.1 Background of the study

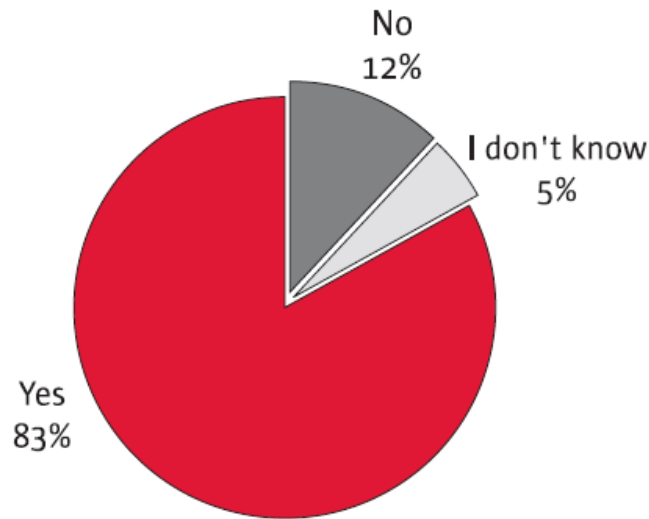
Global warming, the greenhouse effect, natural disasters, disappearing rainforests, air and water pollution, pesticide residue, bioengineered food...are nonstop issues that require the prevention and solution from all individuals to organizations in the world today. Concerns about environmental issues have hit a high desire to do more for the environment. Especially, environmental responsibility is gradually turning from a regulatory compliance to a business imperative. At no time have there been more requirements from companies and consumers to respond to environmental protection, human health and safety. Among business activities, those in the supply chain such as production, logistic, sourcing... has shown a huge negative impact on the environment; even to be known as the major source of environmental problems (Eltayeb, et al. 2010). This matter did not only have an effect on consumer health and wellbeing globally, but also on their choices, purchases, perception, and preferences (Sarigöllü 2009). Due to this, environmental issue has been the main focus in business world during the past decades as indicated in Figure 1.1. More and more companies are discovering that a supply chain which incorporates environmental responsibility is good not just for the environment but also for the business (McCrea 2010). Actually, increasing energy use and industrial waste are pushing companies to seek for options to reduce costs. In particular, the standard of food safety and level of environmental friendly products over public health and genetic modification has been fuelling the demand for the food industry move towards more effective management alternatives to ensure the products' safety and eco-efficiency. During the process from the producer to distributor and retailer to consumer, supply chain management take major responsibility in providing the final product for final sales. Since the environmental impact may originate in any stages of the food supply chain, many senior executives have looked into their whole chain to consider which stage should have improvements in the way they operate to meet these

expectations. "At the end of the day companies should be looking to their supply chains as a source of sustainability and operational continuity" says Dale Rogers, director of the center for logistics management and a foundation professor of supply chain management at the University of Nevada (McCrea 2010).As researched in many studies, sourcing and procurement can be one of the best starting points for launching a green initiative. But many other organizations still struggle with how to convert their environmental awareness into action. Sourcing, lies at the nexus of a number of functions and business units, and is therefore in a position to influence action across an organization; it can be a strong leverage point for starting a green initiative. By working with senior leaders in other functions, sourcing executives can enable a successful, holistic, multifunctional strategy for reducing environmental impact while cutting costs and building better relationships with suppliers and communities. (Turner & Houston 2009)

Cited by Butner (2009), "in a volatile economic environment, companies must dig deep across their supply chains for optimization and efficiencies to help combat the impact of a challenging economy. Sourcing of direct and indirect material continues to grow in emerging areas. To create a new roadmap for the supply chains of the future, today's sourcing and procurement organizations should adopt a strategic sourcing approach that includes initiatives designed to drive efficiency, productivity and – ultimately – business results". In fact, green supply chains in general and green sourcing in particular are primary focal processes to help the companies build and promote the green credentials in their management. As a consequence, food retailers have made efforts to develop a strategic and green sourcing process to pursue the opportunities, benefits as well as margin improvement goals. And the ultimate goal is to reduce environmental impacts of sourcing, increase resource efficiency and ensure the food safety.

Figure 1: Consideration for Environmental issues

Does your firm take environmental concerns into account when making strategic decisions?



Source: 2008 Supply Chain Monitor “How mature is the Green Supply Chain?”

1.2 Research question and the objectives of the study

The overall research question of the study is: What kind of factors influencing food retailing throughout the implementation of green sourcing process?

The overall purpose of this study is to develop our understanding of the factors that have impact on green sourcing in food retailing. Especially, the research is based on the case study of Finnish food retailers to clarify the real influence or effects of different factors in the implementation of green sourcing.

In order to answer the research question and to achieve the purpose, four objectives are set:

The first objective of the study is to take a review and do research about Green sourcing. The purpose is to 1) explain the term Sourcing and differentiate the term Sourcing with

other terms like Purchasing, Buying or Procurement 2) introduce the concept and function of Green Sourcing in the whole operation process 3) provide a wider perspective of Green Sourcing to guide the company understand and apply this function more thoroughly and completely.

The second objective is to examine the drivers leading to Green sourcing actions in food retailing, e.g. Sustainability, Fair Trade, Regulatory constraints. This is done in order to understand why Green Sourcing should be applied if food retailers desire to approach the Green Supply Chain management in their whole service system to deliver final products to final customers.

The third objective is to research and find out the main benefits of Green practices in Sourcing. The purpose is to analyze each benefit that in long term the food retailers will result from. Understanding these benefits, the industry will focus more on applying Green policy in their Sourcing process as well as other related processes in the whole Supply Chain.

The fourth objective is to research about the factors influencing the Green sourcing in food retailing on three levels: internal (company level), industry level and national level. Then factors that have positive and negative impacts on the food retailers in the implementation of Green Sourcing are explored. With the empirical test of the theoretical framework in the context of Finnish food retailers, further discussion about a more strategic operation and management for the whole food retailing industry is presented, concluding the contribution of this study, its practical implications, as well as suggestions for future research.

1.3 Research gap

The issue of greening supply chains under strategic management has been the main topic for most of research today. From an overall environmental and organizational perspective, it is important to understand the situation and what issues exist in this field of study. Many researchers have interest in the exploration of challenges facing companies' implementation of Green Supply Chain Management during their operation process; or they mainly do examine about general strategies that companies should develop for Green Supply Chain Management or more specific strategies for every stage of Green Supply Chain Management such as Sourcing, Purchasing, Manufacturing, Delivery... Among them, Green sourcing does not call for adoption of entirely new processes but it can be easily formed from existing sourcing system with improvement, renovation and innovation if necessarily to capitalize on an expanded set of opportunities. Remarkably, during the development and implementation of green sourcing, these activities will be influenced by many factors that are grouped into three levels: firm level (internal factors), industry level (retailing trends) and national level (related to regulations and support from governments). However, these influencing factors are seldom investigated, especially for the food retailing industry which the most safety standards are required. Moreover, acknowledging the extra-high requirements for food safety from European organizations, most EU food retailers have paid more attention to green issues in their supply chain and implemented a range of green management practices in the entire process starting from green sourcing, such as pollution prevention, waste minimization, local sourcing, food miles, recycling, reuse, repack and green purchasing. With the research on literature about Green Sourcing and influencing factors on Green Sourcing as well as data collecting from the case study of Finnish food retailers, my paper will attempt to bridge the identified gap to investigate and discuss how green sourcing the food retailers are doing and how they are affected by strategic factors on internal, industrial and national levels.

1.4 Structure of the thesis

This study is divided into five chapters. Chapter 1 presents a brief introduction to this thesis, includes the research questions and research gap. The research objectives are also listed.

In the second chapter, earlier literature is reviewed from two viewpoints: the green sourcing and the factors influencing the green sourcing process in food retailing. A theoretical framework is proposed to guide the research.

Chapter 3 justifies the use of single case qualitative methodology. The research data is collected for two qualitative methods, semi-structured interviews and email corpus, and these are justified. The data analysis process is explained by introducing the design of interview questions as well as the qualitative content analysis on interview transcripts and corpus. Moreover, the trustworthiness of the present study is discussed.

The fourth chapter presents the findings on the main factors influencing the implementation of green sourcing in Finnish food retailers. The findings are further summarized to answer the research questions separately.

In the final chapter, the whole research is summarized and the implications for Finnish food retailers are discussed. Suggestions on future communication for the case company towards an improved performance are given on the basis of the research findings. Finally, the research limitations and corresponding suggestions for future studies are discussed.

2. LITERATURE REVIEW

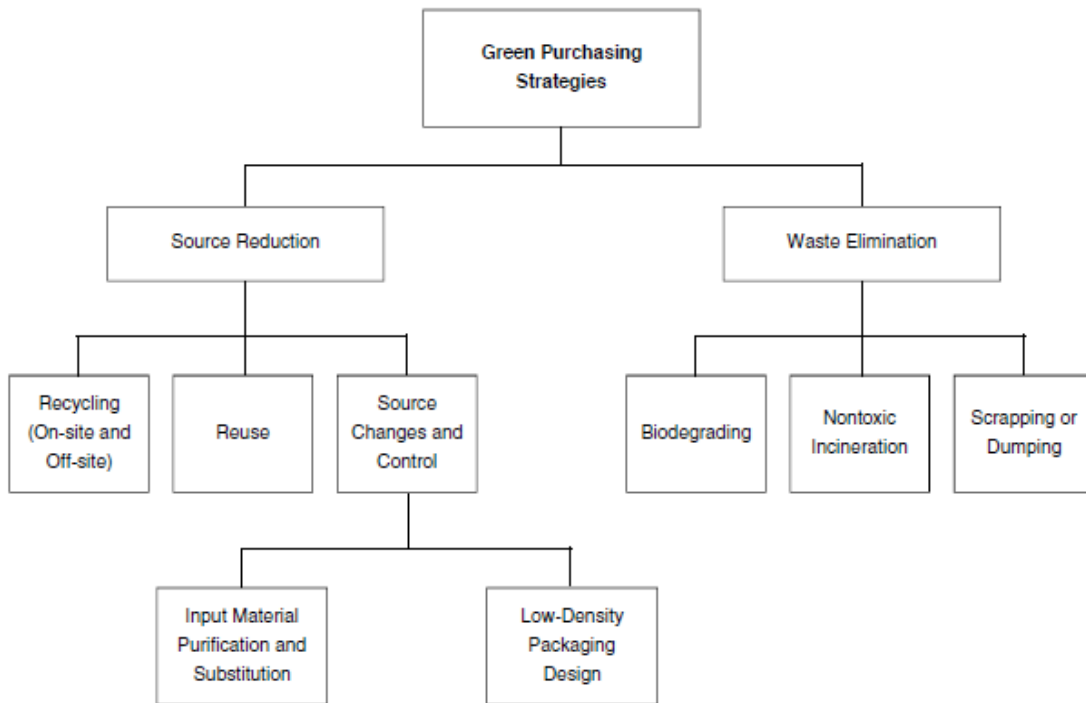
2.1 What is green sourcing?

One of the main supply chain management processes is Sourcing, also known as buying, purchasing or procurement. It is also one of the best starting points for launching green initiatives. Even though these terms can be used interchangeably, they are somewhat different from each other. Early research started from organizational buying which was defined as: “the decision-making process by which formal organizations establish the need for products, and identify, evaluate, and choose among alternative brands and suppliers” (Herbig and O’hara 1996: 41; Webster and Wind 1972). On the other hand, purchasing has been referred to the process that secures supplies, materials, and services from “the five rights”: right quality, right quantity, right time, right price and right source (Handfield et al. 2009: 8; Emmett & Sood 2010: 60). Purchasing is also widely approached as material management – dealing with the planning, acquisition and utilization of materials (Zenz 1994: 8) or “the acquisition of needed goods and services at optimum cost from competent, reliable sources”(Scheuing 1989: 4).According to Balkow (2012: 68), procurement depicts the organizational buying process involves “striving for optimization of materials and logistics”. It is not simply the buying or purchasing behavior but the closed process “the interface between customer and supplier in order to plan, obtain, store and distribute as necessary, supplies of materials, goods and services to enable the organization to satisfy its external and internal customers”(Emmett &Sood 2010: 60). However, the term of sourcing is used for the supplier selection procedures. Sourcing can be defined as “the strategic philosophy of selecting vendors in a manner that makes them an integral part of the buying organization for the particular component or part they are to supply” (Zenz 1994: 120 – 121).Sourcing means reducing the supplier base or the number of suppliers to focus on long-term relationship with qualified suppliers. Additionally, the concept of sourcing reflects “a move toward buying rather than making – on the part of organizations that previously made and the transfer of the technology to an outside source” (Zenz 1994: 120 – 121). From the strategic sourcing perspective, purchasing emphasizes the transactional features between suppliers and buyers (Balkow 2012: 68); whereas sourcing refers to more complex transactions, the integration and coordination of sourcing and production activities across buying locations(Nassimbeni & Sartor 2006: 4).Overall, sourcing is considered as the selection of suppliers while procurement and purchasing responds to the procurement

of goods. Or it is simply understood that beginning from sourcing, which is the selection of suppliers; then purchasing is the following stage which buys the materials or products from those suppliers; and finally they are procured at the best possible cost to meet the needs of the purchaser in terms of quality, quantity, time, and location.

Traditional theory focuses on three factors: quality, delivery and price; but “neglect the Greenness of products, suppliers, and logistic systems in supporting corporate performance” (Chen 2005: 931). Turner and Houston (2009) has changed this three-factor practice and brought environmental factor on the field as a fourth element in purchasing decisions. Furthermore, associate director of procurement and supply chain management for Duke University and Duke University Health System says: “Greening is never ending. It takes tiny, tiny steps and makes such a huge impact” and “Going Green means adopting policies that preserve the environment” (Smith 2008: 28). If buying, purchasing, or procurement practices address the use of efficient materials for pollution prevention as determined by Bachman (2009: 63): “Green purchasing is an ecologically based procurement strategy that blends Environmental considerations with traditional purchasing considerations”, Sourcing is one process in Green purchasing strategies according to Min & Galle (1997) (Figure 1.2).

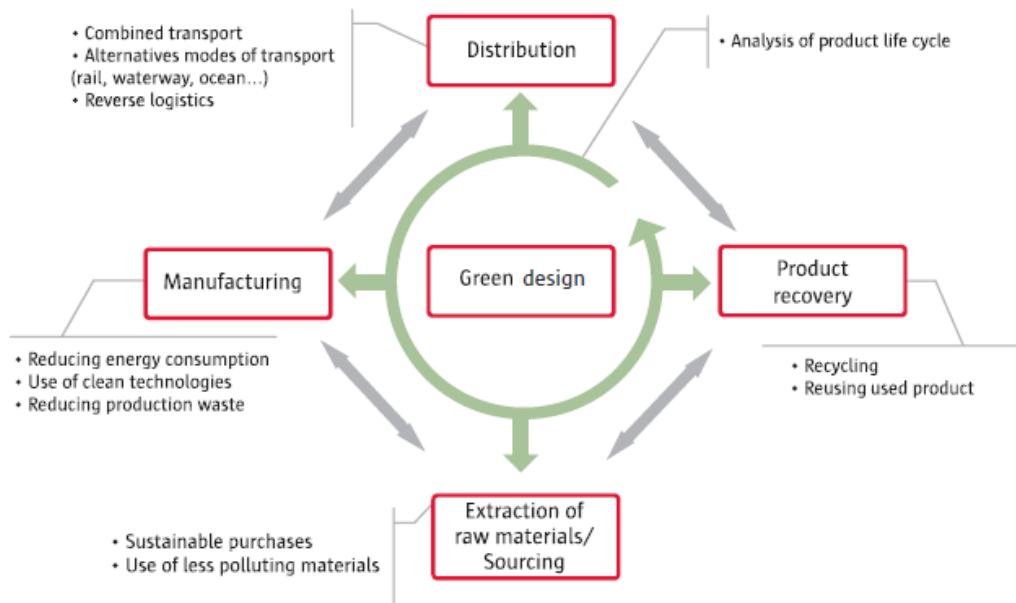
Figure 2: Classification of Green Purchasing Strategies



Source: Min & Galle (1997)

The terms that are generally utilized to define business process and products, which use a lower amount of energy, are recyclable, reduce the waste and pollution, and maintain natural resources, are: “Green”, “pro-environment”, “sustainability”, “environmentally friendly”, and “Ecology”. Simula et al. (2009) claimed that today, the term “green” is broadly used for the latest environmentally friendly and sustainable technologies and products. Combine with Sourcing – this forefront process in the supply chain management will help manufacturers to improve, innovate and develop with their own suppliers new materials, parts, or processes in the forming of final products to address environmental concerns(Figure 1.3). And we call the combination between Sourcing and Environmental solution or the mandate for the environmentally friendly suppliers at all levels of a supply chain the “Green Sourcing”. Playing the main source in Green sourcing are Green Suppliers which play important role in helping companies develop their green sourcing strategies with ideas about product innovation and how to reduce environmental harm throughout the supply chain.

Figure3: Delimiting the Green Supply Chain



Source: 2008 Supply Chain Monitor “How mature is the Green Supply Chain?”

Green sourcing practices have been increasingly researched in the academic literature as well as in other types of documents such as case studies, books... on environmental management. The U.K. organizations have published a training kit for promoting environmental management to suppliers (Business in the Environment 1995). A survey of 256 U.S. manufacturing firms, which asked the firms to identify the key players in their pollution prevention strategies, revealed that nearly half identified suppliers as key players. (Florida 1996). Green Sourcing “aims to reduce overall expenditure on organizations, products, and services by removing or minimizing the usage of “hazardous to Green initiatives” in the entire supply chain. This also reduces expenditure on waste treatment of end - of - life products and other by – products” (Emmett & Sood 2010: 60). According to Turner and Houston (2009:16)“The potential of Green Sourcing today is reminiscent of the quality movement in the late 1980s (...).Within a few years, in many companies, quality took its place alongside price and service to become the third element of strategic Sourcing. Today, environmental sustainability is poised to become an important fourth element.”

