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# Environmental Performance in Customer Communications

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*The use of Sustainability as a Marketing Tool in B2B Settings*

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Daniel Taube, SKF

**Keywords:** Environmental efforts, sustainable supplier, brand image, environmental communication, marketing tools, LCA, DfE, code of conduct, sustainability reporting, sustainable supply chain, customer demand.



# Preface

This master project has been written within Industrial Engineering at Lund University, Faculty of Engineering (LTH) on behalf of SKF and Lund University. SKF initiated the project and the project objective was to provide SKF with insights regarding how environmental performance can be used to strengthen the launch of new SKF bearings.

We found the topic of this project very interesting and it has been both enjoyable and challenging to immerse ourselves in the process of this project. The project has challenged us both intellectually and creatively.

First of all we would like to thank our supervisors, Bertil Nilsson at Lund University and Daniel Taube at SKF. Your support and guidance has been invaluable. Without your help and comprehensive knowledge we would not have been able to achieve the same quality of result.

We would also like to thank all SKF representatives whom have been kind enough to take time from their busy schedules to talk to us. The knowledge we have obtained from interviewing employees at SKF has been crucial in understanding the SKF organization and in reaching our result. Moreover, we would like to thank all companies that participated in the benchmark. It is a very generous gesture, taking time to talk to students without receiving anything in return.

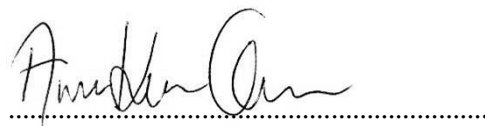
We hope you will find this thesis interesting and that it will give you some new insights regarding environmental communication.

Thank you for your attention.

Lund, June 2014.



Stephanie Gardner



Anna-Karin Olsson



# Abstract

- Title:** Environmental Performance in Customer Communications
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Daniel Taube, *Head of Sustainability & EHS*, Strategic Industries, SKF
- Background:** Corporate environmental efforts are now valued higher than ever and need to be communicated to customers in a successful manner. Companies today wish to promote themselves as sustainable and use environmental performance to obtain competitive advantages. SKF is promoting themselves as an environmentally sustainable supplier and wishes to ascertain how environmental performance can be communicated to strengthen and support its products.
- Delimitations:** This project is limited to evaluate environmental performance by its usability in communication towards customers and not for their effectiveness as environmental efforts as such. The analysis and recommendations are geographically limited to the Swedish market and are primarily applicable to this market.
- Research question:** *How can environmental performance be used to promote industrial components in B2B customer communications?*
- Methodology:** The project uses mainly qualitative data and some quantitative. The qualitative data consists of literature review, benchmark, and interviews with key SKF personnel and customers. The quantitative data extracted from of an externally produced customer survey.
- Conclusions:** Conclusions show the importance of building a comprehensive brand image by incorporating product specific environmental performance (PSEP™) and

environmental efforts which enhance the sustainable supplier brand image (SSBI™) in the environmental communication. Sustainable supplier brand image can be enhanced by including the following three things in the environmental communications:

(1) *SKF's commitment to continuously improving environmental performance:* focus on implemented processes and should use the Beyond Zero concept and portfolio to exemplify the efforts.

(2) *Certifications:* focus on communicating ISO 50001.

(3) *Third-party verification and partnership:* focus on SKF WWF Climate Savers membership.

While product specific environmental performance can enhance sustainable supplier brand image a reputation as a sustainable supplier is a necessity to successfully communicate the benefits of product specific environmental performance.

Communication of product specific environmental performance should always clearly communicate the correlation between PSEP™ and financial savings. To achieve this, it is important to have knowledge of customers' KPI's and communicate PSEP™ that is connected to those. It is also important to communicate measurements customers can relate to. Recommendations for communicating PSEP™ beyond this can be divided into two parts:

(1) *Recommendation for environmentally aware customers:*

Communicate LCA on a more complex and comprehensive level by including all parameters measured in a LCA, not limiting communication of LCA results to Beyond Zero products, and using visual tools in communication of LCA.

(2) *Recommendation for environmental unaware customers:*

Communicate effective and easily comprehensible information in every customer contact by providing SKF bearing packaging with a table of fundamental environmental parameters.

**Keywords:**

Environmental efforts - sustainable supplier - brand image - environmental communication - marketing tools - LCA - DfE - code of conduct - sustainability report - sustainable supply chain - customer demand.







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# List of key acronyms

|              |  |
|--------------|--|
| <b>B2B</b>   | Business to Business   |
| <b>B2C</b>   | Business to Consumer   |
| <b>DfE</b>   | Design for the Environment   |
| <b>EMS</b>   | Environmental Management System                                      |
| <b>ISO</b>   | International Organization for Standardization                       |
| <b>LCA</b>   | Life Cycle Analysis  |
| <b>OEM</b>   | Original Equipment Manufacturer                                      |
| <b>OHSAS</b> | Occupational Health and Safety Advisory Services                     |
| <b>PSEP™</b> | Product Specific Environmental Performance                           |
| <b>REACH</b> | Registration, Evaluation, Authorisation and restriction of CHemicals |
| <b>RoHS</b>  | Restriction of Hazardous Substances                                  |
| <b>SSCM</b>  | Sustainable Supply Chain Management                                  |
| <b>SSBI™</b> | Sustainable Supplier Brand Image                                     |
| <b>SVHC</b>  | Substances of Very High Concern                                      |
| <b>TBL</b>   | Triple Bottom Line   |
| <b>WEEE</b>  | Waste Electrical and Electronic Equipment                            |



# Terminology

|                                   |  |
|-----------------------------------|--|
| <b>Design for the Environment</b> | Addresses sustainability through implementation of a systematic approach to environmental issues in product design.  |
| <b>Green Marketing Myopia</b>     | Stagnation in environmental marketing due to failure to communicate environmental performance which is credible and aligns with customer knowledge and ensures customer satisfaction.  |
| <b>Greenwashing</b>               | When environmental marketing is deceptively used to promote an organization or its products as environmentally friendly. Greenwashing often occurs when an organization promotes an environmentally friendly image that goes beyond the actual environmentally sound practices of the organization.  |
| <b>ISO</b>                        | An international organization with representation from national institutes for standardization, which works with standardization in industrial and commercial sectors.   |
| <b>ISO14001</b>                   | Internationally accepted standard for environmental management. ISO14001 states criteria for an environmental management system that can be applied to in any industry but does not set criteria for environmental performance. ISO14001 certification indicates that a company has implemented an environmental management system in compliance with ISO14001 criteria.   |
| <b>ISO50001</b>                   | Internationally accepted standard for energy management. ISO50001 states criteria for an energy management system that can be applied to in any industry and specifies requirements applicable to energy consumption, including measurement, documentation and procurement practices. ISO50001 does not set performance criteria in regards to energy. ISO50001 certification indicates that a company has implemented an energy management system in compliance with ISO50001 criteria. |
| <b>Life cycle analysis</b>        | A technique to determine the environmental impact in all stages of a product's life. It includes raw material extraction, material processing, manufacturing, distribution, use, maintenance and end-of-life.  |
| <b>OHSAS</b>                      | An organization which provides health and safety services throughout the United Kingdom.   |
| <b>OSHAS 18001</b>                | An internationally applied and widely recognized standard which originates from the United Kingdom. OHSAS18001 is a standard for occupational health and safety management systems which can be applied to a wide range of industries.   |

|  |   |
|--|---|
| <b>REACH</b>                               | A European Union Regulation which addresses the production and use of chemical substances and their potential health and environmental impacts. REACH states that any chemical substance over one ton of weight produced in, or imported to, Europe must be registered and tested in regards to environmental and health impacts. For some especially toxic chemicals, the rules apply no matter of weight. |
| <b>RoHS</b>                                | A European Union Directive which is required to be enforced and become law in every European Union member state. RoHS restricts the use of six hazardous materials in the manufacture of electronics and electrical equipment and is closely linked to WEEE.  |
| <b>Sustainable Supply Chain Management</b> | Expresses the relationship between sustainable development and supply chain management and the incorporation environmental and social aspects as well as financial ones, into supply chain management.  |
| <b>SVHC</b>                                | Chemical substances which are subject to authorization within the European Union under the REACH Regulation. Listing as a SVHC is the first step in the European Chemicals Agency's procedure for restriction of chemicals.   |
| <b>Triple Bottom Line</b>                  | Proposes that the bottom line should be extended beyond the financial sphere to also include social and environmental dimensions in decision making and evaluation of performance.  |
| <b>WEEE</b>                                | A European Union Directive which sets targets for collection, recycling and recovery for electronics and electrical equipment. WEEE is part of a legislative initiative to reduce toxic electrical waste in the European Union.   |





# 1 Introduction

*The introduction chapter gives a background to the problem and to the rationalization behind the creation of this project. A short description of SKF will be presented as well as background to the problem and problem formulation. To give the reader a better overview of the project a conceptual framework of the project is also presented, which describes the work process from start of the project to final result.*

## 1.1 Background and Context

As shown in the benchmark conducted as part of this project, B2B companies consider environmental communication an important part of enhancing brand image and generating goodwill. Sustainability has become an important part of business ethics and is in many ways an essential consideration for corporations (Savitz and Weber, 2006; Elkington, 2004). As consumers are becoming more aware of environmental sustainability issues, the societal sustainability values and demands are transferred backwards in the supply chain and are becoming of greater importance to B2B companies (Hoejmose, Roehrich and Grosvold, 2013).

### 1.1.1 SKF

SKF is one of the world's leading manufacturers of bearings and is established in 140 countries worldwide and in 40 different industries. SKF bearings can be found in a variety of end products: from car engines to renewable energy solutions. SKF's organization is divided into five technique platforms, which are bearings, seals, mechatronics, service, and lubrication solutions. SKF is divided into three general areas: Strategic Industries, Regional Sales, Service and Automotive.

SKF is a B2B organization and uses distribution channels to reach smaller customers. The majority of SKF's larger OEM customers manufacture products with extensive longevity which means that purchase decisions of new bearings may occur infrequently.

### 1.1.2 Performance Classes – The Explorer and E2

Most of SKF's bearings, 80-90 percent of sales, are represented in a product catalogue. The bearings in the catalogue are standard solutions and are not produced with specific customers in mind. The bearings in the catalogue are currently categorized in two performance classes: Explorer and E2.

The Explorer class represents the main part of the bearings, and includes bearings with a high basic load rating. The E2 class was released for the company's 100 years anniversary and contains bearings with low friction which increases energy efficiency. The E2 bearings are communicated by SKF as environmentally friendly and the products are indicated by green writing in the catalogue.

The Explorer class is a well-known and established bearing classification for SKF. The launch of the Explorer classification led to many improvements for SKF's bearing portfolio.

When the Explorer classification was released, SKF was a market-leader and the Explorer class had unique attributes, which competitor products could not match. Since the

introduction of the Explorer series market development has been extensive, resulting in that today, many competitors offer products similar in quality and value to Explorer.

SKF product-lines include a wide range of different bearings. Every bearing in the catalogue has a product table and the bearings are ranked based on dimension within a product line.

### **1.1.3 SKF and sustainability**

Sustainability and especially environmental values are of great importance to SKF. The company states in its code of conduct the aim to act responsibly towards all stakeholders as well as society as a whole. SKF has a long history of environmental efforts and was the first international bearing manufacturer to receive ISO 14001 certification in 1998. SKF wishes to stand out as a sustainable manufacturer and use its environmental efforts as a competitive advantage.

To highlight and communicate SKF's environmental efforts and performance, the company launched the Beyond Zero concept. Beyond Zero is partly a brand and goodwill strengthening statement, that focuses on SKF's own processes and what the organization does to minimize its own negative impact on the environment.