Also from their study, “Green Sourcing encourages the same kind of in-depth, widespread awareness of practices and processes that companies have gained from adopting Lean Six Sigma, process optimization, collaborative decision-making, and other quality-oriented methods.”

Green Sourcing may include certification of suppliers, procurement of environmentally friendly materialer/producer (Hervani et al 2005: 334), reducing waste products and minimization of the use of harmful products in production (Rao & Holt 2005: 900). According to Turner and Houston (2009), the fundamentals of green sourcing are similar to those of quality in three ways: approach to costs, brand appeal, and cross-functional insights into processes. Therefore, “green sourcing goes beyond considering the economics of the scenario or the impact on the customer and also takes into account the environmental impact on the choices to be made”.

On a wider perspective, green sourcing uses the right kinds of materials, technology, and processes supported by the right kind of suppliers. In traditional theory, strategic sourcing focuses on searching for low-cost and high-value materials; developing technology and inventory control more efficient. In green theory, green sourcing means working with suppliers to purchase materials with higher rate of recycled content, pollution prevention, energy efficiency. A research conducted by the Carbon Trust – a research and advisory group in U.K on how to reduce the ecological impact of Trinity Mirror – a U.K. newspaper publisher found that 80 percent of the total carbon emissions come from paper production and this rate will decrease if this company buys paper with high recycled content from a supplier using low-carbon energy sources (Turner & Houston 2009).

2.2 Drivers for Green Sourcing actions in food retailing

As gatekeepers of the food system, food retailing industry with a mass reach of operations and stores, supply chains and product portfolios to consumers, food retailers are ‘in a powerful position to create a greener, healthier and fairer food system through their influence on supply chains, consumer behavior and their own operations’ (Sustainable Development Commission 2008: 6).

2.2.1 Sustainability

In recent years, “there is widespread agreement that the sustainability challenges facing the food system require serious action” (Sustainable Development Commission 2008:85). Especially, of positive messages to consumers with healthy and safety products, food retailers have engaged them in more sustainable consumption habits. There have been a lot of green announcements by food retailers around the world in 2008 such as Wal-Mart, Tesco, Sainsbury’s. This demonstrates the high-level commitments in the retail sector in focusing their entire enterprise on green goals and sustainable programs to maintain green brand credibility with all stakeholders. (ACRS Secondary Research Report 2008)

Sustainable development addresses social, environmental and economic aspects simultaneously. Social value is increased by the improvement provided to employees, customers and suppliers. Ecological value is fostered by the companies’ motivation to the effectiveness of resource use, nature conservation and waste minimization. Economic value is gained in the surplus needed for the continued existence of green-brand organization, cost reduction and in other incentives to its employees and suppliers (Preuss 2005: 22). Also from the study of Pedersen (2009), the term sustainability refers to the “triple bottom line” including the simultaneous pursuit of economic prosperity, environmental quality and social equity. In practical terms, sustainability initiatives in sourcing seek to reduce the use of energy, water, greenhouse gas emissions and harmful substances in the selection of materials for design and manufacturing of their products. Sustainable development may not cover the total answer to green management, but it is a right direction for companies in

retailing industry heading to and it has moved from a trend to a business imperative. Sustainability helps retailers achieve not only their business goals but also other benefits such as customers' loyalty, brand awareness, government's support... Then competitive advantage will be generated from here for eco-friendly products which would enable early movers to distinguish themselves from other firms in their industry. "Sustainability has become a distinguishing factor between the leading companies and the followers" (Pedersen 2009). Especially, it will direct the retailing companies to long-term development strategy or sustainable performance. Therefore, these dynamics are putting companies in retailing industry under pressures to be both lean and green in their whole process from product sourcing and procurement to operation and management. According to Pedersen (2009), sustainable sourcing is the right thing because it reduces cost and waste in the supply chain. "If the green initiatives aren't profitable, they won't be sustainable," says Rodgers. "Don't just implement or try something out that makes no sense, and that won't pay for itself in the long run," he modifies. Sustainable sourcing also requires the selection of suppliers "Before testing anything out, ask yourself what your supply chain partners are doing to go green, what new initiatives might fit under the green banner, while also reducing your costs or your customers' costs and where you can remove both energy and materials out of your operations." (McCrea 2010) Furthermore, retailers only lead edge in sustainability if they lead edge in sourcing and procurement. Sustainable sourcing is a process of buying goods and services that takes into consideration the long term effect on people, planet and profits. Organizations that develop sustainable sourcing typically have an integrated connection between sustainability and the supply chain. Sustainable sourcing considers how products and their components are made, where and from which suppliers they come from, how they are transported and disposed of. This is a much broader perspective than the traditional sourcing policies which focus on quantity, quality, price, lead times and vendors. Therefore, in most cases, green sourcing can be called sustainable sourcing. Full transparency of the supply chain is demanded in sustainable sourcing to secure the supply of sustainable commodities. This includes the sustainable competences of the suppliers, knowledge of the commodities used, and the cooperation with other

companies, governments and NGOs. Then the sustainability in sourcing of the company will be increased in the long term and on top of the margins. (Helen van Hoeven 2009)

2.2.2 Fair Trade

Within an organization, the green initiatives are also linked with fair trade practices as they provide the conditions for producers to operate sustainable businesses and ensure the fair treatment between shareholders rather than focusing on their own interests. Stenzel (2009: 1) argues that “One of Fair Trade’s underlying principles is that it promotes sustainability”. Fair Trade organizations call for practices in both production and trade of goods that minimize environmental impact. While social and economic sustainability priorities are apparent, the standards of Fair Trade also address issues of environmental sustainability. Fair Trade organizations are called to utilize practices in both the production and trade of goods that minimize environmental impact.

By Green Sourcing, raw materials are to be managed sustainably and come from local sources as much as possible. Measures are taken to minimize energy consumption and production of waste. In cases where agricultural products are not organic, pesticide use is kept low to reduce environmental impact as well as the economic and health impacts for producers and workers. In addition, Fair Trade organizations make concerted efforts to use recycled or biodegradable packaging and transfer goods by sea rather than by air when possible (WFTO 2009).

In food retailing, retailers may become greener by buying up organic items or bio-based ingredients from fair trade producers. By this way, greener lines with environmentally-friendly products are introduced or incorporating more into the whole retailing system. In fact, the compliance with Fair Trade system has been processed effectively in many large food retailers. For instance, Carrefour has impressive Fair Trade credentials, being the largest Fair Trade retailer in France. Over 4,500 products of Carrefour have been licensed to carry the FAIRTRADE Mark in the UK. According to the Fair Trade Foundation, sales

reached £1.17 billion in 2010, a 40 percent increase on the previous year. (Retail Ethics and Green Retailing 2012).US health food chain Whole Foods Market has become one of America's leading retailers of organic products, and is regarded by many as the main catalyst for growth for all ethical products, including organic foods (Euromonitor, 2008).

2.2.3 Regulatory constraints

In alignment of global supply network, most organizations are adopting green initiatives in whole supply process to comply with regulatory constraints and to ultimately improve the company's global benchmark. Over the last two decades, there have been various environmental regulations, standards, requirements and directives in food retailing being published and enforced by local, national and international organizations. They include product traceability, end-of-life recycling and disposal, labeling, product liability, food safety, energy use... For example, the International Organization for Standardization (ISO) developed ISO 14000, an environmental management standard that addresses various aspects of environmental management from auditing, performance evaluation, labeling to lifecycle assessment. It provides practical tools for companies and organizations looking to identify and control their environmental impact and constantly improve their environmental performance. Whereas, ISO 22000 certifying for food safety management. The consequences of unsafe food can be serious and ISO's food safety management standards help organizations identify and control food safety hazards. As many of today's food products repeatedly cross national boundaries, International Standards are needed to ensure the safety of the global food supply chain. There are also other two recent regulations that have directed companies' supply chain in the international business community are waste electrical and electronic equipment (WEEE) and restriction of hazardous substances (RoHS). The European Union is also stepping into introducing and enforcing its own regulations by introducing the EU Eco-Management and Audit Scheme (EMAS). EMAS is a management instrument for companies in all industry to evaluate, report, and improve their environmental performance. Then, Integrated Pollution Prevention and Control

System is the regulatory system that firms must adopt when operating in UK especially in foods, chemicals, paper and energy generation industry. These systems actually impose pressure on food retailing companies for immediate compliance to attain green service from efficient sourcing solution to storing on shelves with green products that show customers a proactive approach to environmental improvement (Preuss 2005: 24). A study of Yang and Sheu (2011:10612) found that firms with a proactive strategy in green practices were more willing to adopt the regulations than those with a reactive strategy. Additionally, firms with proactive strategy had less trouble and fewer changes during compliance while firms with passive strategy were under more pressure to make costly changes to meet the requirements. In all cases, firms in retailing industry move towards to work together and share environmental information with their suppliers and clients during the implementation process (O'Brien 2002; Walther and Spengler 2006). These green collaborations were divided into two major activities, sharing of environmental expertise and fostering the usage of environmentally friendly materials (Yang and Sheu 2011:10607). Importantly, the environmental management initiative has gradually upgraded from auditing waste-management into a basic function of supplier management. Most of green collaboration efforts from suppliers were not limited to replacement of hazardous materials and waste disposal but more specified in revising production operations.

Environmental protection regulations require retailing companies to nonstop improving their products and process to increase customer satisfaction, shareholder value and new markets extension. By applying those regulations in Green Sourcing activities, food retailers will make best efforts to ensure their products and services delivered to customers with reduced environmental impacts and higher level of healthy and safety. Furthermore, as the number of environmentally preferable products and services are increasing, consumers will attach their purchasing decisions to environmental performance standard recognition such as certificate or label of quality. For instance, the eco-label helps customers identify products and services that have a reduced environmental impact throughout their life cycle, from the extraction of raw material to production, use and disposal. There are many eco-labels issued by a group of country (Nordic Swan, Euro-Flower), global organizations

(Forestry Stewardship and Marine Stewardship Councils (global initiatives)...Especially, in this stage of learning and developing environmental and sustainability strategies, firms in retailing industry will gain opportunities for cooperation because it is required between organizations to share experiences and information. Also, the government will work with suppliers by giving support and priorities to help them understand clearly the environmental impacts and how to improve environmental performance. On the other hand, the investment community is becoming interested in the environmental performance of organizations by issuing a range of rating schemes to evaluate this performance such as Dow Jones Sustainability Index with fund managers, Green Sourcing criteria... From these plus points, under Regulatory constraints, Green program in Sourcing as well as other processes should continue to be promoted within the retail industry in general and food retailers in specific.

2.3 Benefit of green sourcing

According to Accenture (2008), “Going green isn’t just good for the environment - it’s good for business too. By making green a core value, involving the entire enterprise in a process of transformation that embraces all of the supply chain, environmentally conscious retailers are establishing real green credibility and driving significant competitive advantage”. Actually, many benefits of pursuing green programs are reported by food retailers e.g. long-term cost saving, positive corporation image and credibility, customers’ loyalty. Moreover, top-performing retailers recognize that greening the operation brings a wealth of benefits that extend to increased revenues and profits. Especially, developing Green strategies in Sourcing process, food retailers also result from following benefits:

2.3.1 Long-term cost saving

The environmentally preferable practices in Sourcing by obtaining products from sustainable suppliers can help firms, especially in food retailing, lower costs in waste management, hazardous substance management and pollution prevention. This is explained that it is vital for retailers to consider the total costs generated throughout the product's life cycle, namely the cost of use, the cost of dealing customers' claims and the cost of processing at the end of the product's life (disposal, recovery, recycling and so on). In other words, the sourcing of materials and products with high standard of safety and recycled content will decrease the fee of customers' treatment, managing waste and contributes to conserving natural resources. For instance, sourcing products with packages made from recycled paper or other wastes consumes less 50% energy than using the raw virgin materials with high carbon dioxide emissions for disposal. Other costs including energy tariffs, waste treatment... will be cut down for a long-term plan and head to the purpose of sustainable development. Additionally, retailers also result from low price from Green suppliers who addresses cost savings by minimizing the consumptions and use of basic raw materials such as energy and water in the initial manufacturer of products. For example, energy-efficient appliances and water-efficient products will offer cheaper electricity, gas, fuel, water and other energy bills. In some parts of the world, Liquefied petroleum gas (LPG) fuel is cheaper than petrol or diesel, electric or dual-fuel vehicles offer direct tax benefits.

By implementing Green Sourcing, retailing firms which import environmentally preferable products or services with less toxic and harmful substances will easily comply with environmental regulations. This can help food retailers avoid wasting time and costs in applying for permit or environment approvals for their products from local or regional governments. Additionally, retailing firms will be released from the rising cost caused by the penalty of landfill or wrongly waste disposal. Alternatively, cost will be lower if these waste disposals are passed on to waste producers.

During the Supply Chain, products will pass many stages to reach the final customers. Therefore, if retailing firms implement Green practices at the first stage of Supply Chain –

Sourcing, risks of contaminated foods will be reduced, resulting lower liability of human life. Also, the treatment costs as well as other refunds due to the influence of hazardous substances in food on customers' health will be cut down. Furthermore, any cost related to human being is extremely high, thus green food retailers who are aware of food security from the origin of products will benefit from cost-saving and low responsibility.

2.3.2 Employee enthusiasm

Organizations that use environmentally preferable products, materials, or substances have seen Green Sourcing as a mean of improving both environmental and social performance. In fact, employee health and safety are secured with the green standard of materials and processes because risk of accidents is reduced. Consequently, firms can result in reduced liability, lower health and safety costs. Furthermore, undertaking environmental management can generate a lot of staff's enthusiasm and awareness within a firm as it allows employees to express their environmental concern in a practical way by contributing towards improving environmental performance. Several surveys have shown that certain employees think that organizations should address environmental issues in their policies. Eventually, firms should address Green policy to attract the highest morale and calibre of staff because this part of employees considers their working environment as a place of "work to live" with health and security. According to Retail Sustainability Report in 2013 executed by Retail Industry Leaders Association (RILA), motivating employee enthusiasm for recycling, philanthropy, volunteerism in the community, and team building through meaningful projects heading to environment and society are also benefits. These projects can give employees a sense of personal pride and fulfillment, which improves retention, draws in the best new talent, and promotes interdepartmental collaboration.

2.3.3 Competitive ability

Implementing environmental standards in Green Sourcing can raise firms' reputation and help win new organizational support. Actually, retailing firms that have eliminated listed toxic substances from their materials and products sourced from suppliers may both result from positive media image and cooperative relationships with developed suppliers. Food retailers' profile will be evaluated by consumers who demand products to be manufactured and delivered in an environmentally responsible way. With a profile responding to Corporate Social Responsibility and Environment Protection, retailing firms will lead the market with innovative products or at least will follow the same path with competitors in order not to get left behind in a Green business world. Also reviewed by Deloitte (2007), leading green retailers have shown that achieving environmental sustainability is good for business, not only because it brings financial benefits through additional sales to scrupulous consumers, but also because it offers the chance to establish market leadership.

Cathy Rodgers, vice president of global opportunities for IBM and chair for the Institute for Supply Chain Management's committee on sustainability and social responsibility, confirmed that companies would spend the money and time going green even though orders are down and margins are thinner because "It's a competitive necessity". This competitive necessity is driven by the rising ethical awareness of consumer, interest in green initiatives, carbon footprints and sustainability. Additionally, she said that green is no longer leading edge or pioneering but a normal part of a company's operation and "Firms that want to stay on top of their games need a cohesive and comprehensive sourcing strategy that addresses environmental issues and the challenges we're facing in this realm." (McCrea 2010)

Generally, green credibility can lead a retailer into a leading environmental brand. As customers are turning to be more environmentally conscious, retailers are also in a unique position to shape green choices. With that help, retailers can actually encourage investment in new, environmentally friendly products. In addition, offering obvious benefits for the

bottom line, retailers with green credentials are attracting more and more consumers and employees.

2.4 Factors influencing green sourcing in food retailing

This part of the study mainly focuses on the breakdown of main factors influencing green sourcing in food retailing. These factors viewed from the shareholder perspectives are classified with three groups of level, company level (with internal factors), industry level (with factors within food retailing industry) and national level. Then these groups of factors are further divided into sub-categories of positive and negative impact, which will appear in each section.

2.4.1 Internal factors

In the 1990s, “large corporations were increasingly under attack for their uncaring attitude towards the environment and employees in developing countries” (ACRS Secondary Research Report 2008). Once this affected the corporate image, consumers' attitudes and buying behavior, retailing companies began taking into serious consideration and changing their practices for the greener performance. Initiating from Green Sourcing, retailing companies control this process under internal factors, each of which will be discussed as follows:

Positive impact

Cost reduction goal

Firstly, in most companies, the sourcing and procurement departments are conducted by senior management to meet the cost reduction goals. Actually, by reducing environmental impacts, Green sourcing helps drive cost reductions in a variety of ways such as lowering the volume of resource inputs, preventing wasteful resource use and using content substitution, while still allowing clients to enjoy the equivalent value. Since price of commodity items such as steel, electricity, fuels continue to soar, a comprehensive green sourcing effort not only address a company's fundamentally sourceable items in the ingredients making its products or services but also for its own operations. A strategic green design of sourcing may explore ways to reduce or in an ideal way to eliminate the usage of these types of commodities in a variety of sourcing categories (Christensen et al. 2008). For instance, Wal-Mart installs their whole supply chain the energy-efficient light bulbs and cuts down on paper waste... at all stages of operation and to be Wal-Mart partners, they must comply with quality and environmental standards. More recently, it awarded the World Resources Institute (WRI) a \$420,000 grant to develop tools that companies can use to measure their supply chains' carbon footprints (defined as the total set of greenhouse gas emissions caused directly and indirectly by an individual, organization or product) (McCrea 2010). In 2007, Wal-Mart, TESCO and Cadbury launched the Carbon Disclosure Project to bring retailers and suppliers together to identify potentials for improvement or innovations to manage down carbon footprint (Forum for the Future 2008).

Actually, economics play a major role in a company's decision to create green initiatives. Companies that have instituted sustainability principles in their source selection from quality audits, packaging, and product design have found that this not only benefits the environment, but also the bottom line. An example is Wal-Mart's recycling of plastic bags and packaging. Rather than pay tipping costs for the approximately 5,000 tons of plastics sent to landfills annually, Wal-Mart is now recycling in transportable "plastic sandwich bales," which are sold to plastic lumber manufacturers as a raw material (Pedersen 2009).

In recent years European retailers have been imposing food safety requirements upstream their supply chains (Forum for the Future 2008; BIO Intelligence Service 2009). Then the retail practices of greening sourcing are developed in various ways. These include the

selection and cooperation with supply companies to decrease associated environmental impacts; sourcing products with lower environmental profiles (e.g. local and organic) or phasing out products with high environmental impacts (Chkanikova and Mont 2010). Among the issues that have received widespread attention among retailers are food safety, animal welfare, local produce and ethical trading (human rights, social welfare and fair trade standards) (Jones et al. 2005a). There are many examples of “best practices” in green sourcing among European retailers. Within the waste guidelines issued by Carrefour, suppliers are expected to decrease packaging and increase packaging recyclable content by 10% and 75% correspondently until the year of 2013 (CSCP and UNEP DTIE 2009). Additionally, Carrefour is involved in helping its SME suppliers to improve sustainability performance. Another example, eight out of ten own-brand suppliers of ICA are adopting Global Food Safety Initiative (GFSI) standard (Smith 2011). Also, ICA suppliers of fruits and vegetables, as well as subcontractors, follow the Euro GAP (Global Agricultural Practice) protocol to ensure good agricultural practices.

Furthermore, to pursue cost saving goal, many retailers apply local sourcing to reduce food travel distance. Local sourcing also supports local farmers and food producers, ensures the development of national agricultural sector, and ensures the quality of resources and products at the original places with extra fresh food. By working with over 300 local suppliers, ASDA gains 3 million “food miles” cut down per year (Paulavets 2008). This contributes to the minimization of negative transportation impacts on environment and provision of as fresh products as possible to the end customers. Therefore, some of Morrison’s vegetables (carrots, cauliflower, broccoli) are 100% sourced locally when available in season. Other veggies as onions, mushrooms and potatoes are 90% derived from local farmers in UK. Since 2007 Morrison’s is committed to ensure, that fresh pork available in all its stores is delivered from British producers. Similarly, Sainsbury sells locally delivered 100% of organic meat, poultry, fish, eggs and milk, as well as apples and tomatoes when available in season (Paulavets 2008).

Return on investment

Along with cost reduction, return on investment (ROI) makes a strong affect for green sourcing decision. In the study on use of environmental information by food purchasing companies in Sweden which also include overview of retail practices, Bergstrom (Bergstrom et al. 2005) has revealed that environmental considerations in sourcing decision-making are influenced by financial realities. It is an important reminder that consumption and return to the environment takes place at every point on the supply chain. There are three key areas where green sourcing can drive direct opportunities on revenue (Christensen 2008).The first source of revenue is turned from waste products. For example, a leading beverage manufacturer operates a recycling subsidiary that sources used aluminum cans from a wide array of suppliers. The subsidiary actually processes more aluminum cans than are used in the company's own products, consequently developing a strong secondary revenue stream for the company. In second area, green sourcing can help to set up a separate business to serve environmentally conscious customers and organizations. In fact, in the cleaning-products aisle of any major supermarket or discount store, shoppers will find numerous options of "green" cleaning products from a variety of consumer products. These products are designed to use natural ingredients instead of chemicals, and reduce overall packaging costs. Finally, for companies that insist on winning high-profile deals, green sourcing is essential to implement. For example, the organizers of the 2008 U.S. Democratic National Convention (DNC) stipulated very stringent green procurement regulations for the convention's food suppliers. Exact figures aren't available, but it's very likely that the retailers that source food from local and organic farms won the majority of the DNC's business.

Tibbs (2009) in his article presents a strategy related to return on investment from green sourcing calls “value loop”. He states that “Under this approach, the beginning and end of the value chain are linked together so that materials, products, and waste can flow among suppliers, manufacturers, and customers in a sustained cycle . . . to promote technologies and business models that have minimum impact on nature throughout the loop — or that incorporate it in a beneficial way.” He goes on further to say that the first half of this loop is basically already in place where the raw material and manufacturing segment employ with their waste management and reprocessing programs. The back half of the loop comes

from the consumer and requires product buy backs and product de-manufacture (breaking down an item into its basic elements) in order to create a return path to a manufacturer's resource position in the cycle.

Corporate's image

Brand awareness and corporate reputation are other types of return on investment that companies significantly consider whether they focus on green sourcing. Actually, a retailer's corporate brand is among its most valued assets as it is much more than the financial return on investment analyzed above. The invisible revenue generated from brand awareness and reputation is the sustainable root that helps maintain the company's existence over the long term. Sarah Roberts (2003) affirms that there is a relationship between corporate social responsibility, reputation, and supply network conditions. Similarly, according to Grahame Dowling (2002), "a good reputation enhances the value of everything an organization does and says, a bad reputation devalues products and services and acts as a magnet that attracts further scorn." Businesses such as Nordstrom's, Ford, Volvo, Wholefoods, Walmart, Exxon, Williams and Sonoma, and Nike, enjoy strong brand awareness with quality products and solid reputations as companies and consequently are mandated by Corporate Social Responsibility in order to maintain the value of their assets and their reputations and to sustain their presence in the market. Acknowledging that, retailers invest a significant amount of resources to enhance their green brands with consumers, government, and other key stakeholders. By publicizing its efforts to improve environmental performance, a firm can improve its public image, thereby enhancing its position in the market place. And by demonstrating sound environmental management, a firm can reassure the local community about its activities and thus build up good community relations. In addition, doing so keeps the company's brand at the top of consumers' minds when they are deciding where to shop, and it builds trust in the communities in which retailers operate. So, it is not surprising that retailers address sustainability activities to enhance the corporate reputation.

Collaboration

As an entity in the entire supply chain, in alignment with the upstream and downstream partners, retailers should apply green practices in sourcing and other stages to create the joint benefit from environmental driving. It means that going Green will help retailers spend less money on new products or solutions. When organizations begin to look outside their four walls and collaborate with their partners, they will often see an even stronger motivation towards environmentally friendly process. As has been noted, involving in the sourcing process from original places to distribution to retailers to final customers, managing independently without the collaboration of the other players is a fruitless strategy and it will be hard for the suppliers in the chain to adopt new ways of working (Emmett and Crocker 2006).

The business alignment between buying organization and its trading partners is essential because it responds to their suppliers' development which involves: "Any effort of a buying firm with a supplier, to increase its performance and/or capabilities and meet the buying firm's short and/or long-term needs" (Krause and Ellram 1997b). In addition, cooperation encourages intensive information exchange with suppliers such as sharing of accounting and financial data, sharing of internal information like costs and quality levels of the suppliers. These benefits from cooperation are necessary for green sourcing process as it saves time and money for buying organizations in selecting the suitable suppliers as well as improving supplier base or performance heading to environmental responsibility. In fact, working only with reliable suppliers, strive to reduce lead times and - like Wal-Mart is already doing - demand to see exactly what business partners are doing to be more green themselves. Furthermore, "Consumers have access to, and a desire for, information about sustainability - information that influences their buying decisions," says Rodgers. "The sooner companies recognize this and provide that data in a relevant, transparent way, the better off they will be." (McCrea 2010)

During the collaboration, retailers and suppliers are benefit from additional investments and risk reduction. Building suppliers' capacity is necessary for retailers and can take form of financial investments, information support and trust building, all to ensure greening of supply chains and creation of markets of green and ethical products. For instance, Sainsbury's "Farm connection" scheme delivers different trainings to address lack of IT skills among farmers engaged in British beef and lamb production. The provision of information and advice services also ensures suppliers to comply with sustainability requirements thorough the supply chain process. This is why Supply Chain Leadership Collaboration has been launched by the Carbon Disclosure Project to bring together retailers and suppliers to identify possibilities for reducing carbon footprint (Forum for the Future 2008).

Incentives

One of the most challenging issues for companies that following green movement nowadays is the higher production costs of green products compared to the ordinary ones (UNEP 2005; BIO Intelligence Service 2009) and consumers' low willingness to pay extra price for eco brands (European Commission 2009). Especially now when the economic recess has not gone to the end, the more challenge companies have to face with. Retailers seek the possibilities to overcome this problem by applying special incentives to suppliers to encourage the supply and pricing policies to increase the sales of green products. Therefore, in implementing green objectives in sourcing, incentive alignment is necessary for the involvement of all key stakeholders. Not only incentives provided for suppliers and manufacturers for the efforts of reducing raw material consumption, increasing productivity and decreasing waste, but also the reward for retailers' employees to initiate sustainability practices through green sourcing, utilize reuse, remanufacturing, and recycling of materials to conserve resources and providing better service to the final customers in terms of both social and environmental concerns. For example, Dutch Ahold and Coop Sweden provide price reduction for organic products (Linell 2005; UNEP 2005), while French Auchan has special pricing schemes for Fair Trade products (UNEP 2005). Carrefour provides own

eco-brand products for different budget categories (European Retail Round Table and Euro Commerce 2010). To promote green sales, Super Brugsen in Denmark provides consumers with discounts to test green products (Schmidt et al. 2008). Danish discounter shop Netto differs from other stores of the same format by permanently including ecological and Fair Trade assortment. These products are offered at the lower price compared to conventional shops, under the slogan “Everybody should have the right to ecology” (“Alleskal ha’ rådtiløkologi”).

Negative impact

Cost arising

Given that Green Sourcing minimize the management cost for food retailing e.g. materials consumption, pollution prevention, customers’ treatment in food retailing, then this will automatically lead to savings. However, in times of crisis, where the expenses are cut as much as possible, though, that actually can be a disincentive to engage in Green Sourcing. There is a perception that Green designed products can sometimes cost more than conventional products, because large scale and long-term investment is required in order to implement more environmentally-friendly manufacturing processes. “The investment costs could represent a barrier for those actions that do not result directly in economic savings, such as for example in the case of projects related to the eco-design of products.” (BIO Intelligence Service 2009: 51). Actually, Green products are more expensive because it is produced with cleaner technology, made by materials with higher quality and purity, thereby saving on pollution prevention and waste management. Especially for retailers with a range of discount stores, expensive price will hinder the assortment of green and ecological items in shop. Moreover, the company may lack of resources to pursue a green strategy such as the replacing of refrigerators and freezers in stores or lack of resources may also be seen in terms of staff time in the company to inspect and audit the green performance (Almaani et al. 2004)... Even though these costs can be generated in a short term, it is given as the reason for the reluctance of some food retailers to commit a green

sourcing policy. Additional costs may arise from the need to develop additional systems to collect information about customer expectations, process the information, develop internal and external strategies for greening supply chains and procedures, and to implement them. Eventually, although arising in the short term, the costs of actions to reduce environmental impacts can thus be a barrier for retailers.

Organizational size and management

The size of the organization and lack of commitment are both factors that may affect the organization involvement in Green Sourcing. With regard to the organization's size and structure, the larger organization will have more commitment for Green movement as the brand image or public awareness of larger retailers will be more broadly disgraced. Zhu et al. (2008) highlights that "The significant effect of organization size on Environmental strategy may be due to resource-based aspects such as the greater capacity or greater slack characteristics of larger organizations to aid in absorbing the risks and unpredictability associated with voluntary Environmental strategies, or to these organizations' higher visibility (and hence, higher external scrutiny)".

Additionally, lack of alignment between corporate strategy and its green strategies, single-minded focus on internalization or no motivation to implement green initiatives will have negative impact on Green movement. Similarly, knowledge sharing barrier due to internal knowledge gap when explicit knowledge is shared less than the tacit knowledge may cause the lack of general knowledge about environmental issues, and the strategies for retailers to improve their environmental performance. Along with inadequate knowledge, lack of training, control mechanisms, audit and evaluation system, poor technological integration are challenging factors for retailers to develop Green Sourcing Strategy.

2.4.2 Industry factors

Retailers play an important role in making a more sustainable future through responsible business strategy which meeting their green consumers' demand (Just-Style 2007). In response, retailers around the world are increasingly working toward ensuring that their business operations do not have negative impact on environment and society at any point along the product life cycle. Consequently, retailing industry specifying in food has been driven and hinder to Green implementation firstly in sourcing process by following critical factors:

Positive impact

Green Consumers

Antonies & Raaii (1998:177) described the behavior of consumers as “Studies related to attitudes, intentions and decision making processes, aimed to clarify and foresee such behaviors”. Today's consumers behavior are most dominated by concerns about products with high natural ingredients, low “carbon footprint” and waste disposal, which in turn means consumers are increasingly demanding greener products from retailers and brands that have adopted green practices throughout the entire supply chain. Similarly, as indicated in the research of Gupta& Ogden (2009), Mintel (2006) stated the willingness of the consumer to pay higher for a product that is green, and the concern of the customer regarding pollution and recycling, is to make up his attitude and create the consumers “Green buying behaviors”. Kardash“s (1976:159) also cited in Macdonald & Oates (2006) that “all customers are potential green customers”. When a customer is allowed to choose from two products that are the same, the customer will desire the one that is environmentally friendly. Eric Olson, senior vice president, advisory services at BSR (Business for Social Responsibility) in San Francisco, who sees consumer interest in green as key driver of the movement, says that: “People are paying an unprecedented level of attention to the products they buy, and to where those goods come from,” and “As a result,

delivering products that have a good story to tell, both environmentally and socially, has become a very big deal.” (McCrea 2010)

A consumer who is aware about the environment is likely to make a green buy (Peattie 2001). Green consumers are those who consistently and primarily discriminate product purchases in favor of the environment. In fact, green consumers globally will have an estimated annual buying power up to US\$500 billion in the year 2008 (ACRS Secondary Research Report 2008).

Ottman (1993:27) described green consumer as “people who search for and support products that fulfill their requirements, and that have less influence on the environment”. As stated, consumers become more insistent on environmental theme from organizations. Therefore, an organization should create a long term strategy with care about eco-friendly system (Darling et al., 2009). Lassaye (2001) indicated that the demand from consumers who are highly concerned about environment and are willing to do and spend more to be environmentally friendly has created a new niche markets for green products and foods packed with recyclable material. Roper Starch Green Gauge data figures show consumers are willing to pay 5% to 10% more for energy-efficient major appliances and computers, pesticide-free fruits and vegetables, biodegradable plastic and paper products made from recycled materials (Setlow 2001).

Due to high desire for green products from customers, 92% of European multinational companies have incorporated environmentally sustainable programs (Peattie & Crane, 2005). Ottman (1993:27) agrees that green customers can be driven by giving an additional cost effectiveness or a green benefit in the product. Peattie (2001) claims that the behavior of consumers can be generated by emphasizing on the benefits of green products compared to their conventional competitors that contribute towards environmental issues.

It differs to view consumer concern about the environment on the global picture. A 2007 Ipsos/MORI survey of more than 16,000 people in 15 countries revealed that the Chinese

are most concerned about climate change, with almost 70 percent saying they would prefer to buy products and services from green companies. Chinese consumers also showed a greater preference than other Asians and Europeans for working for companies with a solid environmental reputation. Australian consumers ranked second, with more than 50 percent saying they prefer to buy products and services from green companies, compared to 42 percent in the US, and less than 30 percent in France, the UK, Germany and Spain. The survey also questioned people about the measures they were taking to reduce their carbon footprint. Nearly 60 percent of Canadians said they were doing things to be more environmentally responsible, followed by 55 percent of Australians and 52 percent of Chinese (Euromonitor 2008).

As green becomes mainstream and increasing numbers of consumers embrace environmentally responsible practices, green consumers are becoming a sizeable and lucrative target market - particularly in North America, Western Europe, Japan, and Australia (Marlow 2007). 'Lifestyles Of Health And Sustainability' or LOHAS, is an acronym commonly used to refer to the green consumer and represents the marketplace for the goods and services sought by these consumers. The term LOHAS was first coined 10 years ago in the US in an attempt to define an emerging trend of consumers making values-based decisions about what they purchased. Research indicates that one in six American adults now identify with the concepts of health and sustainability, with the trend spreading across many parts of Asia, including Japan, where 70 percent of consumers recognize the term (Mobium 2007).

From those points stated above, consumer sentiment is a significantly influential factor in green movement for the whole supply chain process including sourcing. According to a recent survey by GfK Roper Consulting, 79 percent of U.S. consumers agree that a company's environmental practices influence the products they would purchase. Further, 40 percent say they are willing to pay extra for an environmentally friendly product (Pedersen 2009). Also, recent world-wide polls show that consumers are increasingly in favor of green products. For example, a survey of 400 Midwestern consumers in the United States

indicated that 312 of the respondents would be very likely or likely to switch to more environmentally friendly food brands. Many firms have viewed this heightened environmental consciousness among consumers as a great marketing opportunity. Because sourcing is at the beginning of the green supply chain, green marketing efforts cannot be successful without integrating the company's environmental goals with sourcing activities. Accordingly, sourcing professionals need to address the relationship between environmental factors and supplier selection. (Min & Galle 1997)

Green Retailing Trend

According to ACRS Secondary Research Report (2008), "The major trends in green retailing include energy efficient stores, offering energy-efficient products, reducing packaging, green marketing and merchandising, sustainability reporting, as well as green sourcing and distribution". In reality, everywhere you look today, green and retail go hand in hand. In fact, you will see aisle after aisle of products in any supermarket or big box store, promoting themselves as "safe for the environment," "green," or "sustainable". Environmental slogan with the color green, which is often referred to as greening or sustainability, has become so prevalent that no corner of the business world has escaped the environmental movement. As a consequence, "developers practice green building techniques; philanthropists pursue green causes; procurement teams seek out "green" sourcing; and merchants and marketers sell green product" (Craig 2007). According to Kennedy (2007), "Going green is no longer just a part of retailers' corporate social responsibility efforts – it's a part of many retail cultures".