The other part of the concept is the Beyond Zero portfolio. The Beyond Zero portfolio includes products that show significantly improved environmental performance compared to a SKF standard solution. Environmental performance that can be highlighted for bearings can for example be low friction, low water use, longevity and low material waste.

Beyond obtaining a significantly improved environmental performance compared to standard solutions, the environmental performance must also be of value to the customer if a product is going to be included in the portfolio. A product can therefore be a Beyond Zero product when it is sold to a specific market and not be included in the portfolio when it is sold to other markets.

## **1.2 Purpose**

This project aims to identify how environmental performance can be used as a competitive advantage for SKF bearings. The work will include identifying which environmental aspects should be highlighted and how these shall be verified and communicated. SKF's existing environmental efforts and communication tools will be evaluated and possible new ways to communicate environmental efforts will be presented.

The project also aims to give a scientific contribution regarding the use of environmental performance as a marketing tool as well as provide SKF with information and analysis which can aid when launching new SKF bearings.

### **1.2.1 Delimitations**

The project is limited to the business area Strategic Industries and how SKF bearings can benefit from communication of environmental performance. Environmental efforts are only evaluated for their usability in environmental communication and not for their effectiveness as environmental efforts as such.

The project is geographically limited to the Swedish market and the presented results are primarily applicable to this market. Furthermore, this project is limited to evaluating environmental efforts and communications as they relate to the SKF business area Strategic Industries and excludes other business areas, such as Automotive.

### 1.3 Problem Formulation

This project is centered on one overall problem, which is supported by two key questions and is presented below.

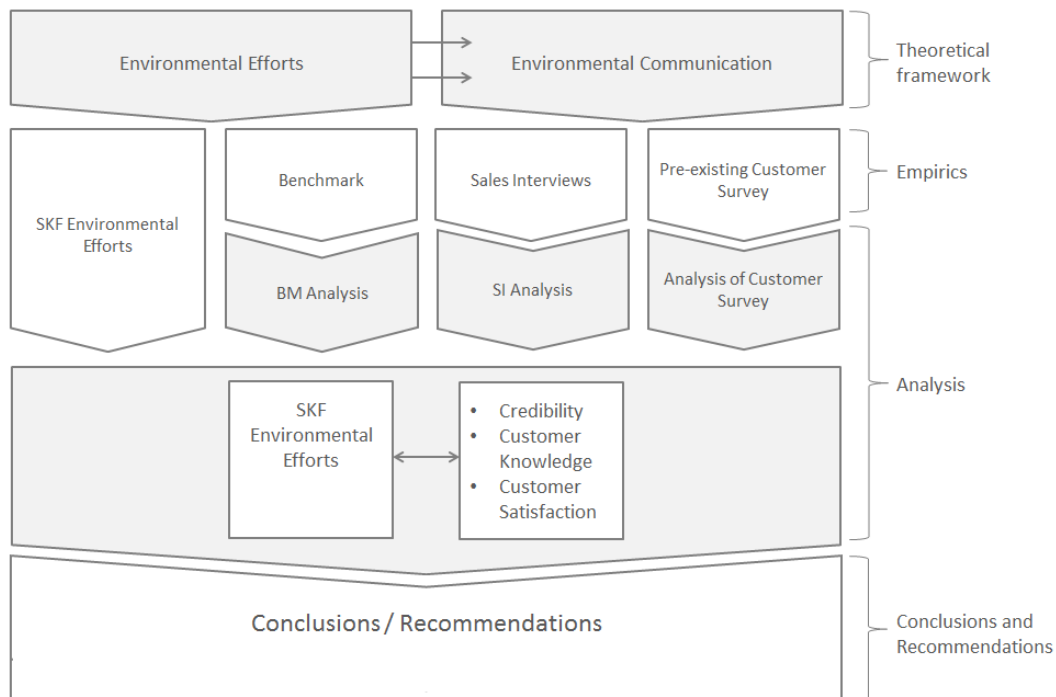
*How can environmental performance be used to promote industrial components in B2B customer communications?*

#### 1.3.1 Key Questions

1. Which kinds of environmental performance aspects are most valuable to promote?
2. How can these aspects be verified and communicated?

### 1.4 Conceptual Framework

Below, in figure 1, the conceptual framework of the data gathering process, analysis and conclusions from this project is presented, to aid the reader in understanding how this project is structured.



**Figure 1** Conceptual framework

The theoretical framework lays the foundation for answering which kinds of environmental performance aspects are most valuable to promote (key question 1) and how can these aspects be verified and communicated (key question 2) by focusing on existing theory regarding environmental efforts and environmental communication.

The empiric data gathering of this project is constructed from information gathered in the theoretical framework regarding environmental efforts and communication and aims to deepen the understanding of how environmental performance can be used to promote industrial components in B2B customer communication. The empirics of this project consist of four parts:

- (1) SKF case study regarding SKF environmental efforts, including current environmental communication.
- (2) A benchmark of environmental communication in industrial B2B companies.
- (3) Interviews with sales representatives at SKF.
- (4) Review of a pre-existing SKF customer survey.

The analysis of the gathered data is structured into two main parts: separate analysis of the benchmark, sales interviews and pre-existing customer survey, and an analysis of the appropriateness of SKF environmental efforts for use in customer communication which is based on the previous separate analysis and existing theory. The evaluation of SKF environmental efforts considers all information regarding environmental efforts gathered in the empirics and focuses on theory regarding credibility, customer knowledge and customer satisfaction of environmental communication as presented in chapter 4.2.2, Avoiding green marketing myopia, and further explained in chapter 6.5.1, Explanation of evaluation tool.

Lastly, the conclusions and recommendations which this project results in are based on all previously presented activities: data presented in the theoretical framework, empirics and analysis. The conclusions and recommendations attempt to answer key question 3: How shall the preferred method or tool for verifying and communicating environmental performance be used? They also aim to fulfill the purpose of this project by detailing how environmental performance can be used to promote industrial components in B2B customer communications.



## 2 Disposition

*Below follows a description of the disposition of this project. The disposition is partially illustrated in a conceptual framework of the project.*

This project consists of eight chapters. The six chapters following this disposition are: (3) methodology, (4) theoretical framework, (5) empirics, (6) analysis, (7) conclusions and recommendations, and (8) academic contribution and future research.

**Chapter 3**, Methodology, describes the methodology of this project.

**Chapter 4**, Theoretical framework, presents relevant theory regarding environmental efforts and environmental communication.

**Chapter 5**, Empirics, presents the results of a benchmark of environmental communication in B2B companies, the results of a review of SKF's environmental efforts and communication as well as the results of interviews with SKF salespeople and a review of a pre-existing customer survey.

**Chapter 6**, Analysis, presents an analysis of the benchmark, SKF's environmental efforts and marketing and communication activities, sales interviews and the review of pre-existing customer survey. The analysis is based on the information gained in interviews as well as theory presented in chapter 4, Theoretical framework.

**Chapter 7**, Conclusions and recommendations, outlines guidelines for efficient environmental communication.

**Chapter 8**, Academic contribution and future research, presents the academic contributions of this project and proposes topics of interest for future research.

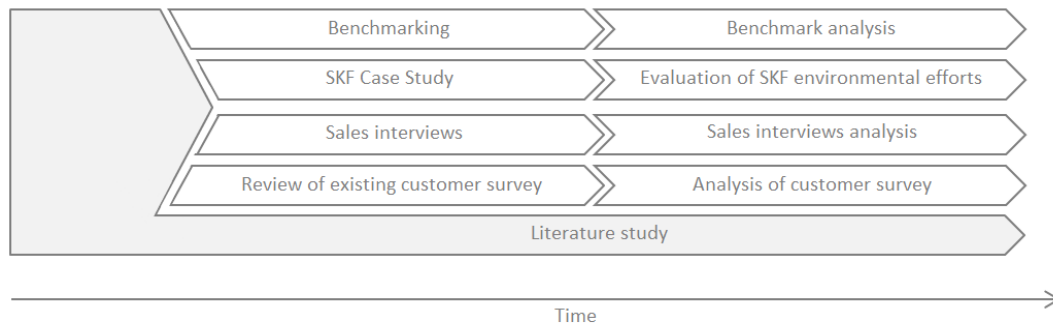




# 3 Methodology

*Below follows brief description of methodology approaches, research strategy, and research methods and techniques. Each part is followed by a presentation and justification of the methodology chosen for this project. Lastly the credibility of the methodology is discussed.*

The work with this project will start with a review of existing literature and then proceed with four simultaneous focuses: benchmarking, interviews with SKF salespeople and customer analysis, case study including reviews of the current environmental communication and development process in the company, and continued review of the literature. The process is illustrated in figure 2 below.



**Figure 2** The data gathering processes and analysis over time

## 3.1 Approach

Arbnor and Bjerke (2009) present three views of methodology and their respective applications as approaches to methodology: the analytical approach, the systems approach and the actors approach.

The analytical approach's ambition is often to represent factive reality through models, and the result is often causalities and generalized knowledge. Logic and mathematics are central to the approach which views the whole as equal to the sum of its parts. (Arbnor and Bjerke, 2009.)

Like the analytical approach, the ambition of the systems approach is often to represent reality in a model. The systems approach, however, can also go beyond this and attempt to represent an understanding of reality through an interpretation. Reality is considered to consist of both objective and subjective facts in the systems approach, which are valued and handled equally methodologically. (Arbnor and Bjerke, 2009.)

Unlike the other approaches the actors approach discourages treating others as the objects of observation and instead urges creators of knowledge to participate in the traditionally observed activity or system. The ambition of the actors approach is to function as a creative and reorienting field of knowledge and because of its in many ways radical presumption of reality it often encourages creative and experimental attitudes towards knowledge gathering and construction. The result of the actors approach is often different forms of descriptions and languages of description, freeing interactive action and interpretation. (Arbnor and Bjerke, 2009.)

### 3.1.1 Selected Approach

This project will attempt to explain how environmental performance can be beneficially communicated. It will also attempt to interpret how these factors affect the launch of new SKF bearings. Because the project aims to both explain and interpret, the systems approach to methodology will be applied.

Presumptions about reality held by the systems view are that reality consists of units, called sub-systems, which in turn consist of components which are relatively closely related to one another (Arbnor and Bjerke, 2009). This project attempts to identify driving forces and obstacles in customers' purchasing behavior and relate them to SKF's products' environmental performance and the communication thereof. The systems approach often deals with mapping relations between components and finding driving forces and obstacles in the attempt to explain or understand reality. The result of the systems approach is often indicator-effect relations, synergy effects and generalized ways to classify systems (Arbnor and Bjerke, 2009).

Another reason for choosing the systems approach is that while analysis is central to both the analytical view and the systems view, the analytical concept is oriented towards generating results that may be employed in practice in the systems approach (Arbnor and Bjerke, 2009).

## 3.2 Research Strategy

Which methods to choose depends widely on the problem and the overall purpose of the project. There are several common purposes of a study, examples of which are descriptive, exploratory, explanatory, and problem solving (Höst et al., 2006).

The purpose of a descriptive study is to ascertain and *describe* how something works, while an exploratory study aims to *understand* how something works. An explanatory study seeks *explanations* of how something works, and the purpose of a problem solving study is to solve an identified problem (Höst et al., 2006). Another fairly common purpose to a study is a predictive purpose. A predictive study aims to identify factors which drive development of target variables; to *predict* which factors will be of value in the future. It is not uncommon for projects to consist of several studies with different purposes. (Höst et al., 2006.)

### 3.2.1 Selected Research Strategy

This project will combine a descriptive, exploratory and predictive strategy. A descriptive strategy will be adopted to investigate the scope and spread of environmental performance in communications with customers within producing industries. This will be done by benchmarking industrial companies' environmental activities and environmental communications towards customers. A combination of exploratory and predictive strategy will then be applied in the search of which aspects of environmental performance are of importance to the launch of new SKF bearings.