As those customers become more preferential in their buying options which respond proactively to the sake of environmental protection, companies and retailers in general, strive toward the same goal: to serve the needs of their customers. And when retailers build their sustainability programs, they also encourage their suppliers to do the same as they recognize that being an entity in a large commercially operating corporation, they have stronger commitment and responsibility to sustain environment movement. That

responsibility not only helps the environment but also the retailer's bottom line because these environmentally sustainable and responsible efforts, which include such as raw material consumption reduction, packaging reduction and fuel-conserving trucks, not only reduce emissions and waste, but also save millions of dollars by using fewer shipping containers and consuming less fuel at the beginning stage. Therefore, these green efforts from the sourced materials used in the production, to trucks along the supply chain, to daily operations are put into the retailer's continuous commitment to their suppliers as well as other partners in the chain of supplying green products to green customers. (Kennedy 2007). And as an industry with mass reach to final users, retailers and their suppliers have the responsibility to respect the environment that society needs to do something about the looming issues of glacial melting, greenhouses effects, landfills or non-renewable energy (Craig 2007). David Marsh, chief marketing officer at Hub Group, Inc., says the retail, consumer products and durable goods providers the Hub Group works with are all looking at how to make that happen across the supply chain. "What we're seeing is that the retailers, from a business perspective, are requiring the durable goods providers and consumer product organizations to become more green," he says. (McCrea 2010)

There are still a lot of opportunities for retailers to stand out with a pro-environment strategy in the products they sell and information they display. More than half of Americans (53%) bought products throughout the store because of its label or advertising presenting the environmental messages such as 100% organic products, high natural ingredients, safe and quality, biodegradable... To appeal to these concerned consumers, retailers might consider adding and showcasing more eco-friendly banners like the products have the origin from green suppliers or are manufactured with high green technology and superior energy efficiency. Simultaneously, stocking more items produced from recycled materials such as paper or plastic will help stores differentiate themselves among other competitors as most of consumers emphasize on not just the environmental-driving features but also the economics of the products. For example, consumers are choosing energy-saving fluorescent bulbs that last longer than incandescent counterparts because they help cut down on electric bills (Setlow 2001). Roger Reports Worldwide data indicates the

environment is the cause consumers would most like companies to address. There is an increased demand in consumers who purchase products from businesses with good environmental records. A study conducted by Edelman, a worldwide public relations firm, found that 87 percent of U.S. consumers believe that corporations need to place at least an equal emphasis on societal interests as they do on their business interests because Americans are also more inclined to pay more for environmental friendly products, which rank the second highest in the past decade (Setlow 2001) and they are “seeking deeper involvement in social issues and expect brands and companies to provide various means of engagement”, says Carol Cone, head of Brand & Corporate Citizenship at Edelman (McCrea 2010).

In general, there is a clear trend of incorporating environmental consideration in retailer’s business and there is a showcase of best practices in applying green initiatives from upstream to downstream supply chain as these movements will help retailers achieve competitive advantage by building customer loyalty and enhancing their reputations.

Negative impact

Suppliers’ reliability

Reliability of supply is one of the considerations for sustainability work, since there are still questions about the capacity of the supply chain to provide greener products (Almaani et al. 2004). For example, Malmö community is working with introducing organic chicken in schools, and has discovered that there is only one producer of organic chicken in Sweden, who cannot fulfill the demand of Malmö schools.

For the alignment with attempt to introduce Green Sourcing, suppliers may not live up to the required standards of retailers in the whole industry. Therefore, the main difficulty for the buyer is to identify suppliers who are capable of meeting the requirements in terms of

quality, quantity and environmental criteria. Obtaining a sourcing guarantee from the supplier is one of the biggest challenges faced by retailers. According to the Supply Chain Monitor 2008, not all suppliers in Europe are able to offer and supply green products, due mainly to the introduction of recent regulations. There may also be an outright hostility from the suppliers towards providing products because of their monopolistic state or relative strengths over the suppliers. They choose not to provide green products that will bring obstacles for food retailers in green implementation. Additionally, perhaps retailers and suppliers spread out over a large geographical area, this issue also hinders the delivery of ecological and organic goods in an environmentally sound manner, resulting the ineffectiveness in Green sourcing practices of the retailers.

2.4.3 National factors

On national level, the implementation of Green sourcing in food retailing is affected by the introduction of green legislation, national targets for reducing environmental impact, development of new standards or tax incentives to retailers for green performance. Moreover, environmental measures introduced by governments also have impact on the initiatives for Green sourcing, either directly or indirectly, as they force manufacturers, retailers and consumers to take action to protect the environment. Those main factors will be clarified as followed:

Positive impact

Green regulations

Most of companies adopting green initiatives in their supply process due to regulatory framework including relevant laws and anticipation of future requirements. These regulations also have a great impact on the implementation of eco-driving supply chain. According a report “How mature is the Green Supply Chain?” conducted by BearingPoint’s global survey in 2008, in Japan, almost 85% of companies cite regulation as a motive, compared to 75% in the UK, 72% in North America and 67% in France. These figures indicate the importance of environmental rules and directives in the development of green supply chain as well as green sourcing. They also suggest that the most environmentally active countries have the toughest ecological regulations and the bigger the company, the greater pressure on complying regulations appears to exert. That reasons why the percentage of companies responding to the survey in terms of establishing an environmental strategy in Japan is the highest. (2008 Supply Chain Monitor “How mature is the Green Supply Chain?). In this matter, Pedersen (2009) found that the environmental regulations in the European Union are tighter than in Asia. In fact, emerging Asia-Pacific economies such as China, India, and Vietnam may already have environmental regulations but supplier compliance is less certain, resulting greater supply chain risk. Additionally, recent surveys have suggested, sustainability performance is low in Asia-Pacific, particularly China. However, “Supplier audits are less likely to disclose environmental violations until they become catastrophic events leading to plant closures or product quality violations. Many of these environmental catastrophes that have been brought to light in recent years have affected food, toys and electronics. These events have cost importers hundreds of millions of dollars in recalls and product liability lawsuits.” (Pedersen 2009) Therefore, the major challenge in for retailers in developed countries is managing the uncertain compliance of environmental regulations of their suppliers and partners in developing countries. It is essential to execute a good risk management practices for companies that are sourcing from low cost countries. Such practices include regular testing of finished goods from the sourcing stage for unauthorized materials and frequent environmental performance audits to prevent the environmental and social violations from suppliers.

In retail industry, environmental compliance considerations are the significant priority to maintain proper operation from raw material sourcing to the manufacturing process and gain objectives in controlling waste generation, energy and fuel usage, land-use footprint, and other environmental impacts across its product supply chains. Environmental compliance in sustainable sourcing can be defined as a continuous process in which companies refine their sourcing policies and practices to ensure the green movement at every following stage in the supply chain because recent regulations require companies to track the origin of products through their supply chains and to publicly report on the potential problems related to the violation of green standards for the sourcing of their products.

To ensure food safety, the regulations and standards must not only be tackled at the national level but also through closer linkages among food safety authorities at the international level. In addition, Nongovernmental organizations (NGOs) such as Greenpeace and Conservation International play an important role in driving corporate involvement in sustainability. In recent years, many companies and NGOs have cooperated in sustainability initiatives including planning and decision making on how to minimize the business impact on the environment (Pedersen 2009). Due to that collaboration, "It's going to become harder and harder to differentiate oneself solely on sustainability efforts in a world where the entire marketplace is going green and concerned about the environment," says Stephen Stokes, vice president of sustainability and green technology for Boston based AMR Research, "The good news is that the companies using the sustainability mantra as a basis for operational efficiency, and to reach their compliance goals, will also achieve cost savings while doing their part to help create a more sustainable future for everyone." (McCrea 2010)

Dealing with complex regulatory, environmental and ethical requirements, sourcing functions must also get involved in matters of the entire supply chain to take the lead in helping their organizations navigate a roadmap to environmental responsibility. For example, regulators want to know if a company is indeed following green standards will look across the compliance of entire supply chains including all stages from sourcing to

manufacturing to distribution and final sales. Meanwhile, regulators especially from the European Union and U.S are making efforts to implement policies such as carbon limits and emissions trading schemes. In addition, governments and NGOs in many countries are on the rise enacting regulations on energy efficiency standards, hazardous materials limits, and hazardous materials handling as well as recycling targets in the sourcing as well as manufacturing process. For example, under these frameworks, retailers sourcing managers are being on the line to ensure the quality of inputs and supply quality; ensure the commitment to comply with the green regulations from the farm to the supermarkets and grocery stores. These compliances may adhere to Good Agricultural Practices (GAP), Global Food Safety Initiative(GFSI) as well as other Food Safety Regulations and Quality Policy...A combination of internal and external third party audits are also used by retailers to ensure their standards are met and to protect their suppliers, distributors, restaurant operators and most importantly their customers. Both GFSI and GAP standard are examples of private governance mechanisms developed by international retail groups. Their aim is to enhance quality of food products to gain consumer trust (Burch and Lawrence 2005). Additionally, with main purpose to ensure compliance with food safety requirements, these standards are developed to deal with variety of sustainability concerns. For instance, Euro GAP standard is imposed to minimize the environmental impacts executed from farm operations, e.g. reduction in chemical usage, animal welfare, as well as cover such social aspects as farmers' health and safety (Chkanikova and Kogg 2011).

Regulation and legislative also play an important role in guiding sourcing to green initiatives and eliminate the violated parts in the whole process. Emission standards and regulations, energy consumption standards and recycling programs are just a few of the green source initiatives that government mandates through regulation and legislation. There is a recent example cited by Hardin Tibbs (2009) that has already been introduced in Europe, called product take-back legislation, which requires the recycling of consumer products after they are used up and requires a minimum percentage of recycled materials in the new products.

In addition to regulations, traceability which is the completeness of information to trace the origin of contaminated footprint in every step in a process chain. There have been compliance guidelines for the retailers to be able to prove that each individual food product sourced from suppliers has been cooked to the required standard. And each supplier needs to produce an audit trail to demonstrate that each product meets the appropriate regulations. They need to accurately identify all historical information of all ingredients and products when and where they were moved or transformed to guarantee the quality and preparation of their food. The higher profile of products the suppliers have, the more opportunity they can be selected by the retailers. (Turnbull 2009)

The use of environmental management standards such as ISO 14001, EMAS, BS 7750... is also the tool that government requires suppliers to demonstrate the compliance. Governments could evaluate suppliers' environmental performance by asking suppliers to respond to a detailed questionnaire about their environmental practices and performance. These standards and evaluations raise the environment concern to the executive level among suppliers and indicate that green criteria are something that must be addressed strategically in order to remain competitive.

In summary, green sourcing is influenced greatly by government, region and international regulations and standards. However, the retailers should not be compulsory to adopt these rules, but take actions beforehand because "Retailers who begin working on sustainability may provide themselves a real advantage in the marketplace, not only with their customers but also in the light of shifting priorities among legislators and regulators." (Duff 2007)

Trade and business associations

Trade and business associations have a particularly significant role in "greening" the supply chain. Since these groups are very familiar with the environmental issues in their specific industry they are in an excellent position to help their members identify the key issues and to share strategies about how to work with suppliers. For example, the American

Electronics Association has a number of work groups and conferences focused on environmental management, and supplier management in a regular topic. Or FoE is a federation of autonomous environmental organizations from all over the world and campaigns on a number of environmental and social issues that support sustainability. In 2005, for example, FoE took action against UK supermarkets regarding the increasing use of palm oil, which is found in one in ten products on supermarket shelves in Britain, and its production is associated with rainforest destruction in South-East Asia. Following the campaign, Asda, the UK's second biggest supermarket, acknowledged the damaging impacts of palm oil production and agreed to take action to source more sustainable palm oil by joining a Roundtable on Sustainable Palm Oil. The Roundtable is an association of business and NGO representatives seeking to promote sustainable palm oil. Asda has also become Britain's first supermarket chain to tell suppliers it will not accept products unless they can guarantee their palm oil is from sustainably run plantations. Further, Asda banned palm oil sourced from the worst affected regions in Borneo and Sumatra and within a year hopes to have banned all unsustainable palm oil from 500 products (The Observer 2007).

Industry associations are now becoming strongly focused on global trade issues. Concerns of their members about doing business with suppliers who may be creating severe environmental problems can be placed within a context of a business's strategic response to the challenges and opportunities of globalization.

Negative impact

Regulatory implementation

Regulations that restrict the use of substances (e.g. EuP Directive and RoHS Regulations), as well as food safety standards and obligatory eco-design, are considered to be effective directives to environmental protection; however, retailers generally do not favor such

regulations due to the cost implications, particularly when regulations differ between countries (BIO Intelligence Service 2009: 50). Taking into account that, all retailers saw higher prices of ecological products as a barrier. The lack of Environmental Tax Reform or any other mechanism to incorporate environmental externalities into product costs must be seen by retailers as a significant regulatory barrier.

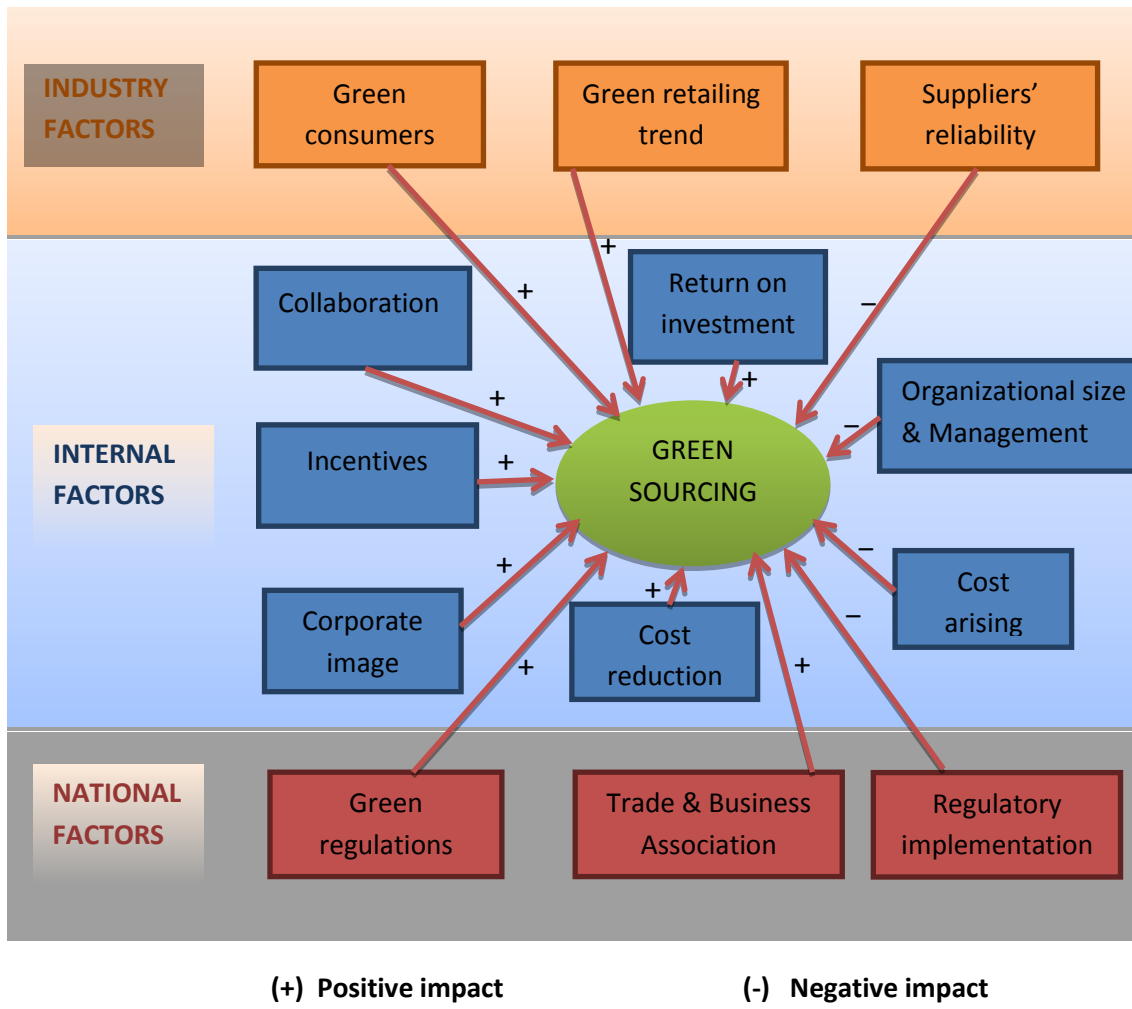
In addition, it accounts for large expenditures of time and money to adopt the new practices as well as revise the production processes, applying regulations will be a burden and compulsory obligations for small firms that are least able to afford it. The study developed by Yang and Sheu (2011) also found that ISO14000 series and other certifications did not significantly enhance commitment and engagement in environmental management or green collaboration. They were only “must have” certificates to survive in the competitive business environment and most firms did not understand the importance of being certified or agree with the economic benefits associated with it.

The last but not least, there are some unclear regulations which make it confused for retailers what they can and must do to become more environmentally friendly. As Professor Jesper Jespersen from the Department of Social Sciences at Roskilde University says, "it is not enough just to put" green "in front of the traditional market economy, for he is both blind and deaf to the real long-term consequences. Sustainable development must be ensured, it must be done through political decisions"(Jespersen 2003)

2.4.4 Theoretical framework

From the examination of all influencing factors above, below is the framework that depicts clearly the connection of all factors and sub-factors and their impact on the implementation of Green Sourcing in food retailing.

Figure 4: Factors influencing Green Sourcing in food retailing



3. RESEARCH METHODOLOGY

In this chapter, the research methods and reason for the choice of methods will be discussed. First, the research philosophy and approach will be addressed. Then the research

method –case study will be explained, followed by data collection and data analysis. The last section of this chapter focuses on the reliability and validity of the study.