## **3.3 Research Methods**

Depending on the purpose or strategy of the project, research methods are chosen which in turn influence which techniques for gathering data are appropriate. Common methods are survey, benchmarking, and case study. (Höst et. al., 2006.)

Survey is a description of the study subjects, or subjects', current situation and is often used to answer a broad question. A survey uses a sample of the target population to draw conclusions about the entire population, and because of this choosing the correct sample is of great importance. Benchmarking maps a phenomenon through investigation of a specific subject in several cases, companies, and compares the results to draw conclusions about the phenomenon, often in relation to one specific case. Case study is an appropriate method when the goal is to thoroughly examine and describe a phenomenon and is used to examine current phenomenon. A case study is performed on a specific case, or several similar cases, and the results are not statistically ensured or properly applicable on other cases. Unlike the survey method, case studies are flexible in their design and is often qualitative in nature. (Höst et. al., 2006.)

### **3.3.1 Selected Research Method**

This project will make use of a method of mapping communication of environmental performance in different industries (benchmarking) and customer needs and wants (customer analysis) which is derived from both survey and case study. The sample of the benchmark will be chosen to represent different links in the supply chain of different industries, although all will work in a B2B setting.

Surveys have a fixed design which means that the structure of the questions in the survey should not change from subject to subject (Höst et al., 2006). Therefore using solely this method is not appropriate for this project since the subjects in the sample differ not only in their place in the supply chain, but also in regards to which industries they are active in. It is because of this that the case study element has been added to the method; both the benchmark and customer analysis will be qualitative and flexible in nature.

Case studies are often used to understand procedures and processes within a company (Höst et al., 2006). A full case study will therefore be performed on SKF where their current environmental communication and their environmental efforts will be thoroughly examined.

#### **3.3.1.1 Benchmark**

The benchmark will be conducted to obtain knowledge of how other companies manage environmental communication and environmental performance in a B2B setting. How the overall sales process is constructed and how the companies divide their customers into customer segments will also be analyzed in order to obtain a deeper understanding of how the companies handle their customer relationships in general.

Representatives from six companies, excluding SKF, in different industries and in different places in the supply chain will be interviewed, interview guide can be found in appendix 1, and the interviews will in some cases be complemented with information from the companies' websites. It is a conscious decision to include companies that are active in industries that differ from those SKF is active in and which have a very differently structured markets and sales channels. This will be done to obtain new

perspectives and angles from which to approach communication of environmental performance and to identify differences and similarities in different industries.

### **3.3.1.2 SKF Case Study**

The SKF Case study will be conducted to gather general information about SKF but will focus on SKF's environmental efforts and the current environmental communication. As part of the case study information regarding performance classes and SKF bearings will be collected to answer the research questions of this project.

### **3.3.1.3 Sales Interviews**

Interviews will be conducted with sale representatives at SKF to obtain a deeper understanding of the general sales process and the role of communicating environmental performance in the sales process. Nine salespeople and sales managers will be interviewed.

SKF has divided its sale organization into two general groups regarding bearings, one with focus towards OEM and the other towards the aftermarket. A geographical breakdown has also been done and some salespeople included in the interview process will have a regional responsibility. The interviews will follow a structured interview guide which can be found in appendix 2 and all the sale representatives were asked the same questions. The answers will be analyzed and put together to obtain a qualitative view of how the costumer communication works today and how sale representatives at SKF handle environmental issues.

### **3.3.1.4 Review of Pre-existing Customer Survey**

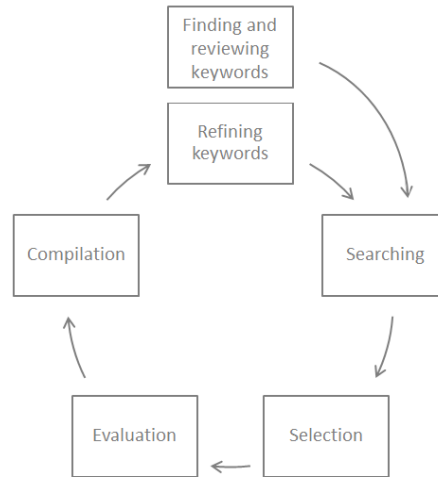
The existing customer survey to be reviewed was conducted by an external source and does not focus on environmental issues but does give insights into customer perception of SKF. The survey and its results are confidential and only a limited amount of information will be disclosed in this thesis.

## **3.4 Gathering and Analyzing Data**

The method of gathering and analyzing data is decided not only by the research method employed by the project but also by practical factors such as time and access to subjects within the sample. This project will be based on secondary data from a literature study and qualitative data gathered in open and semi-structured interviews.

### **3.4.1 Literature Study**

Literature studies have many benefits, they create a foundation of knowledge to build on and diminishing the risk of overlooking already created knowledge. Literature study is an iterative process as illustrated in figure 3, which is the introductory step of the work on this project. (Höst et al., 2006.) As the project progresses, the literature study will be a parallel activity to the benchmark, customer analysis and case study of SKF, all of which are based on qualitative interviews. The literature study conducted in this project is summarized in the theoretical framework.



**Figure 3** The iterative process of a literature study. Based on Höst et al. (2006)

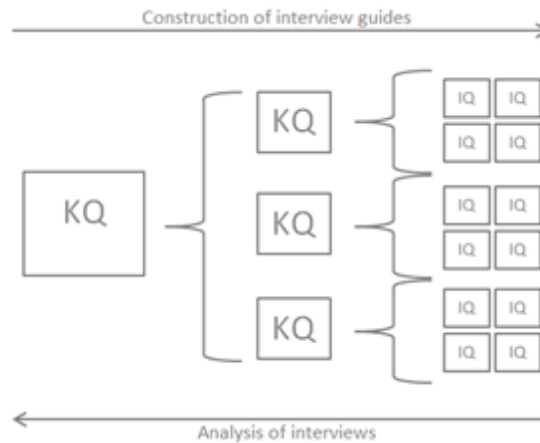
The literature study will consist of scientific articles and books found through Google Scholar and, mainly, LUBsearch. LUBsearch is a search engine for the library resources at Lund University and all but two of EBSCOhost's databases. It includes books, articles, and dissertations.

The keywords used when searching for literature are: environmental performance, triple bottom line, sustainable supply chain, environmental communication, environment and marketing, environmental marketing, environmental product classification, corporate environmental product classification, life cycle analysis, LCA, design for the environment, DfE, environmental certifications, ISO 14001, ISO 50001.

### 3.4.2 Qualitative Interviews

There are three forms of interviews, open, semi-structured and structured. Structured interviews are equivalent of a spoken questionnaire which may not be deviated from, while a semi-structured interview uses an interview guide in which the questions do not have a fixed order or phrasing. Open interviews allow the interview subject to speak freely on one or more specific subjects (Höst et al., 2006). The benchmark and customer analysis will be based on semi-structured interviews and the case study of SKF will be based on open interviews and complemented by semi-structured interviews. Open interviews will be used when exploring the organization and semi-structured interviews will be used when interviewing parts of the sales team. The interview guide for these semi-structured interviews will be based on initial open interviews with selected people in the SKF sales organization. The full interview guides can be found in appendix 1 and 2.

The interview guides are constructed and analyzed using a method presented by Wengraf (2001). The method is a top-down process which starts with the research purposes (RPs) and central research question (CRQ) which is then broken down into theory questions (TQs) and finally interview questions (IQs) and interventions (IIs). The process is the reversed when analyzing the interviews. This method was adapted to this project by generating theory questions (TQs) and interview questions (IQs) from the relevant key questions as stated in chapter 1.3.1 (KQs). The process for constructing the interview guides and analyzing the interviews is illustrated below, in figure 4.



**Figure 4** Process of constructing interview guides and analyzing interviews.  
Based on Wengraf (2001)

Meyers and Newman (2007) identify nine difficulties with qualitative interviews, including *lack of trust* which may cause the interview subject to withhold information they perceive as sensitive, and *level of entry* which refers to the difficulties to reach all levels in a hierarchical organization. They also present seven guidelines to avoiding these difficulties which will be applied to the interviews of this project. These guidelines are:

**Situating the researcher as actor:** Interviewers need to “place” themselves before interviews. This is accomplished by stating one’s role and possible biases to oneself and reviewers of the material. This creates an awareness of how interviewers may have affected the interview and help validate the results.

**Minimize social dissonance:** Interviewers should minimize everything that could lead to the social setting of the interview feeling uncomfortable for the interview subject. This could include dressing and speaking appropriately.

**Represent various voices:** The interview subjects should be many and diverse in an attempt at triangulation.

**Everyone is an interpreter:** The researcher must realize that not only is the interview subject a subjective interpreter of their surroundings and situation, but also that the interviewer is an interpreter of the interview subject’s comments.

**Use mirroring in questions and answers:** To decrease the interviewer’s influence on the interview subject, the interviewer should use the same wording and phrases as the interview subject.

**Flexibility:** It is important that the interview is attentive to the interview subject’s mood and adapts to it. This requires flexibility and openness from the interviewer.

**Confidentiality of disclosure:** To create and keep trust with the interview subject it is important that transcripts and similar material is kept confidential.

### 3.4.3 Review of Public and Internal SKF Information

The qualitative interviews will be based on and complemented by publicly available and internal information about SKF. Publicly available information will be gathered from the SKF website and the SKF Bearings Catalogue. The SKF Sustainability Report and Annual Report are examples of SKF public documents which will be used to gather information.

The SKF intranet and previously conducted customer analysis will be also be used to gather data about SKF's environmental communications and efforts.

### **3.4.4 Methods for Data Gathering as Applied to Research Methods**

This project will use several research methods to approach the problem defined in chapter 1.3, Problem formulation. The research methods make use of a combination of methods for gathering data:

**Benchmark** will use semi-structured qualitative interviews to gather information.

**SKF Case Study** will make use of open and semi-structured interviews as well as review of externally and internally available information, to collect data.

**Sales Interviews** will be conducted uses semi-structured interviews. The interview questions will be based on information collected using open interviews in the SKF Case Study.

**Review of pre-existing Customer Survey** will make use of material provided by SKF and data collected in the SKF Case Study to create context for the given data.

The analysis of the gathered material will be conducted as depicted in figure 4 and the data will be analyzed with the data collected in the literature study in mind.

## **3.5 Project Credibility**

The credibility and quality of a study can be reliant on many factors, these factors are often divided into three categories: reliability, validity and representativeness (Höst et al., 2006). Below these categories and how they will be handled in this project is discussed.

### **3.5.1 Reliability**

Reliability concerns the quality of the data in concern to the data's consistency. A high reliability means that the results would differ little if the data collection process was repeated. The sample is of great importance to achieving reliability, a random selection from the population can strengthen the reliability of the gathered data. (Höst et al., 2006). The sample for the qualitative interviews in this project are not randomly chosen, but instead handpicked to reach a high variation. The interviews are also open or semi-structured and the themes of the study are in some regards open to interpretation and the answers of the interview subjects must be realized to be subjective. This makes the study hard to recreate; even if the study was recreated using the exact same sample it is likely that the answers would differ as the interview subjects may have been influenced by changes in their environment, discussions with others and further contemplation on the subject after the first interview. As the difficulties with achieving reliability are recognized, steps will be taken to ensure reliability in other regards.

The interview subjects will be allowed to review the material generated by the data collected in their interview, and the data collection process and analysis will be reviewed by an external source.