3.1 Research philosophy and approach

According to Saunders et al. (2009), research philosophy is an over-arching term relating to the development of knowledge and the nature of that knowledge. The research philosophy selected for this thesis is research methodology because it depicts the way how a given issue or problem can be studied. Before getting into any further discussions, the distinction between research methodology and research methods should be clarified. The option for collecting research information is technically called research methods. Whereas, research methodology is considered as the “philosophical basis” for the research – what approach is used.(White 2000: 20)Research methodology is broadly classified into qualitative and quantitative research methodologies. And it focuses on methods that are used when trying to understand the world better and it is often divided into method of data collection and method of data analysis (Eriksson and Kovalainen 2008:16).

The choice of research design will be done between quantitative and qualitative study. The quantitative method deals with numerical data that is collected and analyzed from large number of surveys and observations. On the other hand, qualitative method involves the analysis of data such as words (e.g., from interviews), pictures (e.g., video), or objects (e.g., an artifact). Hessler describes that: “data gives the researcher depth of understanding in terms of the inner workings of human organizations, the behind-the scenes action that one can learn about only with time-consuming careful observation and interviewing away from the laboratory and fixed choice interview schedules” (Hessler 1992: 253).Another view from Stake (1995: 37) is quantitative research seeks causes and explanations while qualitative research is more interested in searching for different happening and phenomena (Tuomi & Sarajärvi 2002: 87). From the above explanations, this thesis will follow

qualitative approach. It is chosen because the research question provides answers that cannot be quantified or measured in numbers. Furthermore, since the objective of this thesis is to gain an in-depth understanding of the influencing factors on Green sourcing activity, qualitative study is an appropriate method. Uusitalo (1991: 79-80) defines a qualitative research as follows: “A qualitative research is a study in which the research evidence is verbal or visual, whereas, in a quantitative research the evidence is presented in a statistical form”. Also, according to him, a qualitative research sets out to describe real phenomenon and provide a holistic picture of the researched subject. Adopting qualitative research, complex and in-depth research evidence will be produced. Hence, people are often used as a source of information, because data need to be collected in a comprehensive way in natural situations (Hirsjärvi, Remes & Sajavaara 1997: 165).

It has been said that there are different approaches between quantitative and qualitative methods to conduct a scientific study. They are deduction and induction, and they partly decide how to form theories and how the conclusions are being drawn. Qualitative method is based on inductive approach where a researcher, from interviews or experiments, draws general conclusions or theories from collected data i.e. the detail come before the generality. The concentration of inductive approach is on several different elements that have effect on the result with context bounded. In an opposite way, deduction approach which applies for quantitative study proceeds from general to detail. The researchers in this approach take their view in a general theory with hypotheses and use empirical evidence to test or verify them. The aim of deduction approach is to find causal relationships and it is context free. Deduction also aims to forecast, explain and understand things by generalization. From the description above, induction suits this study best because the research begins with detailed insights and description, then proceeds to detect patterns and regularities, and finally end up developing some general conclusions or theories based on the explanation. Simultaneously, few theories concerning the factors influencing the food retailers are tested, thus deduction is used to test and examine those factors. However, the main emphasis is on induction as the conclusion and the empirical testing will follow the

inductive approach. (Hirsijärvi and Hurme, 2008: 25; Eriksson and Kovalainen 2008: 21-23).

3.2 Research strategy

Saunders et al (2007:135) outline experiment, survey, case study, action research, grounded theory, ethnography, and archival research as alternative research strategies in management. This thesis employed the case study strategy. As the research objective wants to investigate a phenomenon within its real-life context, especially in real business situations, case study will be an appropriate strategy for this study. Case study “is a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple source of evidence” (Robson 2012: 178). Case studies are extremely useful in understanding one particular problem or situation in great depth, and identifying cases in rich information (Noor 2008). A case study research is often selected when the research question starts with the words “how” or “why” and when the researcher has limited information over the event. In addition, a case study research does not provide statistical representativeness, but its main purpose is to acquire an in depths understanding (Turunen 2009: 107). In order to answer the research question, several sources may be required as one single source may not provide the answer or may not be sufficient. By using different ways of acquire information e.g. interviews, observation, literature review, the research question will be addressed from different angles.

According to Yin (2003), there are four case study types, namely, single case, multiple case, holistic case, and embedded case. A single case is most suitable for scarcely considered phenomena. Multiple cases are used to cross-check the findings of previous cases. If the second case study contradicts the first one, it may call for re-formulation of a new theory. This study brings out two cases with expectations that will enable broader exploration of the research. It is also called multiple-case study. Multiple-case study is a

variant that includes two or more observations of the same phenomenon. This option strengthens the results by replicating the pattern-matching, thus increasing confidence in the robustness of the theory. Therefore, multiple case studies even if it is only two-cases, will increase the chances of having good research (Yin 2003a: 1-2,53-54). Selecting the case is important, but at the same time a very difficult part of the case study research. The selection may be random, but it is not always preferable. It should be done in purpose to match the theoretical categories or polar types are chosen. Hence, the criteria are set up based on the research question and theoretical framework. The cases selected must consider the possibility of locating process and accessibility of information that involve the stakeholders. For finding the right case study, the cases should be chosen in the same country, the same industry or in one particular area to unite the sample collected set by the research question. In this study, Finnish food retailers were selected as they did fulfill all criteria. The stakeholders were willing to provide access to information and share about the particular process. The international aspect of these cases was also available. More precise information regarding the case will be provided in chapter 4.

3.3 Data collection

Data collection is the process of gathering data, which can be conducted through several methods. These methods normally vary between quantitative and qualitative research. Following the research philosophy and strategy described above, this study uses qualitative interviews and the analyzed data was collected by the researcher herself. This process is rather time-consuming and requires careful planning that the type of data will fit the analysis.

Interviewing is the most popular data collection method in qualitative research. Like other qualitative methods, the interview targets at giving a complete detailed description, gaining understanding and providing insights into the research. In business research interviews are

an effective way to search and gain information that does not exist in published announcements and also it is a way to hear and learn how people experience and reflect their points of view (Eriksson and Kovalainen 2008: 79-80). Saunders et al. (2009, 324) concludes that an interview is the most suitable approach if the number of questions is large, the questions are complex and open-ended, and the order and logic of questioning need to be varied.

Interviews can be categorized in three types; structured and standardized interviews, guided and semi-structured interviews, and instructed, informal, open and narrative interviews (Eriksson and Kovalainen, 2008: 79). There are differences between mentioned interview methods and basically the differences are based on how fixed the questions are and how structured the whole interview situation is (Hirsijärvi and Hurme 2008:43). The most used interview method is the structured and standardized interviews where an interviewee fills up a form (or the interviewer does it while interviewing) and the forms are exactly similar for every interviewee. Also the basic assumption is that the interviewees understand the meanings of the questions similarly (Hirsijärvi and Hurme 2008:44). In unstructured, informal, open and narrative interviews the questions are open and interviews are close to a conversation. The interviewees are not randomly chosen as in standardized interview it could be, but they are often very experienced persons in their field and by that often only few deep interviews are executed for one research (Hirsijärvi and Hurme 2008:46). Between the structured and unstructured interviews are naturally semi-structured or semi-standardized interviews. In this kind of interview the form of the questions is same for every interviewee but interviewer can change the order of the questions during the interview and shape wording. Also the respondent have not received any fixed answers and is able to answer with own words. Before the interview, researcher outlines the main topics and themes beforehand and the advance of semi-structured interview is that the gathered material from each respondent is within the same theme but still the interview itself is informal and conversational. As a disadvantage can be seen that the data can be difficult to compare because the respondents may interpret and understand the same questions differently (Eriksson and Kovalainen 2008: 82). In-depth interview is the technique that

collects the necessary information for this study. In this type of interview, the researcher often prepared a predetermined set of questions before hand but still keep the flexibility, which means the researcher will adapt the questions to the practical situation. This method is closer to structured and standardized interview than unstructured interview.

In this study, due to the interviewees' option and convenient, in-depth interviews were conducted through telephone and email. The interview process initiated from getting interviewees' contacts that hold the position familiar with their organization's activities relevant to Green Sourcing performance. Next, the invitation letters were sent through their email to get their approval prior to sending the interview questions. After they agree to conduct the interview, the set of questions were attached to the email. To get their feedback, the necessary step was to follow up with a telephone interview and support them with additional information via email to clarify any unclear questions provided. The final step was to send a note or email thanking the interviewees for taking his or her time to answer the questions. Table 1-2 shows the position of each interviewee within the organization. These interviews were carried out in two cases including S-group and K-group which usually lasted for six weeks to get their feedback. Sometimes site visit was made in order to get complementary information and improve the confidence of the findings. In order to increase the validity of the information got from interviews, supporting documents with relevance to the thesis goal were also gathered from the interviewees.

3.4 Data analysis

“Data analysis is the process of making sense out of the data.” (Sharan B. Merriam 2009:175). In this study, qualitative content analysis is applied to interpret the collected data. Qualitative content analysis tends to be inductive and the data evolve during the analysis. Through content analysis, it is possible to build up and analyze different kinds of

studies systematically and objectively (Tuomi & Sarajärvi 2009: 91, 103). However, content analysis has also faced criticism. While using content analysis, it is more important to make meaningful conclusions than just to describe the analyzed data. Content analysis is guided by the main concepts and research problem of the study so that it develops the categories and interpretations as closely as possible to the recorded (printed or verbal) materials. The purpose of the analysis is to clarify the data and bring something new into the researched field. (Hirsijärvi and Hurme 1993: 114-116)

The process of data analysis began by transcribing the two interviews from emailed data to text data. When transcribing the data, it was easier to pick the wanted sections from the interviews and especially in this case, where the data concerning this research, was part of a bigger research. After transcribing, the data was read thoroughly by the sections that concerned the research problems and targets of this research and the picking was done with help of the questionnaire framework. The framework was also used as a starting point and basis for analyzing the data more easily. When it is possible to find the interview sections that are corresponding with the framework, it is possible to start analyzing the data from the theoretical point of view. (Eskola 2001:151-152)

To be able to analyze data thoroughly, the researcher has to know the data thoroughly. The analysis was done based on six key areas based on the ideas of the Five Ws and one H (who, what, where, when, why, how), which can be used to understand the whole ideas. However, in the case study, the question “what” was not used as a separate category in the question framework as it was already answered during the case description. In addition, the “other issues” category can group things that come up during the interviews such as modified answers or statements that appeared to be significant for the research. The key areas will be marked to ensure the answers must be gained. The interviews were then assessed on similarities and differences in these six areas. Remarkably, in case study research, data collecting and analysis is often done overlapping, hence, writing on-going field notes is necessary. This will be helpful in understanding how certain conclusions have been drawn because it is difficult to know beforehand which information is useful and

which is not. During the analysis, the researcher has to link the existing literature to the data collected as it helps to build good theory. (Eisenhardt 1989: 538-541)

Furthermore, this study is more theory-guiding analysis than data- or theory driven. Therefore, inductive reasoning can be seen through the whole study. Along with the chosen analysis method, the study was possibly completed through exploring, researching, and comparing the data of individual interviews to the previous models and theories. The content analysis process was conducted as follows: planning the interviews, marking the important questions, emailing the questions, requiring the answers, receiving the answers, reading and orientating the answers, selecting and underlining the most important phrases, listing the reduced phrases, making individual tables according to the phrases, finding similarities and differences, and forming a new framework based on theoretical model and findings.

3.5 Validity and Reliability of the Study

To gain credibility, each study conducted should take into account reliability and validity. Reliability refers to the consistency of a research, which means that the results of a study should be as identical as possible regardless of who is conducting it. On the other hand, validity evaluates the study whether it actually measures what it is supposed to measure by looking at the findings of the study. Generally, validity is evaluated by the nature of the study and its methodology.

Reliability refers to the possibility of getting the same research results if the study is replicated by another researcher (i.e. Eriksson and Kovalainen 2008: 292). However, this definition does not fit in the field of qualitative research. Even it is acceptable that person can behave differently in different time and context, the possibility to get exactly the same result with replicated research is unlikely to happen. In qualitative research the reliability can be related to the possibility that two or more persons understand and categorize the same phenomenon in the same way and have unanimity of it (Hirsijärvi and

Hurme2008:186). Therefore, when conducting the same interviews with the same persons, reliability is ensured by describing closely what has been done, where, when and why, and by finding equivalent responds within the same questions.

Validity means that the research conclusions give correct and true answers to the placed research questions and aims for the study i.e. findings should represent the studied phenomenon and there should be able to see the evidence. In qualitative research the term 'validity' is understood differently than in quantitative research. In qualitative research it refers to the guarantee that the description of the research is correct and the "common procedures for establishing validity are analytic induction, triangulation, and member check." (Eriksson and Kovalainen 2008: 292). Validity of the research can be evaluated within its external and internal validity. External validity refers to generalization of the results or the results of a study apply to a larger similar group. Internal validity on the other hand refers to research's own validity. Careful planning and use of correct terms and relevant theories improve internal validity of a research. (Metsämuuronen 2005: 57).

Reliability and validity in this study are presented through following several details. First of all, the transparency of the study has been considered by clearly explaining and describing the research process in the methodology chapter of this study. Also, the theoretical part improves reliability by explaining which theory is used in the data analysis and interpretation. Secondly, all interviewees voluntarily took part in the interviews, openly showed their positive attitude and interest toward the research's topic and fulfill all the interview questions timely. Finally, the interviewees were free to choose which kind of interview that is more convenient for them and answering the interview questions through email is the way they felt more comfortable. By this way, the interviewees would have more time to think and provide the answers in more detail. Therefore, the achieved data are more informative and precise.

In addition, in order to increase validity and reliability of this study, the interviews were held in the international language. Then the risk of wrong translation will be dismissed. The misunderstandings are also eliminated as the researcher often asked again what the

interviewees found it unclear. Especially, the case study description was rechecked in order to guarantee that all facts were correct. The direct quotes from the interviewees have been texted in original. The interviewer paid particular attention not to foreclose anything and hence not influence the interviewees' answers. Moreover, in the case study, the same questions were often asked to interviewees to guarantee the correct answer. Inconsistency and ambiguity in answers from previous interviews were all further checked in following interviews. The external validity of this study is also increased since more than one case study was conducted (Yin 2003a: 37). In this study, the research issue was carefully identified before data collection, so the data is collected to be used for comparing it to the existing theory. By establishing this relationship, researchers could prove a larger significance of findings from a particular case study (Saunders et al. 2009).

4. GREEN MANAGEMENT IN SOURCING IN KESKO FOOD AND SOK

4.1 Kesko food retailer

4.1.1 Kesko food background

K-food retailer belongs to Kesko group which is a highly valued listed trading sector company in Finland. K-food retailer, with whom Kesko Food applies the efficient chain business model, is responsible for customer satisfaction at more than 900 K-food stores. It is a key operator in the Finnish grocery trade. K-food retailer's main functions include the centralized sourcing and purchasing of products, selection management, logistics, and the development of chain concepts and the store site network.

Every day, K-food stores are visited by 900,000 customers, whose expectations are met by providing comprehensive product selections, ease of shopping, favorable prices and responsibility. Meeting individual customer needs and expectations is a prerequisite of success for K-food stores.

K-food stores operate in four chains:

K-citymarkets offer their customers the widest selections of groceries and home and speciality goods, a low-price shopping basket and the best special offers – every day. Their special strengths include fresh bread, meat and fish, fruit and vegetables, diversified food expertise, and eye-catching displays.

K-supermarkets are better than average food stores. Their strengths include excellent service and wide selections of food items. Abundant service counters provide meat, fish and meal solutions for everyday needs and more festive occasions, and store selections are always complemented with local products.

K-markets are reliable, service-oriented, local neighborhood stores located near customers. In addition to good basic selections, K-markets offer customers fresh bread straight from the store oven, fresh, high-quality fruit and vegetables, and the best local services.

4.1.2 Green management in Kesko food

Kesko group participates in the UN Global Compact initiative and is committed to observing universally accepted principles in the area of environment protection and human health in all of its operating countries. Therefore, Kesko Food has a comprehensive cooperation agreement with Fair-trade Finland and a license for Fair-trade products in the Pirkka range. The selection and marketing policies of Fair trade products are included in K-food stores' chain concepts. In 2012, Kesko Food had 215 Fair-trade products (222 in 2011) in its selection, of which 39 (38 in 2011) were Pirkka products. According to the statistics of Fair trade Finland, Kesko Food had 146 Fair trade suppliers in 38 countries.

The products sold by Kesko Food generated over €330,000 in Fair trade premium for social development projects.

The K-Group has signed the trading sector energy-efficiency agreement and committed to improving its energy consumption by 65 GWh through various energy saving measures by the end of 2016. The agreement is based on the 9% savings target set in the EU Directive on Energy End-Use Efficiency and Energy Services for the period 2008–2016. The agreement covers all store chains that belong to the K-Group. A report on the results of the trading sector energy-efficiency agreement is prepared annually. In addition, Kesko is building new, increasingly energy efficient stores in both Finland and its other operating countries. By using energy efficient building materials in stores, it has gained good results in energy consumption.

The design of a new store site or shopping center relies on sustainable development, environmental friendliness and energy efficiency. When building new stores and renovating existing ones, it uses solutions that reduce the consumption of materials and energy during the lifecycles of properties.

Kesko contributes to the development of green building and is a member Green Building Council Finland (FIGBC). FIGBC's main tasks include encouraging the use of environmental categories for properties. Kesko uses internationally well-known systems for environmental categorization, the British BREEAM or the American LEED systems best suited for retail store properties.