### 3.5.2 Validity

Validity focuses on systematic problems and concerns the degree to which the data gathering and analysis measures what it purports to measure. The validity can be improved by employing triangulation: studying the same subject with different methods (Höst et al., 2006). Triangulation contributes to validity by allowing for different perspectives to emerge by the employment of different methods (Jick, 1979). This project employs triangulation by approaching the problem with a benchmark, customer analysis and case study, derived from a combination of the survey and case study methods.

### 3.5.3 Representativeness

Representativeness concerns the generality of the results of the study. Strictly speaking, mapping and survey can only be generalized to the population the sample was collected from, while case study cannot be generalized. However, a detailed description of the examined context can lend representativeness to the study and if the context in which one wished to generalize is similar to the context of the case study, the probability of the results being generalized increases. (Höst et al., 2006.) This project aims to be representative within the context of the use of environmental performance in sales and marketing of industrial components in a B2B-setting.

## 3.6 Chapter Summary

This project will take a systems approach and use a combination of descriptive, exploratory and predictive strategies to identify how environmental performance can be used as a competitive advantage for SKF bearings. The data gathering process will have four simultaneous focuses, which will each use different methods of data gathering:

- (1) **Benchmarking:** will use qualitative interviews to map communications of environmental performance in different industries.
- (2) **Sales interviews and customer analysis:** will use qualitative interviews and pre-existing customer analysis to determine customer needs and wants.
- (3) **Review of current environmental communication and environmental efforts:** will conduct a case study by conducting qualitative interviews and reviewing publicly available and internal information.
- (4) **Literature review:** will review relevant existing literature to build a theoretical framework on which to base data gathering for empirics and analysis.

The qualitative nature of the project will make it difficult to recreate. However, the use of several different methods and carefully chosen samples for interviews as well as review of the data gathering process and analysis by an external source give credibility to this project.





# 4 Theoretical Framework

The theoretical framework presents material relevant for the data gathering, analysis, and generation of conclusions and recommendations in this project. The theory is divided into two different areas and an overview of the presented theory and how the different areas correlate can be seen in figure 5 below.

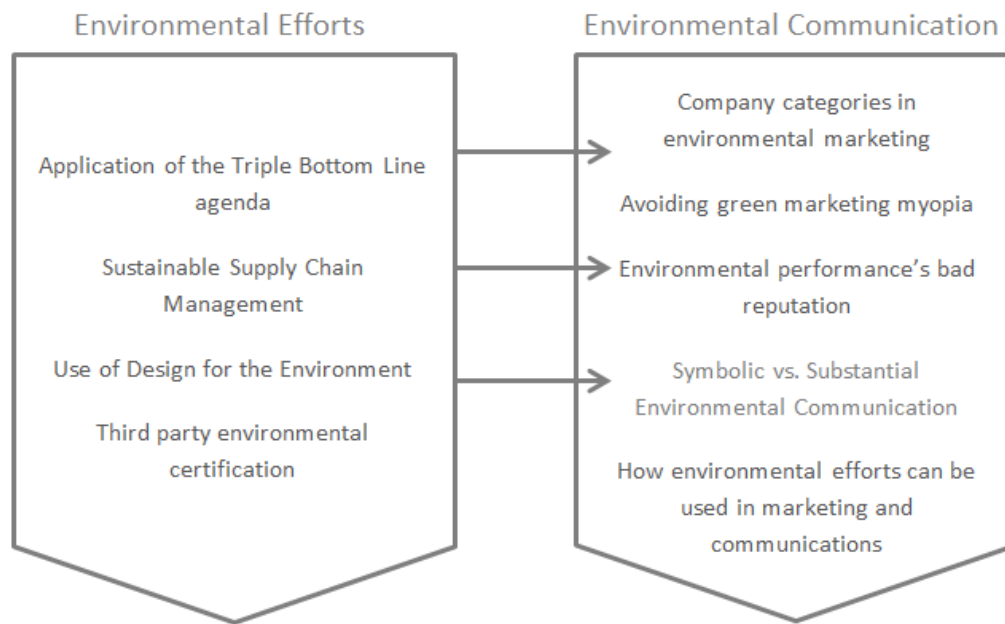


Figure 5 Visualization of the theoretical framework.

## 4.1 Environmental Efforts

Focusing on profit alone can incur difficulties for companies. Politics have become an inescapable part of the corporate world. Companies are often accountable to more people and organizations than they may realize. Even profitable companies can suffer if they fail to recognize and act on their stakeholders' values (Savitz and Weber, 2006; Elkington, 2004). As consumers are becoming more aware of environmental issues and demanding more of the companies at the consumer end of the supply chain, it is not unusual for consumers and other stakeholders to penalize these companies if their products and business practices do not meet accepted sustainability standards (Francés-Gómez, 2008).

However, the view of companies as isolated organisms that are only responsible for their own actions and those who are directly affected by them, no longer holds. Instead companies are now held responsible for their entire supply chain (Savitz and Weber, 2006) and B2C companies pass on consumer expectations and demands to B2B companies further back the supply chain (Hoejmoose, Roehrich and Grosvold, 2013). The triple bottom line agenda transfers backwards in the supply chain along with sustainability accountability, and companies must aim to act in accordance with socially accepted sustainability standards (Hoejmoose, Roehrich and Grosvold, 2013; Francés-Gómez, 2008).

### 4.1.1 Application of the Triple Bottom Line Agenda

The Triple Bottom Line, TBL, agenda is well known and proposes that corporations' bottom line should extend Beyond the economic sphere to also include the environmental and social value they create (Elkington, 2004). The triple bottom line approach shows how a company can benefit from sustainability and how sustainable business practices create value for society as well as stakeholders (Savitz and Weber, 2006). The increasing focus on sustainability is instigating, and in turn being driven by, change in seven areas. These areas are markets, values, transparency, life-cycle technology, partnerships, time and corporate governance (Elkington, 2004):

**Markets** are becoming increasingly competition driven. This in turn means that customers can apply greater pressure on corporations to employ the TBL agenda.

Corporate **values** need to follow the evolution of society's values. As people are becoming increasingly aware of environmental and social issues corporations must adjust their activities to align with these new values to avoid crisis.

As corporations are submitted to harsher external scrutiny from governments and stakeholders they will be forced to become more **transparent**.

A clear shift has already occurred in the area of **life cycle technologies**. Focus has shifted from the time-of-sale appropriateness of the product to a life-cycle focus.

Competition and cooperation are no longer mutually exclusive; instead it is becoming more common that corporations need to build **partnerships** with industries, or even companies, that they are in competition with. This is often the case with environmental issues, where corporations collaborate with other companies and industries to benchmark their environmental performance.

Sustainable business practice requires long term planning, and in the area of **time** the planning horizons need to expand to allow for planning for sustainability.

The last area, **corporate governance**, builds on the previous six areas which will drive a greater commitment to sustainable issues in corporate governance. They will also drive corporate governance to become more inclusive.

Elkington (2004), who coined the term Triple Bottom Line in 1994, proposes that the TBL agenda is evolving to involve a wide range of stakeholders and a great number of governmental policies, from tax policy to labor policy, and Savitz and Weber (2006) declared that "sustainability is now a fundamental principle of smart organization".

### 4.1.2 Sustainable Supply Chain Management

Sustainable Supply Chain Management, SSCM, expresses the relationship between sustainable development and supply chain management. SSCM has not yet been clearly defined and there are many terms in use to describe the same, or very similar, relationship. Examples are Green Supply Chain Management, GrSCM/GSCM (Srivasta, 2007; Hoejmoose, Brammer and Millington, 2012), and Responsible Supply Chain Management, RSCM (Hoejmoose, Roehrich and Grosvold, 2013). Seuring et al. (2008, p.1545) define SSCM as "the management of material and information flow as well as cooperation among companies along the supply chain while taking goals from all three

dimensions of sustainable development, i.e. economic, environmental and social, and stakeholder requirements into account”.

Hall, Matos & Silvestre (2012) note that there are common themes within the discourse and identify these as: (1) supply chain dynamics contribute towards improvement of sustainability, and (2) systematic approaches to SSCM are necessary.

SSCM adds the complexity of sustainability and includes the TBL agenda in the already complex coordination of supply chain members (Hall, Matos and Silvestre, 2012). Because of the high level of complexity in sustainable supply chains, it can be argued that the search for optimal solutions are impractical and fruitless, and companies should instead focus on finding satisfactory solutions to sustainability problems in the supply chain (Simon, 1969). Hollos, Blome and Foerstl (2012) summarize two options for companies that wish to improve sustainability performance in their supply chain: (1) to only continue and initiate buyer-supplier relationships with sustainable suppliers, or (2) to co-operate with suppliers to improve sustainability throughout the supply chain.

Collaboration and co-operation are staples of buyer-supplier relationships and the success of sustainable supply chains depends in no small part on the implementation of a trust-based approach to collaboration (Vachon and Klassen, 2006). However, despite the collaborative nature of SSCM, the strive towards achieving a sustainable supply chain is often initiated and driven by a channel leader, a company with a degree of control over the other members of the supply chain (Hall, 2000). The channel leader is often under pressure from stakeholders to improve sustainability (Hoejmoose, Brammer and Millington, 2012; Hollos, Blome and Foerstl, 2012; Hall, 2000) and can extend that pressure to suppliers in the supply chain that are less visible and susceptible to pressure from the public (Hall, 2000).

#### **4.1.2.1 Benefits of SSCM**

Sustainable supplier co-operation has a positive effect on environmental and social behaviors within companies. Though no direct link has been found between SSCM and financial performance, sustainable practices and behavior can lead to improved financial performance, through cost reductions and improved operational performance (Hollos, Blome and Foerstl, 2012), and competitive advantages (Campbell, 2007). SSCM in itself does not affect financial performance, but has to be paired with internal capabilities and sustainable practices to enable improvement of financial performance. However, the environmental aspects of sustainable procurement have been shown to have a direct positive effect on costs and operational performance in some cases. (Hollos, Blome and Foerstl, 2012)

#### **4.1.3 Use of Design for the Environment**

Environmental issues have historically been treated as an add-on or afterthought to production, and have been approached using end-of-pipe-control (Chialin, 2001). However, as environmental awareness has increased, the consideration of environmental issues has been integrated into business and production practices to a greater extent. Design for the environment, DfE, addresses sustainability through implementation of systematic consideration of environmental issues in the product design stage (Chialin, 2001; Jesswiet, 2007). DfE should consider the effect a product has on the environment in all stages of its life cycle, and how adverse effects can be reduced (Jessewiet, 2007).

There are many design-for-concepts, commonly referred to as DfX (Billatos, 1997; Jesswiet, 2007). DfE includes many of the other DfX issues, such as design for recycling (DfR) and design for disassembly (DfD) When designing for the environment, designers must consider the entire life cycle of the product, from raw materials and the recyclability of components, to customer energy consumption and end-of-life treatments. Because of the complexity of DfE, it is often applied using checklists of issues regarding the environment which should be considered during the design process. There is no standardized DfE process, but DfE is often divided into three design modules: (1) product design, (2) material design, and (3) energy consumption. (Jesswiet, 2007.) DfE follows principles very similar to JIT: environmental impact should be reduced by optimizing production operations to prevent waste, thus reducing costs (Billatos, 1997).

DfE is a tool to help designers include environmental aspects in the design process, and the application of DfE should not overshadow the goals of the design process. Environmental performance should not take priority over the strongest competitive attributes or performances of the product. If the product is environmentally superior to those of competitors, but does not achieve success on the market due to poor performance in areas valued greater than sustainability by customers, the product will not reduce the market's environmental impact. This is undesirable both from an economic and environmental point of view. However, by employing DfE environmental performance can often be improved over the product life cycle without causing decreased performance in other parameters. Challenging designers to find environmentally optimized solutions often drives creativity and innovation in other areas as well. (Jessewiet, 2007.)