As a company specifies in food retailing and one of the trading sector pioneers on a global scale, Green management is the utmost important responsibility that K-food retailers strive for. Actually, responsible operations are a strategic choice and one of its values. K-food retailer's Green work is based on the general principles of its corporate responsibility, its vision for corporate responsibility and responsibility program. The Green management sets both long-term and short-term objectives for the following matters concern to its policies and its stakeholders:

- Responsible purchasing and selling

- Product safety and quality
- Sustainable product selection
- The environmental impacts of production in the purchasing chain
- Promoting sustainable agriculture
- Sustainable use of natural resources

The main goal of the K-food retailer is to ensure the responsibility of the purchasing chain and bear responsibility for product safety and quality. It provides customers with information and support for responsible purchasing decisions. Customers must be able to rely on the fact that the products offered by stores are well-researched, safe and sustainably produced.

In 2011, Kesko Food joined the RSPO (Roundtable on Sustainable Palm Oil). Palm oil is used in a large number of foodstuffs. Palm oil is an important source of income for the national economies of the countries of production. The yield potential of oil palm per growing area is higher than that of any other oil plant. However, the expansion of palm oil production into new tropical areas is a growing concern for the environment. Palm oil production must be sustainable. Responsibility must be considered in respect of economic, social and environmental aspects. Kesko Food recommends that the manufacturers of Pirkka and Menu products use Certified Sustainable Palm Oil (CSPO). Currently, 15 Pirkka products and 10 Menu products contain CSPO.

The popularity of organic food is growing in Finland. Kesko Food and K-food stores are strongly committed to developing organic products in cooperation with producers, the industry and other parties working for organic production. Kesko Food is a founding member of the Pro Luomu association, established in March 2011 to promote the target-oriented development and growth of organic production in Finland and to advance the meeting of the demand for and supply of organic products. The vision of the Pro Luomu initiative is that by 2015 organic products are a part of consumers' and food chain operators' everyday lives and the product selection meets consumers' needs, covering the key categories.

K-food retailer develops product selections while listening to its customers. The indication of origin is added to its own brand products. It also offers a wide selection of Pirikka responsible products. Its objective is to offer 500 Pirikka products meeting a responsibility criterion by 2015 and 200 Pirikka organic products by 2015. Merchandise that fulfills a responsibility criterion includes Fair trade products, MSC certified products, products with environmental labeling and UTZ certified products.

4.1.3 Green sourcing practice

In respect of products offered to customers, the aim of K-food retailer is to take into account the impact of their entire life cycles on consumption. Especially, a product's route to the store shelf is often long and the supply chain may have many steps. Therefore, from the beginning stage – sourcing and purchasing are evaluated as the focal processes that help the K-food retailer build and promote Green practices from the products' origin.

The transparency and responsibility of purchasing chains have become increasingly important and increasingly detailed information on the origin and manufacturing methods of products need to be made available to customers. That responsibility is realized in all operations and throughout the supply chain. Diversified networking with suppliers of goods and providers of services requires that all supply chain operators share the same values, objectives and operating practices.

Because Kesko food retailers recognized that a failure in product safety control or in the quality assurance of the supply chain can result in financial losses, the loss of customer confidence or, in the worst case, a health hazard to customers, they confirmed that:

It is the store's duty to help customers make responsible choices. Customers must be able to rely on the fact that the products offered by stores are well-researched, safe and sustainably produced.

Kesko's sourcing principles guide its responsible sourcing. Various policy statements, e.g. the palm oil policy, the fish and shellfish statement, the timber policy have been prepared to support purchasing operations. As declared in the fish and shellfish statement, Kesko Food, Kespro and K-food stores do not sell species with a red rating in WWF Finland's traffic light guide for fish. Species with a green rating are favored and sustainable fish stocks and MSC certified suppliers are preferred when making selection decisions. Kesko Food supports retailers' efforts to sell fish caught in local waters using sustainable methods. The Pirkka range contains 11 MSC certified fish products and new ones are sought actively.

K-food stores' competitive advantages are gained by providing a wide selection of products from local producers. Listening to the wishes of local customers and making use of customer data, the K-retailers build a selection of products that meet local customers' needs.

By far the best fruit and vegetable are on shelves; a bakery department and service counters with fresh meat, fish and meals. Responsibility, which means, for example, that a wide range of responsible products are offered to customers.

Kesko food stores have cooperated with their suppliers and subcontractors on a systematic, long-term basis to ensure the ethical quality of their products. Deviations from Kesko's ethical principles are handled similarly to deviations from other quality requirements.

In the long run, Kesko favors in its purchasing those suppliers that approve of Kesko's values and principles and want to act accordingly. The most reliable way for a supplier of proving that it fulfills Kesko's ethical requirements is to acquire an SA 8000 certificate from an independent certification body or another corresponding audit approved by Kesko.

Kesko has a SUMO (supplier monitoring) database, in which the information on supplier audits, certifications and monitoring visits to suppliers in high-risk countries is saved alongside their respective risk ratings. According to Kesko's SUMO database, the total number of full audits carried out at suppliers' factory premises or farms during the year was

47, while the number of re-audits was 14. As a member of the European Business Social Compliance Initiative (BSCI), at the beginning of 2013, a total of 209 (247 in 2012) factories or farms of Kesko's suppliers in high-risk countries were in the BSCI auditing process. At the same time, Kesko's direct purchases from high-risk countries also decreased. Some of Kesko's suppliers are themselves members of BSCI and promote audits in their own supply chains. Most deficiencies occur in observance of working time regulations, compensation, and occupational health and safety. Experiences gained from monitoring work in China are similar, and it has been found that Chinese suppliers need time and professional support in order to manage the corrective actions required by BSCI. In 2012, the total number of monitoring visits was 57 (64 in 2011) (Kesko Corporate Responsibility 2012)

Most of Kesko Food's import suppliers of fruits and vegetables, 97.3%, have the Global GAP (Good Agricultural Practice) certificate. All Pirkka bananas are RFA and SA8000 certified, except Pirkka Fairtrade Organic bananas, which are Organic and Fair trade certified. Kesko Food's Finnish producers of vegetables must belong to the Finnish Horticultural Products Society (KK), in other words, entitled to use the society's seed leaf quality symbol. The society has drawn a guidebook "Quality Requirements for Vegetables" on good production methods for the sector to ensure product safety and environmental aspects of domestic horticultural products. Compliance with these guidelines is compulsory for companies using the KK's seed leaf quality symbol.

4.2 SOK

4.2.1 SOK background

S-group is a co-operative retail company group. The retail and service trade comprises over 1600 outlets in Finland. S-Group provides services in the trades of grocery and consumer goods, service station stores and fuel, tourism and hospitality, automobile and auto accessories as well as in the agricultural trade. S Group's purpose is to produce service and benefits for its co-op members.

S-Group consists of 20 independent regional cooperatives and SOK, which is owned by them. The cooperative network covers the whole of Finland, and the operations have a strong regional emphasis.

Owned by the cooperatives, SOK (Suomen Osuuskauppojen Keskuskunta) operates as a central firm for cooperatives and produces procurement, expert and support services for them. Grocery trade is practiced nationwide by the Prisma, S-market and Sale chains as well as the Alepa chain in the metropolitan area. In addition, the ABC service station market shops sell grocery goods nationwide and the ABC-Deli units in the metropolitan area. At the end of 2013, the supermarket chains consist of ca 880 outlets, 108 ABC service stations and 16 ABC-deli shops.

In Finland, the business activities of all supermarket outlets are managed by regional cooperatives. The SOK subsidiaries operating in each country manage the business activities in the Prisma units in the Baltic countries and St Petersburg. They administer altogether 30 Prismas(2013).

The main mission of SOK Grocery Trade in Supply Chain Management include issues related to quality assurance and sustainability. Especially, there is a close cooperation between teams in sourcing and chain management and the stores to make sure that green management is implemented, that best practices are distributed and that the green retailing results are measured and evaluated.

4.2.2 Green management in SOK

Green management, especially supply chain management, as well as open and fair actions throughout the supply chain is the necessities for SOK. SOK hope that this strategy will help them to be a forerunner in responsibility in all business areas in Finland. Actually, the Green management that is environmentally responsible and profitable creates the foundation for S Group to carry out long-term and beneficial operations. Especially, S Group's grocery trade has been intensively developing predictive analytics in recent years. It helps develop the operations of the entire food supply chain – from the producer to the store – and make them more predictable. Improved predictability makes everyone's work more systematic and productive and makes it possible to reduce food waste, among other things.

In SOK, we are continuously developing our own practices to ensure that the products and services we offer are responsibly managed. S-group is engaged in a dialogue with customers and different stakeholders to understand their expectations in respect of green management and early evaluation of new issues emerging in the area of green management help us to minimize risks and build business opportunities.

As a food retailing company, SOK consider a wide array of green issues: food healthy and safety, sustainability of raw materials, origin of raw materials and traceability of the supply chains, locally produced food, transparent and accurate customer information, social responsibility, fair trade, eco labeled products, material efficiency, energy efficiency, environmentally sound solutions and food waste.

S-Group sustainability criteria and implementation cover all of the abovementioned green issues. We implement these in our service operations and sourcing. For example: By SOKs predictive analytics and forecasting, we can help our suppliers to better manage production and delivery planning. This predictive analytics is also used in store order resulting in better material efficiency and service level.

Continuously ensuring the safety of the products included in the product range is crucial for S Group. The best end result is reached by means of extensive monitoring and mutually

agreed operating policies. Comprehensive statutory self-monitoring guarantees that each link in the chain does its part to ensure the quality of food by, for example, maintaining correct storage temperatures and an unbroken cold chain. The quality of new food items to be included in the grocery product range is checked and the products are subjected to sensory evaluation before they are accepted for sale. Products that are already in the product range are tested in accordance with an annual risk-based self-monitoring plan. For example, meat and fish products are tested many times per year.

In 2011, SOK started labeling the country of origin of primary ingredient in its Private label food products. Today over 1000 SOK's private label products are labeled according to these principles which extend legal requirements for EU consumer information.

Moreover, SOK is promoting sustainability in their product development i.e. SOK is only sourcing fish that are not from endangered, vulnerable or overexploited fish stocks. Sustainability criteria for fish products contains guidelines for sustainable sourcing and separate lists of species that are accepted in the selection. SOK also acknowledges the need to promote the use of sustainable palm oil. SOK is a member in RSPO (Roundtable on Sustainable Palm Oil). By 2015, all palm oil used in SOK PL-products will be RSPO certified.

S Group is continuously striving to save energy and improve energy efficiency. By improving the energy efficiency of S Group's own operations, renewable energy and by supporting co-op members in saving energy, S Group wants to do its share to influence global megatrends such as climate change. Moreover, reducing the amount of waste and recycling and energy recovery of waste efficiently are key aspects of minimizing S Group's environmental burden. Among other things, one of S Group's objectives is to eliminate waste to landfills completely.

4.2.3 Green sourcing practices

The sourcing operations in SOK contain responsibility principles related to product-specific quality requirements. SOK defined key areas of improvement for product responsibility including improving product traceability and transparency of product origin, development of environmental responsibility monitoring of the production chain and continuous improvement of product safety, as well as development of raw material responsibility in products which contain raw materials associated with special responsibility risks.

Our goal is to enhance the traceability and supply chain transparency. Our ultimate goal in this process is to extend the green management requirements and follow up tools to all relevant steps in the chain. In some cases it means that we must follow the materials up to the beginning of the chain.

The key area of improvement in Green Sourcing is ensuring the responsibility of raw materials because customers' expectations and wishes and also their actual buying behavior are directly linked to the composition of the product range. Many raw materials are associated with risks in terms of environmental responsibility. Many guidelines for the sustainable sourcing are in place for products e.g. palm oil, tropical wood and fish products, and plenty of different certified and eco-labeled products. The production of several imported raw materials is associated with factors that endanger biodiversity. This is why SOK has paid special attention to ensuring sustainable production of certain raw materials, such as palm oil and tropical wood.

It is important for any food retailers to provide customers with a domestic alternative whenever possible. Therefore, local products are an increasingly popular part of SOK's grocery selections. Plenty of local products can be found, particularly in the fresh produce sections. As much as over a half of vegetable sales in grocery stores comes from produce grown in the local area, and at a maximum, two-thirds of pastries and bread are made in local bakeries.

As a diversified food retailer, SOK has numerous suppliers of different kinds and size. All these suppliers are equally adhered to responsible principles. SOK operates their system

with integrity and responsibility and expect the same from its partners. For example, at the beginning of 2013, SOK signed a letter of intent on the Principles of Good Practice. These principles concerning the food supply chain have been prepared at the High Level Forum of the EU Commission. Some of these requirements are set up as a prerequisite product and specific requirements for SOK sourcing and these requirements are followed 100%.

We follow up our suppliers based on our own performance criteria. When we are talking about follow up of the performance criteria, it means that they are linked to a specific system like RSPO and BSCI. Our follow up is based up on the reporting requirements that are set up in the system. Our suppliers in the Food industry follow the environmental and human health indicators very well in their own production systems. Many food companies carry valid certificates which state that the companies follow internationally recognized food safety and environmental standards.

SOK participates in the Business Social Compliance Initiative system. The goal of the system is to improve the environmental and safety level in suppliers from risk countries e.g. Africa, Asia, South and Central America as well as some European countries and to bring them to the standards required by international agreements to ensure a responsible product range for customers.

According to SOK, customer is their main driver for Green sourcing action. Sustainability and Fair trade are also part of Green strategy. However, regulations are not the pull for SOK to enforce Green movement in Sourcing. Customers' feedback and suggestion can influence S Group's operations. Information obtained from customer feedback is used in product development and selection of suppliers in the manufacture of private grocery labels.

Main driver for SOKs to set its goals for green sourcing are our customers. We are committed to sustainability and fair Trade in our retail operations. The organizations' objective is, among other things, to develop the Green practices in the food sector voluntarily so that separate regulation is not needed.

SOK is committed to open and transparent information on green sourcing to its customers and stakeholders. It paid special attention to increased transparency of the information regarding topical issues primarily in the grocery trade to the media. The events covered, among other things, the centralization of retail and its impacts, as well as the development outlook for local and organic food.

5. FACTORS INFLUENCING GREEN SOURCING IN FINNISH FOOD RETAILERS

As it can be seen from the literature review chapter of this thesis, a theoretical framework is proposed to guide the researcher in analyzing the empirical section. Regarding to this framework, the outcomes from the empirical data gathered on the actual activities of both case studies could be revealed in an extensive view. It means that the factors influencing the implementation of Green sourcing in K-food retailers and S-food retailers could be analyzed as similar as in the framework. Both interviewees were asked how each sub factors in three main groups of factors influence the exercise of Green Sourcing and among them, which factor has positive and which one has negative impact. From their answers, all factors in theoretical framework have influence on the Green Sourcing practices. However, some of factors have opposite impact to the identified one in theory building. The analysis of each group of influencing factors will be conducted as follows:

5.1 Internal factors

According to K-food retailers, all internal factors including cost reduction, return on investment, collaboration, corporate image, incentives, cost arising and organizational size and management have positive impact.

Cost reduction and Return on investment

There is no doubt that cost reduction, resulting return on investment, has a greatly positive impact on Green Sourcing. Nearly all surveyed companies are currently improving their environmental performance by reducing waste and increasing recycling. As it is the goal for all activities and for the long-term financial plan, the decrease in cost has lead the food retailers to the Green strategy in Sourcing practices e.g. energy consumption, waste management, sustainable use of natural resources.

At Kesko, energy consumption has a significant impact on both the progress of climate change and costs. Among greenhouse gases as outlined in the GHG Protocol, emissions from the energy consumption of properties are the most significant component. Electricity, heating and water are the biggest expense items in property maintenance. Mitigating climate change resulting from energy consumption is one of the focus areas in Kesko's environmental work. Preventing the generation of waste, increasing the recovery rate and recycling of materials are the means by which Kesko reduces the amount of landfill waste.

In SOK, the preservation in energy and material are the major alternatives for reducing cost. Since price of energy items such as electricity, gas and fuels continue to soar, a strategic green design of sourcing may save these energies and replace them with others that bring more economic value. Therefore, cost reduction is a positive factor for their Green management in sourcing.

SOK is continuously re-evaluating cost reduction and material efficiency this is important in green retailing. We have specific targets in relation to material and energy efficiency.

In addition, the efficient management in recycling systems could result in a waste reduction. By improving the recovery of waste, the consumption of materials during the lifecycles of the properties can be saved. This improves that the good management of finances refers to the efficient use of resources, as well as generating stable, long-term economic benefits to different stakeholders. Reasonable, waste management is also applied well in Kesko.

Kesko develops recycling systems in cooperation with other operators and promotes waste recycling by developing packaging methods and the use of materials. The generation of waste is prevented by using recyclable transport units and by minimizing the wastage of products on sale.

Reducing food travel distance by local sourcing is also another way that both retailers apply to supply customers with the most natural and freshest products. Furthermore, to pursue cost saving goal, by decreasing long transportation distances, the large-scale and efficient operations network of stores help these retailers to serve the entire Finnish food supply chain better, with decreasing expenses.

According to K food retailer, the primary reason for Green action in sourcing is to achieve Green and sustainable savings and returns. Reducing waste lowers costs and can even generate new revenue streams. Finally, partnering with suppliers may uncover resource efficiencies that also translate to lower costs, whether by reducing energy, water, material, or waste. The return may be in terms of measured lowered costs like reduced energy usage or intangible benefits like brand enhancement or a more engaged workforce. It is clearly a positive factor.

However, the revenue made from recycling and other Green actions do not result much in SOK operation.

Building revenue from waste products does not offer many possibilities for us in retail business in Finland.

This statement is true in short term. But in longer term, investing in renewable, environmentally friendly and alternative energy is investing in the future. Green sourcing is one of the strategies for most companies to earn profits that in turn can be reinvested in new plants and processes. From above statement, return on investment does not have any impact on their action in Green sourcing.

Shareholders are a company's financial lifeline. Large retail chains are typically either publicly held or privately managed by private equity firms. In both cases, investors often recognize the tie between a company's sustainability performance and its financial performance and brand value. Public companies are scrutinized by mainstream investors and socially responsible investment firms (SRIs). Some investors specifically engage retailers through conversations and occasionally shareholder resolutions to increase visibility of sustainability efforts in the company's operations and management—ensuring their due diligence for the investments they hold. When retailers are managed privately, those firms often provide resources and technical support for sustainability performance improvement and set goals for their portfolio companies to achieve. As investors continue to value companies' sustainability programs, they develop processes to measure and rate company sustainability performance. The CDP is one such example of investors seeking a corporate plan for reducing energy use—and now reducing water use—realizing that their use of both is directly tied to the organization's cost structure.

Collaboration

This factor really has a positive impact on Green sourcing for both retailers. Diversified networking with suppliers of goods and providers of services requires that all supply chain operators share the same values, objectives and operating practices. Moreover, cooperation are necessary for green sourcing process as it saves time and money for the retailers in

selecting suitable suppliers who have capability of supplying products heading to environmental responsibility. Indeed positive cross-functional contributions from internal and external stakeholders are actually needed to enable effective total and holistic “end-to-end” supply chain management, as K-food retailer demonstrated. Therefore, SOK has remarked collaboration or a close connection with its suppliers and partners as a necessary tool for operating the effective Green supply chain management as well as Green Sourcing.

Green sourcing demands a tight collaboration with our suppliers and different stakeholders within SOKs multichannel supply chain.

In today’s competitive business and global climate, organizations that fail to take a collaborative and sustainable approach to working with both suppliers and internal stakeholders will face numerous risks. These risks range from being placed on allocation (which can jeopardize that most basic tenet of procurement, continuity of supply) right through to lost sales.

As is clearly seen, those suppliers who will cooperate on Green issues are critical for Green Sourcing initiatives. It is also worth noting here that suppliers are often in touch with many other buyers on Green issues; indeed some suppliers will have Green as a key competence and differentiator.

As has been said, “You are only as good as your suppliers” and Green Sourcing really emphasizes such linkages, as customers/consumers only deal with the one supplier and are not really interested in any supplier’s supplier’s problems. With Green, an end supplier’s ignorance of what a supplier is doing upstream from them is of no concern or interest to customers/consumers; accordingly with Green sourcing and Green Supply Chains, the whole is clearly greater than the parts where ignorance is not an option.

Multi-stakeholder collaborations bring together constituents with perspectives that often represent diverse parts of a holistic system—whether a product supply chain, building

construction and operation life cycle, or transportation network. Having diverse perspectives represented allows the participants to draw on a wider base of expertise and resources than they would have in their own organizations alone. And true system-wide innovations can only be found when the whole system is represented.

Multi-stakeholder initiatives, which may involve organizations from the business, government, nonprofit, academic, and other sectors, are important to creating long-term value for companies, suppliers, and customers. While effectively managing collaborations can be challenging and time consuming, they represent a holistic approach to sustainability issues. Involvement in multi-stakeholder collaboration groups helps retailers to identify the most effective opportunities and leverage the best expertise to develop the tools necessary to act on those opportunities. Some examples include the Sustainability Consortium and the Sustainable Apparel Coalition for product improvements, U.S. Green Building Council and EPA and DOE ENERGY STAR for store performance, and EPA Smart Way for trucking efficiency.

Corporate image

A failure in product safety control or in the quality assurance of the supply chain can result in financial losses, the loss of customer confidence or, in the worst case, a health hazard to customers. It is true and positively influences the implementation of Green sourcing. K-food retailers confirmed that:

Good corporate responsibility performance creates possibilities to improve satisfaction and to increase healthy, profitable business.

It is one of the first-row that K-food retailers target to achieve and Kesko has been included in 'The Global 100 Most Sustainable Corporations in the World' list since 2005. On the 2013 list published in January, Kesko came in the 50th place.

The demand for responsibility has emerged as an important criterion for institutional investors when deciding where to invest. Kesko has established its position in comparative studies that measure responsibility and serve as tools for investors when making investment decisions.

Kesko engages in long-term, high-quality corporate responsibility work that has been internationally recognized. For years, Kesko has been included in the most significant sustainable development indices. This sets a high standard for the demands on its responsibility work and its continued development. The objective of its updated responsibility program is to ensure that responsibility is implemented in the daily work of every K-Group employee and across all of the processes.

A retailer's corporate brand is among its most valued assets. Retailers invest a significant amount of resources to enhance their brands with consumers, government, and other key stakeholders. Doing so keeps the company's brand at the top of consumers' minds when they are deciding where to shop, and it builds trust in the communities in which retailers operate. So, it is not surprising that retailers recognize the corporate reputational rewards that sustainability brings.

By publicizing its activities in improving environmental performance, a firm can improve its public image, thereby enhancing its position in the market place. And by demonstrating sound environmental management, a firm can reassure the local community about its activities and thus build up good community relations. In addition, doing so keeps the company's brand at the top of consumers' minds when they are deciding where to shop, and it builds trust in the communities in which retailers operate. So, it is not surprising that SOK also address sustainability activities to enhance its corporate reputation.

Commitment to common green sourcing goals is necessary for customers and employers. Green sourcing thinking in the core our corporate image and brand awareness work.

Organizational size and management

This factor, according to K-food retailer and S-group, has a positive impact. Kesko food retailer explained that:

Corporate responsibility in Kesko is integrated in daily work. The management of each business division, like Kesko Food, is responsible for the practical implementation. The level of commitment and knowledge is high in every level and still of cause there is always demand of more detailed training.

Kesko's Board and Corporate Management Board handle reporting and the key principles. Kesko's Corporate Responsibility Unit, assisted by steering groups, is responsible for the development, coordination and reporting. The corporate responsibility function is managed by the Senior Vice President for Human Resources and Stakeholder Relations, who is a member of Kesko's Corporate Management Board.

This means that the whole organization has a strong commitment in Green Sourcing. They have non-stop effort in training and guidelines, effective communication and tightened controls to prevent malpractice

Kesko has a malpractice examination and reporting guideline, according to which Kesko's Risk Management examines the suspicions of malpractice. Clear suspicions of criminal activity are reported to the police for further investigation.

Personal commitment of managers and employees to buy green products and live sustainable lifestyles, e.g. leading by example, is really important to business success in promoting sustainability.

Lack of alignment between corporate strategy and its green strategies, knowledge sharing barrier due to internal knowledge gap might cause the negative impact on the strategies for retailers to improve their environmental performance. Also, lack of training, control mechanisms, audit and evaluation system, poor technological integration are challenging factors for retailers to develop Green Sourcing Strategy. Therefore, SOK has concentrated on training and other educated systems from bottom to ensure the whole Green sourcing operation is controlled with high-quality work.

Management is committed to this work and common goals in green sourcing. Our training and control systems are regularly evaluated.

Cost arising

Even Green designed products might cost more than conventional products, because large scale and long-term investment is required in order to implement more environmentally-friendly manufacturing processes. In SOK's perspective, this cost from Green sourcing may arise in short term because all new products need testing and research development. Additional cost e.g. modifying new resources, additional management system may arise but they seem not such an important issue for SOK retailers because they know that the profit will be cultivated bigger and bigger in long term for the continuous demand of Green products. However, this factor is still a negative factor for both retailers.

SOK is considering the costs of developing the green sourcing in a longer perspective. Any new product or concept in green sourcing is first tested and evaluated and investment is realized if the customer benefits are likely.

In the other hand, Kesko take regulation on Green management into serious consideration because it has indirect impacts on the costs of electrical and heat energy. The electrical and

heat energy used in Kesko’s own properties represents a significant part of the K-Group’s energy costs. The implementation of the EU’s Integrated Energy and Climate Policy, and the Finnish Government’s energy policy will affect future energy solutions and may increase energy prices, adding to energy saving pressures.

Table 1: The impact of internal factors on Green Sourcing implementation on K-food retailer and SOK’s view

Internal factors	K-food retailer	SOK
Cost reduction	+	+
Return on investment	+	
Collaboration	+	+
Corporate image	+	+
Organizational size and management	+	+
Cost arising	-	-
Incentives	+	+

Incentives

In implementing Green sourcing, incentives are necessary for the involvement of all key stakeholders. It is a positive factor which motivates the high-quality work for Green Sourcing process and the whole Supply Chain Management. The incentives are not only provided for suppliers and manufacturers for the efforts of reducing raw material consumption and decreasing waste, but also the reward for the employees to motivate them in sustainability practices e.g. remanufacturing, recycling of materials to conserve resources and providing better service to the final customers in terms of both social and environmental concerns. In Kesko Corporation’s performance system, the factors contributing to the bonus amount are the total performance of the Group and the division, the performance of the employee’s own unit and customer satisfaction. By evaluating the performance in Green Sourcing implementation of each division and employee, Kesko will

generate the Green action from their bottom-up operation. This will ensure that Green management is applied in the whole system.

Differently, in SOK, the costs of green sourcing are included in the buying price. Incentives are not used extensively to promote green management. Only employee incentives for those employees whose work is related directly to green sourcing i.e. resource efficiency are used in this context. As Green sourcing is a stage in Supply chain management, the information sharing about Green practices should be popularized to everyone in the whole corporation. Therefore, this incentives system might not work effectively.

5.2 Industry factors

According to SOK, all factors belong to this group influence SOKs decisions, they can speed up or help their decision making. Similarly, SOK and K-food retailers consider that the first two green factors have positive impact.

Green retailing trend

This factor has extremely positive influence on the decision making in Green sourcing for both retailers because there is a clear trend of incorporating environmental consideration in retailer's business and there is a showcase of best practices in applying green initiatives from upstream to downstream supply chain as these movements will help retailers achieve competitive advantage by building customer loyalty and enhancing their reputations. In another word, Green management is a part of retailing industry. Therefore, SOK commented that:

I don't think Green retailing is either a trend or a main goal for the food retailers, it is something you can't operate without, more like a framework for cooperation which profitable and sustainable business.

As we have seen, Green trend is generated from the customers' demand. Retailers of course are being right next to consumers and so directly face the "first wave attack" because the real end here is the consumer's requirement, the consumer is the final, ultimate, originating end demand in any supply chain. Consequently, retailers are increasingly growing and developing their efforts to be Green,

Green consumers

Two retailers agreed that there is no surprise that Green customers has positive impact on Green sourcing because Green consumers are a major factor for the movement to Green Sourcing. Stated by Kesko:

Customer involvement is a constantly growing trend in the development of new products and services and Pirkka has also wanted to invite customers to join in.

Especially, in an industry specified in food, in respect of products offered to customers, the aim is to take account of the impact of their entire life cycles on consumption. Customers' purchasing decisions are also affected by a concern for personal wellbeing. Promoting healthy ways of living and eating habits is an opportunity and a strategic objective for the food trade.

The transparency and responsibility of purchasing chains have become increasingly important and increasingly detailed information on the origin and manufacturing methods of products need to be made available to customers. Care must be taken that responsibility is realized in all operations and throughout the supply chain.

An analysis of risks and opportunities also takes customers' future needs into account. Kesko actively develops the stores' selections and services in all of its divisions to meet customer needs. At the same time, customer awareness of, for example, environmental impacts is increasing and their needs and buying behavior have become diversified as new forms of services, such as e-commerce, have been made available. With regard to the competitive situation in the trading sector, the role of online transactions and multi-channel services has grown significantly in a few years.

Customers are paying increasing attention to issues related to climate change. Possible failures in implementing responsibility may weaken Kesko's reputation. Stocking more items with Green source e.g. organic products, pesticide-free fruits and vegetables, biodegradable plastic and paper products made from recycled materials, can provide a competitive advantage for stores seeking to differentiate themselves among environmentally conscious consumers.

Retailers are those who help shoppers become aware of green products offerings and by providing easy options for recycling. Customers will feel environmentally responsible, and retailers can achieve competitive advantage by building customer loyalty and enhancing their reputations.

Suppliers' reliability

According to K-food retailer, suppliers' reliability has a positive impact because Kesko wants to cooperate with its suppliers and their subcontractors on a systematic, long-term basis to ensure the ethical quality of their products. Deviations from Kesko's ethical principles are handled similarly to deviations from other quality requirements.

In the long run, Kesko favors in its purchasing those suppliers that approve of Kesko's values and principles and want to act accordingly. Mutual cooperation between Kesko and its suppliers shall be open-minded, fair and equal, and adhere

to contract terms. Bribes and similar measures are not allowed in any circumstances.

The most reliable way for a supplier of proving that it fulfills Kesko's ethical requirements is to acquire an SA 8000 certificate from an independent certification body or another corresponding audit approved by Kesko.

Comprehensive networking with suppliers of goods and services requires that all involved parties accept common values, objectives and operating practices.

We require competence and commitment to the common objectives of ourselves and our partners. Thereby we create a framework for cooperation which is both profitable and sustainable. We are jointly responsible for our customers to be able to rely on our expertise, services and the quality and safety of our products.

In retail companies, merchandising and sourcing managers typically maintain the relationship with manufacturers; however, every company defines those roles in slightly different ways. Merchants tend to determine the items that consumers see on store shelves and the suppliers from which they buy these products. Sourcing teams often focus on contracting with manufacturers to produce the retail brand's private-label products.

Sustainability teams are beginning to empower merchant and sourcing teams by providing them with educational tools and resources. These tools will allow companies to integrate sustainability efforts—such as reducing their use of energy, water, materials, and toxic chemicals; emitting less carbon; and improving their performance on human rights—into supplier selection, efficiency improvement strategies, awards recognition programs, supplier risk assessments, and more.

Retailers engage suppliers through a variety of techniques: audits for social compliance, score carding or surveying, and collaborative projects are the most common. However, techniques for supplier engagement vary significantly depending on the types of products sold. Some companies need to be more concerned with the labor conditions in supplier factories, while others need to consider product safety or waste reduction.

Oppositely, supplier reliability and product availability have negative impact on green sourcing. SOK found that:

We can find the right supplier and right product for each demand but sometimes it means a lot of work.

To explain this, these works not only processed by SOK but also other food retailers in interacting with their suppliers. The success of supplier engagement is measured on a yearly basis. Key indicators are determined for monitoring the areas of improvement defined in the responsibility program to support management. Moreover, there are additional works for labeling. These include the share of private label products marked with countries of manufacture and origin of all private label products; the share of private label product purchases and own imports from audited suppliers in countries at risk (rights at work); number of certified products and services in the product range; volume and reuse/recycling rate of waste; consumption of electricity, heat, fuel and water, as well as the percentage of outlets with a defined target consumption for energy. As a diversified company, S Group has numerous suppliers of different kinds and size. S Group treats all suppliers equally and adheres to ethical principles in relation to them.

In accordance with our ethical principles, we operate with integrity and responsibility and expect the same from our partners.

Table 2: The impact of industry factors on Green Sourcing implementation on K-food retailer and SOK’s view

Industry factors	K-food retailer	SOK
Green retailing trend	+	+
Green consumers	+	+
Supplier’s reliability	+	-

5.3 National factors

Green regulations and regulatory implementation

Most of companies adopting Green activities is instructed and required by regulatory framework including relevant laws and anticipation of future requirements. These regulations also have a great impact on the implementation of eco-driving supply chain. In retail industry, environmental compliance considerations are the significant priority to maintain proper operation from raw material sourcing to the manufacturing process and gain objectives in controlling waste generation, energy and fuel usage, land-use footprint, and other environmental impacts across its product supply chains. Environmental compliance in sustainable sourcing can be defined as a continuous process in which companies refine their sourcing policies and practices to ensure the green movement at every following stage in the supply chain because recent regulations require companies to track the origin of products through their supply chains and to publicly report on the potential problems related to the violation of green standards for the sourcing of their products.

Dealing with complex regulatory, environmental and ethical requirements, sourcing functions must also get involved in matters of the entire supply chain to take the lead in helping their organizations navigate a roadmap to environmental responsibility. For example, regulators want to know if a company is indeed following green standards will look across the compliance of entire supply chains including all stages from sourcing to manufacturing to distribution and final sales. Meanwhile, regulators especially from the European Union and U.S are making efforts to implement policies such as carbon limits and emissions trading schemes. In addition, governments and NGOs in many countries are on the rise enacting regulations on energy efficiency standards, hazardous materials limits, and hazardous materials handling as well as recycling targets in the sourcing as well as manufacturing process. For example, under these frameworks, retailers sourcing managers are being on the line to ensure the quality of inputs and supply quality; ensure the

commitment to comply with the green regulations from the farm to the supermarkets and grocery stores.

These guidelines actually drive the action in Green sourcing and help the enterprises make improvement during the Green sourcing process. Kesko food retailers as well as SOK's operation is influenced by national and local regulations. However, regulatory implementation and changes in the system can have big impact on their operation costs. SOK figured out and it is also true for K-food retailer:

National and EU regulatory frames and good implementation practices have a positive impact on green retailing development as well as the co-operation in trade and business associations. Only negative impact would be regulations and guidelines which hinder or slow down the green retailing development.

Trade & Business Associations

This is definitely a positive factor as these associations who are very familiar with the environmental issues in their specific industry, they are in an excellent position to help their members identify the key issues and to share strategies about how to work with suppliers.

Responsibility is a team effort where shared rules and principles are essential. Shared rules guarantee that customers can trust us and our products.

Kesko has representatives in several national and international organizations. SOK is also a member in national grocery trade associations.

Their co-operation with different regulatory and official stakeholders as well as industry associations help us to find solutions to common questions to all parties in food retail in Finland. International trade and business associations and organizations give us tools to build our own green retailing strategies and operations.

Nonprofits and government agencies support many corporate efforts to be more sustainable. For example, construction engineers may work with the LEED building or interior space certification or the ENERGY STAR program for buildings.

NGOs provide resources and expertise that may not exist within a company. Retailers partner with these organizations for training, consultation, strategy building, and more. Other partnerships help ensure that companies adhere to certain regulations, such as the case of the Forest Legality Alliance to promote legal sourcing of forest products as outlined by the Lacey Act.