#### **4.1.4 Third Party Environmental Certifications**

The implementation of environmental management systems, EMS, is becoming an increasingly large part of corporate sustainability (Zobel, 2013) and the certification of EMS often has strategic value (Michael, Echols and Bukowski, 2010). The most widespread international certification standard for EMS is ISO 14001 (Jong, Paulraj and Blome, 2014). ISO 14001 provides a framework which can be used to develop an effective EMS, regardless of industry or activities (ISO, 2014; Jong, Paulraj and Blome, 2014). ISO standards do not set requirements for the outcome of the implementation of the EMS (ISO, 2014).

Many studies have analyzed the effect of implementation of EMS certification on corporate environmental performance, but the findings have not been conclusive (Lannelongue and González-Benito, 2012). There have been multiple possible reasons provided for this. Zobel (2013) analyzed the change of environmental performance in six areas for ISO 14001 certified companies, comparing changes in environmental performance prior to certification, and for non-certified companies, comparing change in environmental performance over a corresponding period of time. No statistically significant differences in environmental performance between certified and non-certified companies could be found. Zobel (2013) concluded that the quality of a company's current environmental performance does not affect the choice to implement and certify an EMS.

## 4.2 Environmental Communication

Environmental communication faces several obstacles that other product or corporate communications lack. Environmental communication today often include vague statements as “green” “sustainable” and “environmentally friendly” and are received with skepticism as individuals have an assumption that the communication is misleading and incomplete. Environmental performance can therefore be hard to evaluate for a purchaser (Kangun, Carlson and Grove, 1990).

### 4.2.1 Company Categories in Environmental Marketing

Studies have shown that companies often believe environmentally sustainable products to be a necessity in the future and that companies should guide their customers towards sustainable consumption. Kärnä, Hansen and Juslin (2003) identified three company categories of social responsibility in environmental market planning:

- (1) **Proactive green marketers:** companies that believe in the free market system and that are actively pursuing sustainability beyond legislation,
- (2) **Reactive green marketers:** companies that pursue sustainability under legislation and governmental incentives,
- (3) **Consumption marketers:** companies that do not perform well in regards to sustainability.

Proactive green marketers are labeled the most genuine in their sustainability effort and use the implementation of environmental marketing to seek competitive advantage. Competitive advantage can be achieved when a company’s sustainability efforts are voluntarily more progressive than what is needed to satisfy legislation and to benefit from governmental incentives; proactive green marketers utilize their progressive sustainability efforts in marketing. Proactive green marketers also contribute to direct the market towards sustainable development and use customers’ environmental awareness to their benefit. (Kärnä, Hansen and Juslin, 2003.) Kärnä, Hansen and Juslin (2003) also note that many of the companies that make efforts to reconcile, or already have reconciled, profitability orientation and redirecting the market towards sustainability in their environmental marketing planning, are close to the end user. Companies further back in the supply chain seldom put emphasis on both of the above mentioned in their marketing planning (Kärnä, Hansen and Juslin, 2003).

### 4.2.2 Avoiding Green Marketing Myopia

Green marketing myopia can be defined as when companies offer environmental performance that does not correspond to customer preferences or demand. Green marketing must satisfy two objectives: (1) improve environmental quality and (2) customer satisfaction. Environmentally friendly products have thereof a dual purpose, to satisfy the customer as well as offer improved environmental performance. A failing in either one of these aspects can lead to green marketing myopia. Many actors today tend to focus on the products environmental performance to the extent that the customers demand and expectations on the product is left unfulfilled (Ottman, Stafford and Hartman, 2006).

#### 4.2.2.1 The Three C's

Green marketing myopia can be avoided by following and obtaining “the three C's”: (1) credibility of product claims, (2) customer knowledge and (3) customer value proposition. (Ottman, Stafford and Hartman, 2006.). Successful environmental communication obtain all three C's and the principles are shortly described below.

***Credibility of products claims*** – The environmental performance must be communicated in a credible way towards customers. The customer must trust the content of the communication and believe that the products have distinct and substantial environmental performance.

***Customer Knowledge*** - The principle is based on understanding how knowing the customer is, regarding environmental aspects, and how well the company educate and motivate the customer regarding environmental aspects. Ottman, Stafford and Hartman argue that it is crucial to help the customer understand that environmental performance is a solution to customer needs.

***Customer value proposition*** – Environmental products must be constructed to perform better or equally good as the competitor's solutions. The customer needs and wants must be considered and the product must fulfill customer demand.

#### 4.2.3 The Issues with Symbolic Environmental Communication

Many studies have tested the relationship between environmental and financial performance. A study by Walker and Wan (2012) examined over 100 Canadian firms in order to find how different kinds of environmental communication affect the financial result and overall performance.

The study indicates that having a symbolic approach to environmental performance affect the overall financial results negatively. Symbolic actions are defined as to which extent the firm discusses future plans and their overall commitment to environment, for example communicating that the company is “green” or “has a strong commitment to be environmentally responsible”. Symbolic actions can either be communicated together with or without a substantial action plan. Most firms that take substantive action also spend considerable space on their webpage discussing symbolic actions (Walker and Wan, 2012).

The authors declare that symbolic actions are not only less effective but could be harmful as the “green talk is not backed up with any green walk”. Though there is no clear difference in what kind of environmental measurements different industry communicates it can be of great importance to move away from one-size-fits-all prescriptions in the relationship between environmental and financial performance. Companies should instead look at specific areas regarding environmental actions where financial benefits can be obtained (Walker and Wan, 2012).

Symbolic actions are most effective when performance is difficult to measure. Stakeholders may however believe or make the assumption that if a firm spends a lot of space on its webpage discussion what it plans to do or hopes to achieve in the future the company have little environmental effort in the present (Walker and Wan, 2012).

#### **4.2.4 Environmental Performance's Bad Reputation**

Ottman, Strafford and Hartman (2006) argue that due to previous failures in launching environmentally friendly products, environmentally friendly products have gained a bad reputation. The 2002 edition of The Green Gauge Project states that many consumers hold the belief that environmentally friendly products make sacrifices in other areas, for example poorer technical performance or a higher price (NOP World and RoperASW 2003). Many environmentally friendly products have additional benefits to offer customers that is not necessarily related to environment. Environmental performance often leads to other performances which can be attractive to customers (Ottman, Strafford and Hartman, 2006).

#### **4.2.5 LCA-based Information in Communication**

In communicating LCA, Life Cycle Analysis, there is a risk of either oversimplifying information or including an excessive amount of complex information (Molina-Murillo and Smith, 2008). It is a challenge to find the right balance between scientific reliability and keeping the information easily comprehensible (Dahlbo, 2012).

A study by Molina-Murillo and Smith (2008) indicates that advertisement in a B2B environment that includes environmental messages is more effective than advisement that only presents functional product performance. However, this is only obtained when the environmental communication is substantiated with disaggregated and quantitative information, like LCA-based information. The credibility gained then compensates the higher complexity. (Molina-Murillo and Smith, 2008). When products fail to obtain credible and substantive environmental benefits green marketing myopia can occur (Ottman, Stafford and Hart, 2006).

Walker and Wan (2012) define 14 environmental categories and approaches towards handling and communicating environmental efforts and to which extent companies use these categories. They show that the most common tool is environmental conservation and the least common is LCA.

There are in many cases incorrect usage of technical terms in the communication of LCA-based information, and the gap between the scientific vocabulary and daily language can lead to confusion (Heijung, 2013). The use of the words *significant difference* in terms of distinguishing one product from another is an example of using a word incorrectly, Heijung claims. In most LCA studies the term *significant* is used as a synonym to *better*. Though in many other scientific areas the term is used to highlight a specific technical assumption. A difference is said to be significant if a result of a survey is passed a declared level (Heijung, 2013).

Heijung (2013) also discusses the importance of using visualization in the communication of LCA, constructing pedagogical graphs can help potential customers and other stakeholders to easily understand the analysis and the results.

#### **4.2.6 Environmental Labeling and Classification**

Kocmanova, Karpíšek and Klímková (2012) investigated what environmental Key Performance Indicators, KPI's, 79 companies with over 250 employees in manufacturing industries use and communicate. Companies in manufacturing industries were chosen since they have strong fields on action regarding social and environmental issues. The study highlighted 11 different KPI's and whether the companies were using them or not.



The use of environmental classification of product portfolios was one of the environmental efforts. The study showed that around 30 percent of the companies were using environmental classification of products. Moreover, the most commonly used KPI's were the ISO standards 9000 and 14000 which 89.9 and 55.7 percent of the companies used (Kocmanova, Karpíšek, and Klímková 2012).

A study declared in *New frontiers in environmental and social labeling* by Hicks (2007) examines and highlight how the appeal of products with different environmental labelling depends on how well the labeling system performs. The performance of the labeling systems is measured based on how much information is presented and how well this information is communicated. The study examined how consumers reacted when they were offered a product with different kinds of environmental labeling. The consumers were first offered to buy products labeled with basic information were the label design aimed to look as similar as possible to standard environmental labeling of products today. In a second stage of the study more information was included on the label. Here the labeling did not just state that a product was environmentally friendly but declared measurements of why and how the product contributes to a more sustainable world.

The study showed that consumers are willing to pay a higher price for a product with a well-documented and high performing label declaration than for an identical but poorly performing labeled product. This indicates that consumer's value declared environmental performance and when this is not declared in a distinct way the incentive to pay decreases (Hicks, 2007.)

Hicks argues that environmental labeling today are poorly constructed and leave a lot of information hidden for the customer. The overall environmental impact of the product is left to guess by the consumers and only the direct benefits of consuming the product is declared on the product.

#### **4.2.7 Sustainable Supply Chain in B2B Marketing**

Marketing and management strategy are both in agreement that sustainability must be included in strategy planning and decision making to successfully implement sustainable practices in an organization. For B2C companies, marketing has been recognized as a major part in achieving financially sustainable environmental sustainability and gaining competitive advantage (Sharma et al., 2010). As the TBL agenda is being transferred backwards in supply chains (Hoejmoose, Roehrich and Grosvold, 2013; Sharma et al., 2010) and it is not uncommon for B2C companies' purchasing to include non-financial parameters such as environmental performance for consideration in the purchasing process, Sharma et al. (2010) note the need to include sustainability efforts in B2B marketing.

For successful implementation of sustainability practices, such as SSCM, Sustainable Supply Chain Management, it is important to allocate resources for internal marketing as well as external. Internal marketing refers to marketing efforts directed towards spreading information about process changes and similar corporate activities within the company. Sustainable practices require coordinated effort across all functions of an organization and are therefore often reliant on functioning internal marketing. External marketing designed to enhance sustainability, should have a dual focus in two aspects:

- (1) It should focus not only on marketing towards customers (demand management) but also towards suppliers (supply management) to ensure suppliers' cooperation and help achieve sustainability;

(2) Promotional efforts should include not only sustainability aspects, such as environmental performance, but combine this with functional and technical performance to create a better overall value. (Sharma et al., 2010.)

#### **4.2.8 SSCM and Corporate Reputation**

Corporate reputation has been linked to favorable stakeholders (Greyser, 1999) and financial performance (Flanagan, O'Shaughnessy and Palmer, 2011) as a result of improved customer satisfaction and loyalty (Hoejmose, Roehrich and Grosvold, 2013). Although corporate reputation can be strengthened through efficient communication, it is the companies' actions and implemented programs that ultimately improve and affect corporate reputation (Greyser, 1999). SSCM is an example of an implemented program which can be used as a market signal to drive and establish corporate reputation (Hoejmose, Roehrich and Grosvold, 2013) and to build trust for the company or brand (McWilliams and Siegel, 2001). Trust is an integral part of buyer-supplier relationships (Vachon and Klassen, 2006), and will in turn strengthen the sustainable supply chain.