Government agencies also provide useful tools, resources, and credibility for certain sustainability efforts. The U.S. EPA, for instance, organizes voluntary business programs like ENERGY STAR, Smart Way, Waste Wise, Water Sense, Green Power Partnership, and more. Companies enter these programs without cost and receive technical training, implementation tools, educational resources, and more-all of which reduce their environmental impacts and build their business value.

Table 3: The impact of national factors on Green Sourcing implementation on K-food retailer and SOK’s view

National factors	K-food retailer	SOK
Green regulations	+	+
Regulatory implementation	-	-
Trade & Associations	+	+

6. DISCUSSION AND CONCLUSION

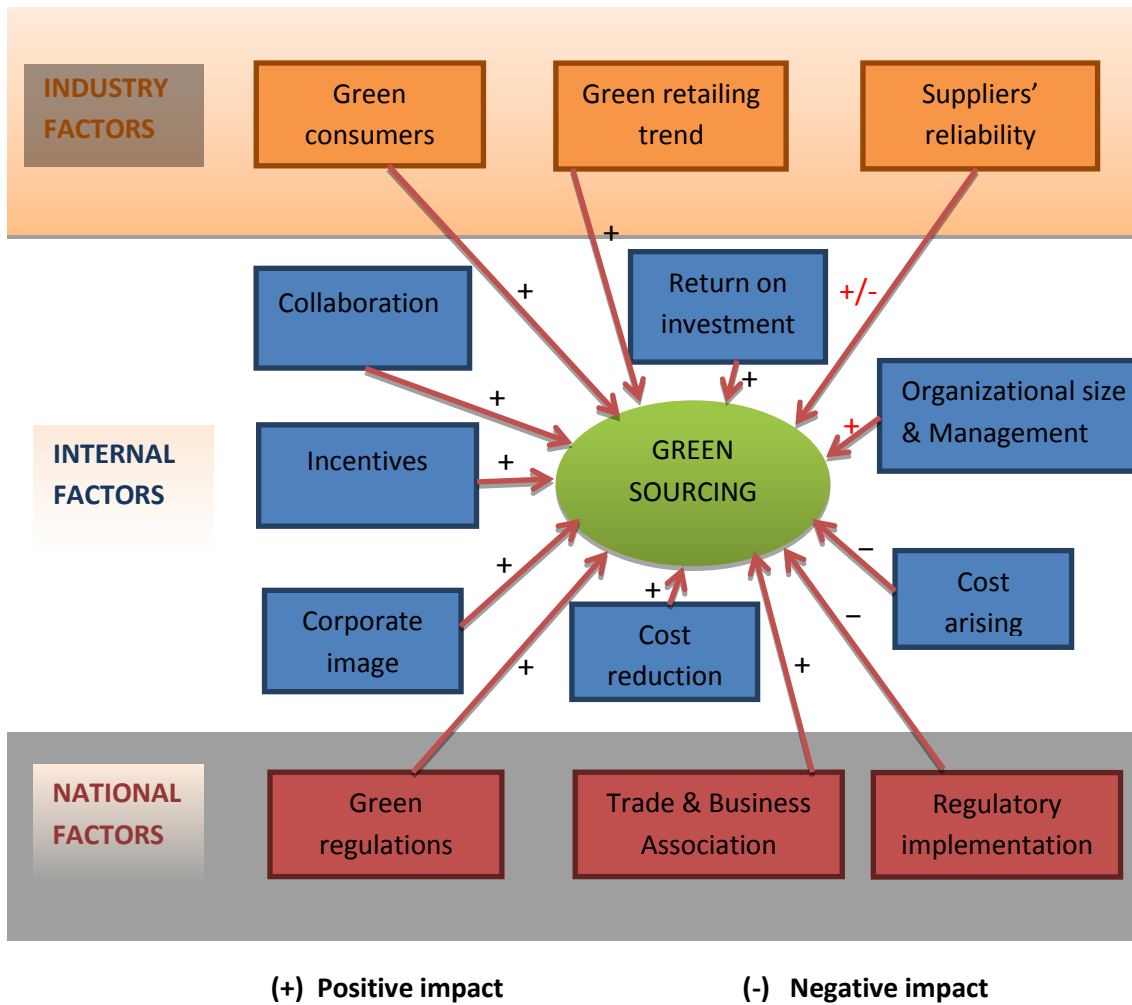
6.1 Discussion of key findings and limitations

Retailers may play a significant role in greening markets of products and services and in promoting more sustainable lifestyles of consumers. From the findings above, the reality is not so far from what theoretically could be possible. This study demonstrates that most Finnish food retailers have started to systematically work with sustainability issues. However, the study is involved with two large food retailers who have a significant market share, there are still many more medium and small-size retailers. Will they see sustainability work in supply chain as an important activity is still a question that need more research.

The investigation of the Finnish retail forerunners reveals that major factors having influence on the Green Sourcing implementation including internal factors, industry factors and national factors. Most of them have positive impact and just a few of them have negative impact. Among them, green regulations, customers demand and return on investment are three main factors that have great influence on the consideration and decision in Sustainable strategy in food industry. They seduce the sequential impact of other facilitators which have indirect impact, although they often represent a more profound environmental threat and consequent challenge of addressing them.

From Table 1, 2 and 3, the new framework based on the analysis of two case studies will be presented as follows with the new impact of Supplier's reliability and Organizational size and management in red color:

Figure 5: Factors influencing Green Sourcing in food retailing in reality



This study reinforces that the strong persistence in green business is not sufficient to ensure that food retailers will move all into the committed green action. There is still a mandatory or ignorance among food retailers and the society about the corporate environmental activities due to higher price of Green products, cost arising from regulatory implementation. These negative factors have hindered facilitators such as incentives, return on investment and suppliers' reliability to play an effective role in greening the Sourcing process.

The study also discovers that business associations and networks are useful in the implementation of Green sourcing. They are usually guided by economic incentives. But they act as a platform to transfer information and bring the benefits of improving the corporate environmental performance in retailers. Experience, advanced practice and information from individual companies can be shared and exchanged through the networks. In addition, networks and associations can play important roles in calling government policies and other aids from international organizations for retailers in developing the Green programs. With financial and technical assistance from these providers, more free training and education services are also transferred to food retailers. Ultimately, networks and associations play a critical role in persuading retailers that green business is worth long-term investments.

Although this study identified many interesting initiatives undertaken by retailers along the Green Sourcing process, which undoubtedly contribute to the development of green markets, there are still many issues that hinder retail sector from becoming truly sustainable and that need to be addressed in the near future. Furthermore, this study only investigates the large food retailers in Finland with already proactive in Green management. While small and medium food retailers, who are now facing with cost issues and more pressure from their customers, needs more concern from researchers.

The motivating factor of legal compliance is one of the main drivers that lead retailers to a more proactive action in Green management, resulting in significant improvements of environmental performance of food retailers. It will be useful to deeply research in this factor. By comparing government environmental legislations and corporation's environmental requirements, food retailers will consider and take action according to the requirements that have more influence. Further research is needed in this area.

The goal of Green Sourcing is obtained by Green production from manufacturers and Green consumption from customers. To achieving this goal, retailers play an important role in initiating sustainable consumption and production. This challenge will need the

support from governments and associations to create clear vision for food sustainability system from sourcing to consumption. Recently, European Retail Roundtable was established in 2009, aiming to facilitate retailers' actions towards sustainable production and consumption. The membership in the European Roundtable is voluntary and open to all interested stakeholders, which ensures incorporation of the sustainable approach, where interests of all actors are taken into consideration.

So far, setting priority for sustainability action of retailers is not a straightforward process because this priority is not solely based on scientific knowledge, but also affected by business goals (cost and quality issues, in-time delivery etc.) and stakeholder's expectations (Bergstrom et al. 2005). Improving the sustainability performance of retailers is in the face of often contradicting priorities among retailers, policy makers, non-profit organizations and consumers. Therefore, high level of collaboration among retailers and stakeholders is desired to have an agreement on the common sustainability approaches to supply chain management. In addition, more collaboration among retailers is required on international and regional levels to jointly have a call on Green management. The foundation of corresponding initiatives at more local levels might be of value as well - for instance, organization of Nordic Retail Roundtable. This could take advantage of contextual background, e.g. already advanced practices, specifics of business and cultural environment etc. Especially in regions like Scandinavia, where food retailers are already proactive in addressing sustainability issues and consumers are highly aware about Green management, more advanced visions and targets could be set to move forward. Collaboration with governments and international organizations could help retailers have a greater priority to address problems related to environment and food safety and shape better responses to the problems.

Another challenge that retailers are facing in ensuring Green supply chain management is the issue of commonly agreed standards. These standards not only help retailers comply with sustainability requirements but also increase transparency and allow benchmarking between actors upward and downward the supply chain. Nowadays, standards setting is starting to take place among international and national retail organizations, e.g. GFSI

(Global Food Safety Initiative), BRC (British Retail Consortium) standard, Euro GAP (Global Agricultural practices). These schemes are examples of standards developed by retail groups to enhance food quality and sustainability, as well as to gain consumer trust. However, internal standards should aim at higher sustainability performance than industry standards, which are usually lower as they aim to ensure wide acceptance among stakeholders (Smith 2008). However, sometimes official standardization (official eco-labeling, ISO 14001 etc.) is perceived by retailers as costly and restrictive (BIO Intelligence Service 2009).

Perhaps the most challenging issues nowadays is the higher production costs of green products compared to the ordinary ones (UNEP 2005; BIO Intelligence Service 2009) and consumers' low willingness to pay extra price for Eco brands (European Commission 2009). Especially now in economic recess, the consideration between these two issues has increased. Few retailers subsidize production of green products but most of retailers perceive it as an undesirable activity. To resolve this issue, governments should undertake an active role in providing financial incentives to motivate retailers in food sector towards higher level of sustainability.

6.2 Practical implications

The Green Sourcing trend recently has encountered the process of Green Supply Chain Management in food retailing sector. To catch on and adopt this trend, an increasing number of companies are beginning to think and develop Green approach to sourcing and supply chain management. By incorporating this new reality in their plans, Green sourcing is fastly emerging as a strategic business imperative in an effort to proactively manage a new era of customer needs, regulations and competitive realities that will ultimately impact their business. With the discussion of key findings and limitation above, there are practical

implications for procurement organizations to jumpstart their efforts and get on the path to success:

Understanding the organization's pattern in cost efficiency, supply chain and consumption is naturally the first step for Green strategy being addressed. Whether this is a detailed carbon footprint study or an assessment of organization's "green" status, retailers need to know how the sustainable approach is positioned in their supply chain. Once retailers understand where they stand, a set of goals and, even more important, mechanisms that can be used to track progress.

Retailers' weakness in financial and technical aspects calls for proper interference from the society. It is necessary to bring multi-stakeholders together to create a better environmental for retailers to integrate environmental thinking into corporate activities. The leading position of government in influencing corporate environmental activities in Finland has to be amplified and extended to help improve retailers' environmental performance. More financial aid and technical assistance has to be readily offered to small and medium food retailers. As there are increasing interests on food retailers and their environmental performance, and the government is working on mobilizing various financial and technical resources to promote the sustainable development of food retailers, it is necessary for international aid providers to carry out effective communication with the government regarding the government policies and initiatives concerning retailers' environmental performance. Proper assistance can then be designed and provided to complement and strengthen the national counterpart's capacity in helping green retailers especially the small and medium food retailers. The intervention points can be government policy formulation and implementation, establishment of favorable financial mechanism, and dissemination of experiences and information from other countries, etc.

To empower the practice of Green sourcing in the whole organizations, a chief officer who specifies in sustainability should be appointed. He/she will oversee green efforts and be in charge of any issues related to environmental protection and food safety. The applicability

of this specific position will depend on the organization and industry, but the key is to have a single point of accountability to effect change.

Food retailers who are moving towards Sustainability should expose their strategy and action to their partners and customers. The more organizations are getting the word out, the more they are getting people on board. The Green progress is not only marketed externally but also internally. By setting goals in sustainability, be sure to communicate to all levels why green efforts are being undertaken, what will be measured and how the company is going to get there. As with any broad initiative, it is nearly impossible for just one functional area to have an impact on the entire organization through its efforts alone. To be effective, not only Engineering, Design, Sales, Finance, Operations but everyone else is also involved in Green implementation.

"Green" should be incorporated into existing sourcing and procurement processes. Factoring green priorities into existing processes is a natural extension of the non-price process and an effective way to drive green goals. Green criteria must be included in the requests for proposals and create clear metrics for measuring them as part of supplier performance management. Capacity development among suppliers by retailers is necessary in the form of financial support, information provision and trust building, rather than just stocking shelves with already available green products. Strategies to engage suppliers into sustainable behavior are required to ensure transformation to markets of green and ethical products. In addition, Green goals and standards should be communicated effectively to supplier community by setting clear expectations for every supplier during the sourcing process and proactively monitoring compliance/progress. Similarly, outline what suppliers will be expected to provide and how they will be measured to ensure that they are delivering and putting in place the processes and procedures to drive compliance. By this way, retailers can quickly improve their sustainability performance.

Environmental regulations such as the Restriction of Hazardous Substances (RoHS) directive in the European Union and other global regulations that are mentioned above will increasingly affect how supply chain functions regardless of organizations' location.

Retailers need to stay up-to-date with Green regulations or keep up with changes in this rapidly evolving area to avoid costly mistakes in the whole supply chain.

In food industry, retailers should always stay up-to-date their industry, participate in industry groups and do whatever it takes to maintain the competitive advantage and not be left behind. Moreover, retailers must keep up with new materials, technologies and processes which are applied for Green practices. New approaches with cost arising will address challenges and opportunities, therefore significant work should be done to develop and apply Green initiatives. Easy stuff should be done first. For instance, retailers don't need to overhaul the supply chain to see gains from sustainability efforts. Instead, identify "quick wins" such as simple improvements in energy efficiency that can both deliver bottom-line results and kick-start green initiatives.

More strategic and long-term thinking especially more commitment to responsible marketing effort is required among retailers. Some retailers, in order to mainstream green products, promote 'buy 3 – pay for 1' offers. However, such marketing activities promote over-consumption and higher level of food waste generated (Jones, Comfort et al. 2009). Obviously, purchasing of green products should be linked to sufficiency rather than wastefulness mentality. So far little activities on preventing over-consumption have been mapped.

Promotion activities are still lacking easy and engaging messages to motivate consumers to alter their behavior (European Commission 2010; Bio Intelligence Service 2009). Close collaboration with consumers is required to incorporate societal concerns into marketing strategies, thus increasing chances for successful adoption of sustainability practices. At the same time, mutual dialogue with customers would help to identify areas where level of environmental awareness is low and further education activities need to be implemented. With easy and engaging message, retailers could motivate sustainable consumption.

While it represents a very useful instrument in proliferating sustainability practices, it still has low level of uptake among retailers. Certain difficulties are associated with phasing out different products groups, as it potentially could clash with the interests of some producers

and consumers. By choice-editing measures, unsustainable products can be phased out. When analyzing the retailers' initiatives in green marketing and improving sustainability of food supply chains, distinction should be made between the proliferation and the actual sustainability outcomes of retailers' activities. Some actions when applied might yield more successful results than others; for instance, financial incentives and choice-editing could potentially engage more consumers into behavior change than provision of environmental information and eco-labeling (BIO Intelligence Service 2009).

6.3 Conclusions

Green Sourcing, which was defined as the selection of suppliers to purchase environmentally friendly products, taking into account other factors affecting the environment, such as production, consumption plus a general account of the Green supply chain management - related factors. Other important points about Green Sourcing, is that Green is considered to be the fourth selection in the choice of suppliers in the future criterion after price, quality and delivery. The Green Sourcing is managed during the management of Green supply chain management.

After the study, it can be concluded that there are positive and negative factors that complicate the implementation of the Green Sourcing and it is different from company to company to consider which factor has positive or negative impact. There are identified factors inside and outside the company, respectively internal factors, industry factors and national factors. These groups of factors are very specific and can be further classified as additional subcategories to those already found.

By investigating influencing factors the Green Sourcing in two Finnish food retailers, it can be seen that the external 'heavy-handed' regulatory controls, customers demand and cost

consideration are the main driver for greening Sourcing process in Finnish food retailers. They reduce the sequential impact of other facilitators.

Not surprisingly, it is still the financial issues, which makes most of retailers even large scale retailers reluctant to implement Green Sourcing. The main reason is that there is a perception of green products more expensive than conventional products, and not looking further in the long term. In addition, it costs human resources to investigate Green Sourcing, and it may be difficult to do Green business at a time when they are under pressure to gain the turnover. This factor becomes the internal barrier that hinders Green Sourcing.

Green Sourcing is highly promoted when specific knowledge of Green Sourcing integrates into business. Apparently, associations and networks play important role in sharing experience and information between individual retailers and bring the benefits of improving the corporate environmental performance in retailers. Then, communication about Green Sourcing will not be a barrier when resources globally.

Although this study identified many interesting initiatives undertaken by retailers along the Green Sourcing process, which undoubtedly contribute to the development of green markets, there are some limitations of this study and suggestions for future research. Many issues that hinder retail sector from becoming truly sustainable and that need to be addressed in the near future. Furthermore, the study was limited in term of its applicability to small and medium food retailers, who are now facing with cost issues and more pressure from their customers, it may need to be modified for the industry to be studied.

Another area of concern is the motivating factor of legal compliance which is one of the main drivers of Green action in sourcing, resulting in significant improvements of environmental performance of food retailers. This study is exploratory in nature, and further investigations will deepen the understanding of influencing factors at a whole. It may be valuable to compare government environmental legislations and corporation's environmental requirements, food retailers will consider and take action according to the requirements that have more influence.

The focus of this study was to investigate the effects of influencing factors on Green Sourcing. Given that business ethics theories control the strategic decision in corporate sustainability, individual ethical decision-making process, to study individual cognitive factors (e.g., ethical values) as antecedents of Green management and their interactions with organizational factors will be valuable. This, along with the findings of this study, will guide to develop a rigorous framework to study Green decisions.

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