SSCM can improve corporate reputation and competitive advantage by sending positive market signals to both internal and external stakeholders (Markley and Davis, 2007; Hoejmose, Roehrich and Grosvold, 2013). Corporate reputation as affected by SSCM has been linked to the attraction and retention of suppliers, investors and staff. SSCM can also be used as a differentiation from competitors' products similar in price and quality. Despite the benefits of engaging in SSCM, there is little incentive for companies to attempt enhancing their corporate reputation and trustworthiness beyond the expectations of their customers'. Customers are unlikely to recognize the value of suppliers' good reputation in regard to sustainability if it goes beyond mitigating the customer's risk of reputational damage from including the supplier in their supply chain. (Hoejmose, Roehrich and Grosvold, 2013.)

Although the possibilities of enhancing corporate reputation through SSCM are somewhat limited, Hoejmose, Roehrich and Grosvold (2013) highlight the benefits of using SSCM to protect corporate reputation. Failure to meet accepted sustainability standards can be punishable by customers (Francés-Gómez, 2008) and result in loss of customers. The protection of corporate reputation and brand image is often a driving force in companies' engagement in SSCM.

When faced with negative press and accusations, standing SSCM practices ensure the company has the ability to prove they have acted responsibly and have taken reasonable precautions against socially or environmentally unsustainable incidents and actions in their supply chain. It is more common for B2C companies to suffer negative effects from neglecting to incorporate sustainability in their supply chain management, but this does not mean that B2B companies are exempt from taking social and environmental responsibility in their supply chain. B2C and B2B companies which suffer public scrutiny are passing on stakeholder expectations and demands to their suppliers further back the supply chain. (Hoejmose, Roehrich and Grosvold, 2013.)

#### **4.2.9 Third Party Certification's Use in Communication**

Zobel (2013) found no differences in environmental performance between certified and non-certified companies. While this indicates that certification in accordance with international standards such as ISO and OHSAS is used both as a tool to implement EMS in the hope of improving environmental performance (Zobel, 2013) and as a means to communicate the quality of a company's EMS (Morrill and Berthelot, 2012), it makes ISO

and OHSAS certification unsuitable as the latter. Because ISO and OHSAS are not result-based standards, they do not guarantee a certain level of quality of the environmental performance of a certified company (Zobel, 2013), nor do they guarantee that the environmental performance of a certified company will improve after certification (Lannelongue and González-Benito, 2012).

Despite the dissidence in findings regarding the effect of ISO 14001 on environmental performance, ISO 14001 is often used as a method to communicate and ensure good environmental practices and performance externally (Artene, Domil and Stirbu, 2011). Jong, Paulraj and Blome (2014) showed that ISO 14001 certification can lead to increase in market performance. They contributed the finding to ISO 14001 certification leading to an improved image of the company which in turn led to improved sales in relation to the company's assets. Lannelongue and González-Benito (2012) noted that EMS certification has signaling power: the market perceives employment of EMS certification as a sign that the company is making an effort to improve their sustainability. This perception can be used to alleviate pressure from external stakeholders, as the implementation of EMS certification creates a barrier of insight for stakeholders who do not have understanding of the EMS and certification standards (Lannelongue and González-Benito, 2012).

A study by Dr. Ebru Genc analyzes the situation for companies using environmental certifications versus companies using greenwashing and unofficial labeling systems. Results showed that profit from both certified and greenwashing using companies is decreasing where customers are price sensitive in comparison to markets with less price sensibility. The certifications were no longer the better choice in the price sensitive case when certification cost equals 30 percent of the productions cost, greenwashing was more profitable. Though if the demand is elastic and the certification cost is less than 30 percent of production costs, certification was dominating (Genc, 2013).

## 4.3 Chapter Summary

The theoretical framework for this project is the basis for the data gathering and analysis which are to come. The theoretical framework presents theory of two areas, environmental efforts and environmental communications:

(1) **Environmental efforts:** as sustainability is becoming a bigger part of consumer awareness, sustainability accountability is being shifted backwards in supply chains and B2B companies are not exempt from acting sustainably consciously and making environmental efforts. This chapter presented a number of common sustainability efforts:

Application of the Triple Bottom Line agenda

Use of the Value proposition canvas

Sustainable Supply Chain Management

Use of Design for the Environment

Third party environmental certification

(2) **Environmental communication:** as environmental communications are often received with skepticism it is important that communication of environmental efforts is thoughtfully created. This chapter presented several aspects for consideration in the development of environmental communication:

Company categories in environmental marketing

Avoiding green marketing myopia

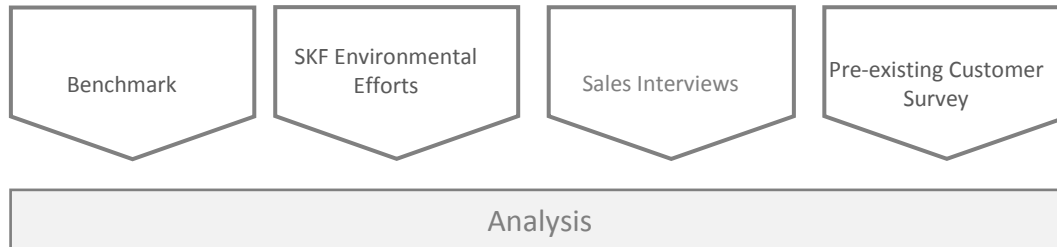
Environmental performance's bad reputation

How environmental efforts can be used in marketing and communications



# 5 Empirics

This chapter describes the results of the benchmark of environmental communication and SKF case study. The information presented in this chapter is the empirical basis for the analysis and conclusions of this project. This chapter is divided into four parts as illustrated in figure 6 below.



**Figure 6** The four parts of empirics

## 5.1 Benchmark of Environmental Communication

Six Swedish companies, Alfa Laval, Axjo, E.ON, Haldex, Höganäs AB and Tetra Pak, participated in the study and some basic initial information on these can be found in table 1 below.

**Table 1** Basic information about the participants in the benchmark

|                              | Alfa Laval          | Axjo            | E.ON                | Haldex              | Höganäs AB         | Tetra Pak            | SKF                  |
|------------------------------|---------------------|-----------------|---------------------|---------------------|--------------------|----------------------|----------------------|
| <b>Turnover (MSEK)</b>       | 30 335 <sup>1</sup> | 99 <sup>2</sup> | 38 721 <sup>3</sup> | 39 000 <sup>4</sup> | 6 712 <sup>5</sup> | 11 155 <sup>6</sup>  | 63 597 <sup>7</sup>  |
| <b>Number of employees</b>   | 16 000 <sup>8</sup> | 44 <sup>9</sup> | 3755 <sup>10</sup>  | 2135 <sup>11</sup>  | 1700 <sup>12</sup> | 23 425 <sup>13</sup> | 43 039 <sup>14</sup> |
| <b>Sustainability report</b> | Yes                 | No              | Yes                 | No                  | No                 | Yes                  | Yes                  |

The companies are all active in different industries and inhabit different links of supply chains. The figure below illustrates the participating companies' roles as suppliers and customers. It should be noted that figure 7 does not intend to imply any relationships between the companies.

<sup>1</sup> <http://feed.ne.cision.com/wpyfs/00/00/00/00/00/23/C5/15/wkroo06.pdf>

<sup>2</sup> [http://www.ratsit.se/5561619346-Axjo\\_Plastic\\_Aktiebolag](http://www.ratsit.se/5561619346-Axjo_Plastic_Aktiebolag)

<sup>3</sup> [http://www.eon.se/upload/eon-se-2-0/dokument/om\\_eon/presscenter/ekonomiska\\_projecter/arsredovisning-2012.pdf](http://www.eon.se/upload/eon-se-2-0/dokument/om_eon/presscenter/ekonomiska_projecter/arsredovisning-2012.pdf)

<sup>4</sup> <http://www.haldex.com/en-gb/Europe/About-Haldex/The-global-Haldex/>

<sup>5</sup> [http://www.hoganas.com/Documents/Annual%20projects/2012/Annual\\_project\\_2012.pdf](http://www.hoganas.com/Documents/Annual%20projects/2012/Annual_project_2012.pdf)

<sup>6</sup> <http://www.tetrapak.com/about-tetra-pak/the-company/facts-and-figures>

<sup>7</sup> <http://www.skf.com/se/investors/projecter/skf-arsredovisning-2013-finansiella-miljomassiga-och-sociala-resultat>

<sup>8</sup> <http://www.alfalaval.com/about-us/our-company/pages/our-company.aspx>

<sup>9</sup> [http://www.ratsit.se/5561619346-Axjo\\_Plastic\\_Aktiebolag](http://www.ratsit.se/5561619346-Axjo_Plastic_Aktiebolag)

<sup>10</sup> [http://www.eon.se/upload/eon-se-2-0/dokument/om\\_eon/presscenter/ekonomiska\\_projecter/arsredovisning-2012.pdf](http://www.eon.se/upload/eon-se-2-0/dokument/om_eon/presscenter/ekonomiska_projecter/arsredovisning-2012.pdf)

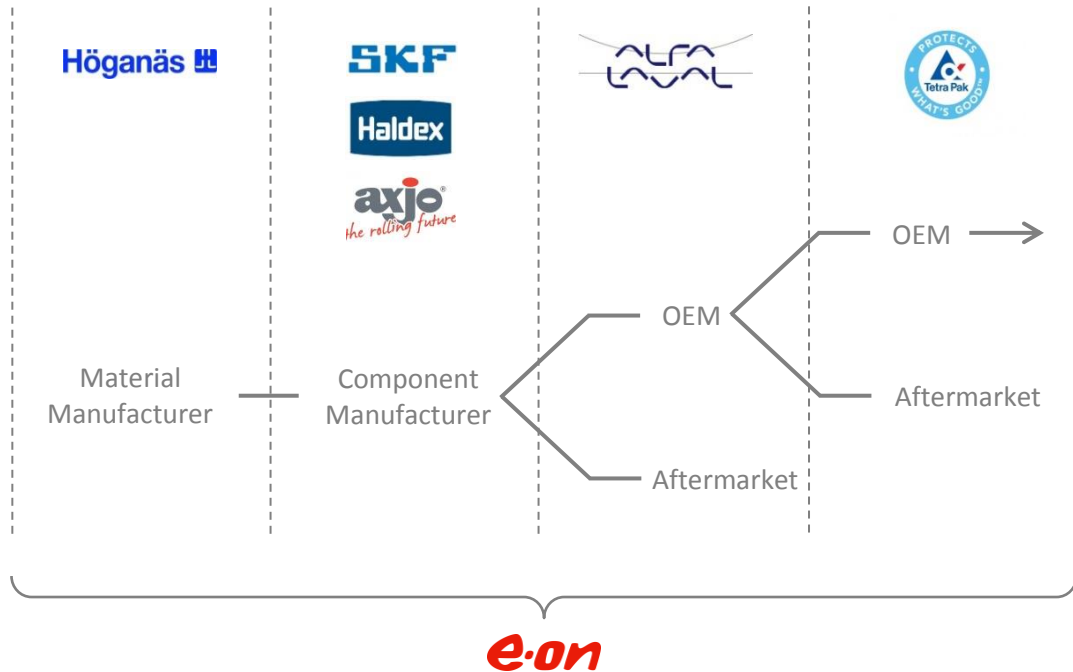
<sup>11</sup> <http://www.haldex.com/en-gb/Europe/About-Haldex/The-global-Haldex/>

<sup>12</sup> [http://www.hoganas.com/Documents/Annual%20projects/2012/Annual\\_project\\_2012.pdf](http://www.hoganas.com/Documents/Annual%20projects/2012/Annual_project_2012.pdf)

<sup>13</sup> <http://www.tetrapak.com/about-tetra-pak/the-company/facts-and-figures>

<sup>14</sup> <http://www.skf.com/se/our-company/index.htm>

Figure 7 illustrates how the companies' products can move through a supply chain towards the end customer. SKF, Haldex and Axjo are all components manufacturers selling towards both OEM customers and the aftermarket.



**Figure 7** The possible movement of benchmarked companies' products through a supply chain

### 5.1.1 Communication of Product Specific Environmental Performance

A product's environmental performance can be communicated on different levels. Environmental performance can be communicated as a product attribute. A product with high environmental performance may be placed within an environmental classification of the company's own design, which can be communicated to customers and other stakeholders.

#### 5.1.1.1 The Lack of Environmental Classifications

Of the companies that partook in the study, only E.ON used environmental classifications in their communication. There are several things which make E.ON unique in the study, one being that it is the only company that sells directly to consumers. E.ON offers customers, both B2B customers and consumers, renewable energy solutions as well as products and services that help the customer to decrease their energy consumption and environmental impact. Origin has been central to the discussion of the environmental impact of energy for a long time, and since 2013 all electricity sold in Sweden must be origin-labeled (Energimarknadsinspektionen, 2014). This is in accordance with the directive concerning common rules for the internal market in electricity of the European Parliament (directive 2003/54/EC). These regulations have a large impact on the energy sector and E.ON's environmental classifications are closely linked to origin.

Moreover, one interviewed company stated that to classify some products as environmentally friendly is not aligned with the company's sustainability focus since they

want to promote all their products as environmentally sustainable. Even though none of the out-and-out B2B companies use environmental classifications, all companies declared that they have products with noteworthy environmental performance, and those environmental aspects are communicated in discussions and other close contact with customers. All companies stressed the importance of maintaining personal, long-term contact with customers and stated that it is mainly in the personal contact that the products environmental performance is discussed.

Products with high environmental performance were consistently mentioned to also have functional and technical performances which have notable financial benefits for the customer, such as savings in production due to decreased energy use. The environmental performance is therefore often incorporated in the function of the product and converges with the overall performance.

#### **5.1.1.2 Low Demand from Customers Regarding Environmental Performance for Specific Products**

Most companies explained the absence of environmental classifications with the argument that customers primarily values other types of performance higher than environmental performance. The demanded performance types vary depending on industry and application. One company also mentioned that what constitutes environmental performance for one customer in one industry, or in one application, can be an irrelevant type of performance for another customer. Since a product can perform differently in different applications it is difficult to declare environmental classifications.

Both Alfa Laval and Höganäs mentioned the importance of engineers or other people with a high technological know-how being included in the sales process. This is to ensure customers that the company has the right knowledge base to offer a solution that is appropriate for the application and superior to competitors’.

### **5.1.2 Brand Image and Corporate Goodwill**

All participating actors highlighted the importance that environmental communication strengthens the brand image and generate goodwill. All companies, except one, aim to promote themselves as sustainable suppliers and to achieve good environmental reputations. Several of the environmental marketing tools used to build sustainable supplier brand image were the same for the companies and are presented below.

#### **5.1.2.1 The Importance of Having a Holistic and Long-term Perspective**

All participants of the study stated that they work with ISO standards and recognize the importance of keeping up with the environmental development. They note that actions to improve environmental sustainability that are cutting edge today may become a threshold competence in the future as legislation and the overall market climate gets tougher. One company, Axjo, has built its complete organization around sustainability since the company, to a high extent, uses recycled material in their production. This leads to both lower production costs and more sustainable products. Axjo describes this as a win-win situation.

All companies mentioned the importance of taking a wide perspective regarding environmental actions and PSEP™ are often determined using LCA. Several of the companies also noted that customers are interested in what happens further back in the supply chain and that responsibility is shifted backwards through the supply chain, from

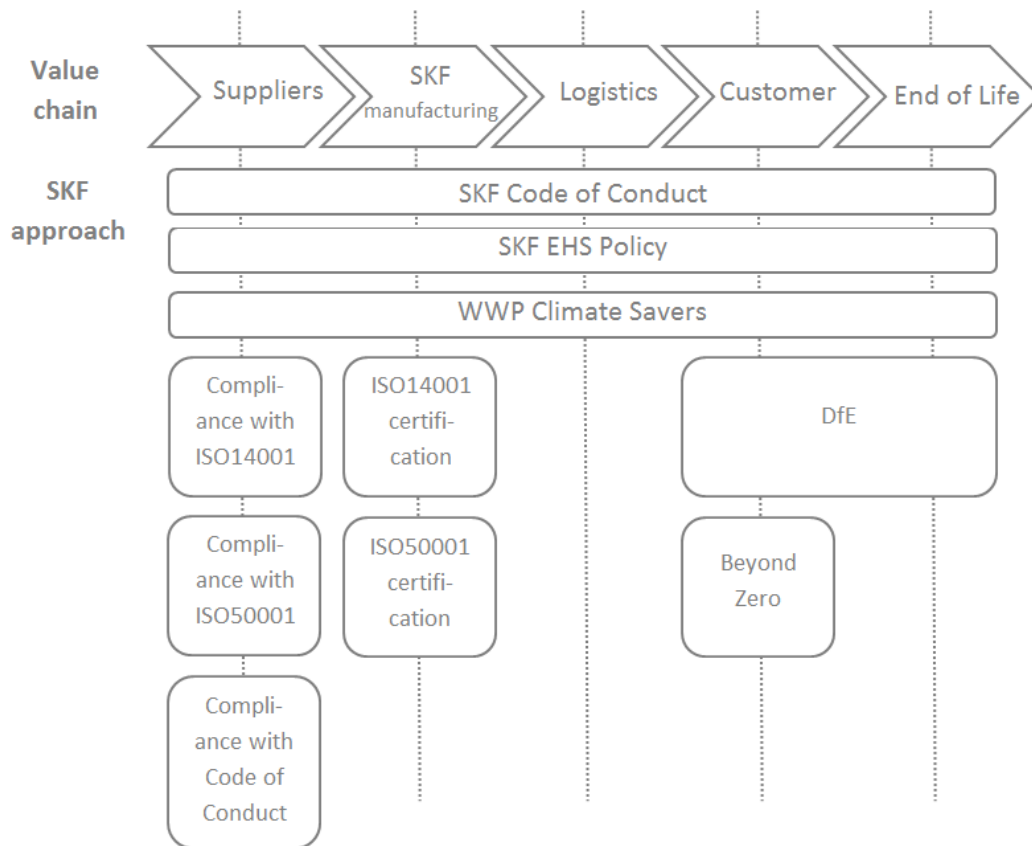


supplier to supplier through purchase agreements. Especially bigger customers are actively demanding certain sustainability proficiency from suppliers. One company also noted that smaller firms may not have the proper tools to communicate and measure environmental proficiency. Though they might have the motivation to act in an environmentally conscious way and have the desire to be part of a sustainable supply chain.

Other ways of showcasing environmental performance is through sustainability reports and codes of conduct. Of the participants in the study, all have a code of conduct which can easily be found on their homepage, while three, Alfa Laval, E.ON and Tetra Pak have annual sustainability reports available. One company mentioned having problems with managing and measuring the overall environmental performance of the company and that this is something that the company seeks to improve. Another company declared that selling to sustainable industries, such as wind power and solar cells, can help the company's image while a third company chose to avoid cultivating an image as sustainable for fear of being accused of greenwashing and hypocrisy since they are active in "dirty" industries such as oil refinery.

## 5.2 SKF Environmental Efforts

Sustainability is one of SKF's drivers and is present in all links of the SKF Value Chain as illustrated in figure 8 below.



**Figure 8** SKF's approach to sustainability (SKF Sustainability Report, 2013, p. 16)

SKF's approach to sustainability can be grouped into six categories:

- (1) Strategies and policies.
- (2) Compliance with regulations and directives.
- (3) Subscription to internationally recognized principles and Charters.
- (4) Certifications and compliance with standards.
- (5) Environmental actions.
- (6) Communication tools.

Below follows a description and exemplifications of SKF's environmental effort as divided into these categories. The division of efforts is summarized in table 2 below:

**Table 2** Categorization of SKF environmental efforts

| <b>Strategies and policies</b> | <b>Regulations and directives</b> | <b>Principles and charters</b>    | <b>Certifications and standards</b> | <b>Environmental actions</b>  | <b>Communication tools</b> |
|--------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|-------------------------------|----------------------------|
| Climate Strategy               | REACH and SVHC                    | The United Nations Global Compact | ISO 14001                           | Environmental Compliance Team | Sustainability Report      |
| EHS Policy                     | RoHS 2                            |                                   | ISO 50001                           | DfE                           | LCA                        |
| Code of Conduct                | WEEE                              | ICC                               | OHSAS 18001                         |                               | Beyond Zero                |
|                                |                                   | WWF Partnership                   | LEED                                |                               | E2                         |

## 5.2.1 SKF's Environmentally Relevant Strategies and Policies

To ensure that SKF environmental efforts continuously improve and permeate the entire organization, SKF has erected policies and strategies specifically concerned with environmental sustainability.

### 5.2.1.1 Climate Strategy

To control and work proactively with reducing greenhouse gas impact throughout their products' and solutions' life cycles, SKF has developed a Climate Strategy based on SKF Beyond Zero. The SKF Climate Strategy was recognized by WWF as best in class in its industry in 2012 and has set aggressive targets to reduce greenhouse gas emissions in four areas:

#### (1) SKF's own operations:

- Reduce the total annual energy use of the SKF Group by 5% below 2006's level by 2016.
- Reduce the energy use per production output by 5% year-on-year.

#### (2) Raw material and components:

- 100% of SKF's energy-intensive major suppliers certified according to ISO 50001 Energy management System by 2016.

#### (3) Transport and distribution:

- Reduce CO<sub>2</sub> emissions per ton/kilometer for all transport managed by SKF Logistic Services by 30% below 2011's level by the end of 2016.

**(4) Products and solutions:**

- Increase the revenue from the SKF Beyond Zero portfolio from SEK 2.5 billion in 2011 to SEK 10 billion by 2016.

(SKF Sustainability Report, 2013, p. 24.)

### **5.2.1.2 SKF EHS Policy**

The SKF Environment, Health and Safety Policy describes SKF's commitment to short- and long-term contributions to providing a safe work place for employees and protecting the environment. It is the responsibility of all SKF employees to act accordingly to the policy when working or otherwise representing SKF. The policy defines local legislation as the minimum requirement in all EHS matters and commits SKF to continual improvement in these matters.

The SKF EHS Policy defines 10 requirements for all SKF units which must be fulfilled in order to meet the policy's commitment. The eight requirements which concern the protection of the environment urge all SKF units to:

- (1) Consider applicable laws, regulations and other commitments to which SKF subscribes as minimum requirements.
- (2) Proactively assess health & safety risks, environmental and energy impacts and systematically define, document and implement improvement plans.
- (3) Utilize best practice EHS related technology and management to improve EHS performance through the purchase and design of efficient equipment, services and the adoption of improved organizational approaches.
- (4) Develop and offer products and services which provide customer value in terms of improved EHS performance throughout the complete life cycle.
- (5) Require suppliers and sub-contractors to adopt the principles of this policy.
- (6) Define objectives and targets; provide the resources, information, training and management attention needed to comply with this policy.
- (7) Ensure that EHS performance and compliance to this policy is monitored, documented and communicated in a clear and transparent manner towards employees, authorities and other stakeholders.
- (8) Ensure that EHS impacts are analyzed for all business decisions.

(SKF Group Policy – Environment, Health and Safety, 2014.)

All SKF's suppliers are required to agree with and adhere to the SKF EHS policy. Verification of suppliers' compliance with the policy is part of SKF's risk assessment procedure.

### 5.2.1.3 Code of Conduct

Like many major corporations, SKF has erected a Code of Conduct to ensure that all employees act in an economically, socially and ethically responsible way when carrying out their work or when perceived to represent SKF. SKF's Code of Conduct adheres to laws and regulations as well as international standards and guidelines; such as the United Nation's Global Compact's Ten Principles, the ILO Declaration on Fundamental Principles, Rights at Work, the OECD Guidelines for Multinational Companies and the International Chamber of Commerce (ICC) Charter.

The Code of Conduct consists of four key areas of responsibility:

- (1) **Responsibility towards customers**, distributors and suppliers: includes the responsibility to gain and maintain business and to provide products and solutions with value in regard to performance, quality, safety and environmental care, while maintaining the highest standard of ethics.
- (2) **Responsibility towards employees**: includes the responsibility to offer a safe and non-discriminatory work environment and to promote and aid in the continual development of competences and skills.
- (3) **Responsibility towards society**: includes the responsibility to show respect for the laws and customs of the countries in which SKF is present and for human rights and the need for environmental sustainability.
- (4) **Responsibility towards stakeholders**: the responsibility to protect stakeholders' investments and to pursue a sustainable and growing return.

All SKF's suppliers must agree with the Code of Conduct. SKF verify suppliers' adherence to the Code of Conduct through on-site audits which are conducted using a risk-based approach.

## 5.2.2 SKF Compliance with Environmentally Relevant EU and EEC Regulations and Directives

SKF works actively and proactively to ensure compliance with EU and EEC regulations and directives. REACH regulations, the ROHS and WEEE directives are environmentally relevant European governance instruments with which SKF works continuously.

### 5.2.2.1 REACH and SVHC

SKF complies with REACH regulations, including SVHC, as they come into effect. To ensure the environmental compliance of SKF products, SKF has formed a Global Steering Team. SKF also works actively to eliminate or substitute substances from the Candidate List of SVHC in their products. SKF products do not, to SKF's best knowledge, contain these substances above 0.1% w/w, which is in compliance with SVHC requirements.

To ensure continued compliance with REACH, including SVHC, SKF continuously monitors chemicals used in production, identifying SVHC chemicals and limiting their use. By keeping contact with suppliers and communicating technical changes, SKF ensures that the origin of all SKF products comply with all applicable regulations and directives.

### **5.2.2.2 RoHS 2 and WEEE**

Since the recast of RoHS, called RoHS 2, customers frequently request additional information; such as Full Material Disclosure. This information is not currently available for all products. As RoHS 2 affects more and more products, SKF is aware of the need to be able to declare that substances prohibited by the directive are not present in SKF products. The RoHS and WEEE Directives are European law, and SKF continuously works to comply with both directives.

### **5.2.3 SKF's Subscription to Internationally Recognized Principles and Charters**

SKF subscribes to a number of internationally recognized principles and charters to enhance and prove the quality of their sustainability work.

#### **5.2.3.1 The United Nations Global Compact**

The United Nations Global Compact is a policy initiative in which SKF has participated since 2006. The Global Compact consists of ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption with which businesses can align their operations and strategies. SKF has committed to the Global Compact principles and communicates their progress in the Annual Report.

The three principles in the area of environment are derived from the Rio Declaration of Environment and Development, and are as follows:

**Principle 7:** Businesses should support a precautionary approach to environmental challenges.

**Principle 8:** Undertake initiatives to promote greater environmental responsibility.

**Principle 9:** Encourage the development and diffusion of environmentally friendly technologies.

(The United Nations Global Compact, 2014.)

#### **5.2.3.2 The International Chamber of Commerce, ICC**

ICC issued the Business Charter for Sustainable Development in 1991 to provide businesses with a basis for sound environmental management. The ICC Charter defines 16 principles for environmental management. As part of the ICC Charter, all technical claims made by a business regarding operational or product performance has to be based on conservative assumptions. SKF has endorsed the Charter and applied its principles in all their activities since 1992.

#### **5.2.3.3 WWF Partnership**

WWF included SKF in their Climate Savers program in 2012, and recognized SKF's climate strategy as best in its class in its industry. Member companies of the WWF Climate Savers program set sector-leading targets for greenhouse gas reduction in their operations and collaborate with other companies, suppliers and partners to create and implement solutions to reach their targets.

## **5.2.4 International Certifications and Standards**

SKF is certified in accordance with ISO 14001 - international standard for environmental management, ISO 50001 - international standard for energy management, and OHSAS 18001 - standard for occupational health and safety management systems. All new major constructions undertaken by, or on behalf of, the SKF Group must be constructed according to LEED (Leadership in Energy and Environmental Design) standard.

### **5.2.4.1 ISO 14001, ISO 50001 and OHSAS 18001**

SKF has been globally certified in accordance with ISO 14001 since 1998. All SKF manufacturing units, logistics centers and technical centers are included in the auditing scope. Newly acquired companies are given a timeframe for implementation of the management system to be included in the certification scope. SKF has recently been Group certified for ISO 50001. ISO 50001 certification is intended for all manufacturing sites with an energy use of 9 GWh/year or more, as these sites represent around 90% of the SKF Group's total energy use.

All major suppliers to SKF must have management systems which are in accordance to ISO 14001 and OHSAS 18001 and SKF carries out on-site audits to ensure this. As part of the SKF Climate Strategy, all energy intensive major suppliers must also have implemented energy management systems which are in accordance to ISO 50001.

### **5.2.4.2 LEED**

SKF has made a commitment to adopting the US Green Building Council's LEED standard for all major constructions. LEED is a generic standard and is not adapted to address the environmental and human impact of specific manufacturing process. Because the impacts of the manufacturing processes are often significant, SKF has internally developed Sustainable Factory Rating, SFR, to complement LEED. Both LEED and SFR list criteria to be addressed during the design and construction of new facilities. SFR groups criteria into eleven categories:

- (1) Health and Safety.
- (2) Process Media and Process Pump Systems.
- (3) Compressed Air Systems.
- (4) Process Cooling / Heating.
- (5) Metering, Monitoring and Targeting Capability.
- (6) Pollution Control.
- (7) Process Waste Management.
- (8) Manufacturing Equipment.
- (9) Water.
- (10) Heat Treatment.
- (11) Commissioning Phase.

## **5.2.5 SKF Sustainability Actions**

To ensure that SKF operations work in compliance with environmental policies and strategies, SKF takes environmental action throughout the products' life cycle. Below are prominent examples of specific actions taken to aid SKF units in reaching sustainability goals.

### **5.2.5.1 Environmental Compliance Team**

To ensure that SKF complies with international environmental legislation, an Environmental Compliance Team has been set up. The team's main tasks are to translate international environmental legislation into requirements for SKF's products and product development, and to act as support in specific customer requests regarding materials and chemicals in products.

### **5.2.5.2 Designed for Environment**

Designed for environment, DfE, is a process that can be used during product development to systemize the consideration of environmental impact in the development process. All SKF products must satisfy the minimum requirements of environmental performance, which focus on legislation and un-wanted substances and there are sub-processes in place to ensure this. However, some products have a lesser environmental impact than the minimum requirements and such products may be part of the Beyond Zero product portfolio or the E2 performance class. DfE is a process and does therefore not ensure the resulting product to have a greater environmental performance, even if this was intended. It is the goals in the product development that decide the quality of the finished product in all aspects. DfE may be applied to reach a specific environmental performance or simply to meet the minimum requirements of SKF products. Therefore it is not enough to proclaim that DfE has been used during product development; the environmental improvements must be measured and proven.

## **5.2.6 Environmental Communication Tools**

SKF has implemented four main communication tools for communication of environmental sustainability efforts and PSEP™. These four tools are sustainability reporting, life cycle analysis, the product portfolio Beyond Zero and the performance class E2.

### **5.2.6.1 Sustainability Report**

SKF publishes a detailed Sustainability Report annually. The projects are subjected to third-party verification and follow the GRI projecting principles.

### **5.2.6.2 Life Cycle Analysis, LCA**

SKF uses Life Cycle Analysis, LCA, to measure products' environmental impact. LCA is an established and widely used method of reviewing environmental impact but the actual calculations often vary greatly between industries and companies. Because of the complexity of LCA calculations, simplified ways of determining environmental impact have been derived from LCA and such calculations are used for Beyond Zero.

### 5.2.6.3 Beyond Zero

Beyond Zero is a product portfolio for SKF products which offer a significant improvement of environmental performance throughout the products' life cycle compared to the standard solutions on the market. The products in the Beyond Zero portfolio are evaluated for environmental impact in three phases of the life cycle: production, application and end-of-life. The results are presented to a board of SKF employees, the Beyond Zero board, which decides if the improvement of environmental performance compared to the standard solution on the market can be deemed significant enough to include the product in the Beyond Zero portfolio. If so, the worth of investing in the development of the marketing material for the product is analyzed and if it is found to be sufficient, the product is included in the Beyond Zero portfolio. It is the product developer of the individual products who conducts the evaluation and applies to the Beyond Zero board for inclusion of the product in the Beyond Zero portfolio.

The products in the Beyond Zero portfolio are evaluated using a simplified LCA. By comparing the product to an existing standard solution, only the areas which have been improved are analyzed. This simplifies the evaluation process considerably compared to a full LCA which includes many more, and often more complex, inputs. The Beyond Zero portfolio takes many aspects of environmental impact into consideration, for example energy usage, lubrication and other leakage, water usage and contamination, noise, and possibilities for downsizing. Despite the wide range of environmental aspect used as input, Beyond Zero mainly communicates  $CO_2$ - equivalents, which cannot always be communicated effectively to customers. The Beyond Zero portfolio also has a limited range and products are commonly only Beyond Zero approved for certain applications. The same products applied differently may have vastly different environmental impact which may negate the results of the Beyond Zero evaluation. Because of this Beyond Zero is more commonly used in practice as a conceptual representation of SKF's continuous work with improving environmental sustainability and performance. Beyond Zero is used more for corporate branding than as a sales argument for the products in the portfolio.

SKF has goals for Beyond Zero in four areas: (1) raw material, (2) transportation, (3) production, and (4) portfolio goals, where the portfolio goals are financial goals for 2016. As sales have not increased as hoped, the goal seems ambitious at present and very hard to reach. To reach the goal, efforts need to be made to increase sales of the products currently in the portfolio as well as to widen the range of the portfolio by increasing the number of the products evaluated for inclusion in the portfolio.

#### 5.2.6.3.1 Criticism Regarding Beyond Zero

The requirements products have to meet to be included in the Beyond Zero portfolio is, as stated above, to provide a significant improvement of environmental performance. What is considered significant is based on industry standards and customer needs and wants but the wording is considered ambiguous by some within SKF. In the end, it is the Beyond Zero board that decides what is to be considered significant on a case to case basis. While this is considered subjective by some at SKF, supporters of the Beyond Zero portfolio argue that it is in SKF's best interest to promote products with unimpeachable environmental performance in the Beyond Zero portfolio to ensure the credibility of the portfolio and SKF.

Products marketed towards environmentally beneficial industries, such as wind and solar power, are automatically placed in the Beyond Zero portfolio. It is argued that products applied for the production of sustainable energy serve a good environmental cause which excuses the products from further scrutiny. It boils down to a "the end justifies the means" argument which is not shared by all within the company. The practice is criticized



internally and the opposition argues that allowing products which may not fulfill the Beyond Zero requirement may harm the credibility of the portfolio.

#### **5.2.6.4 E2**

E2 is a low friction and energy efficient performance class for bearings. E2 is a management initiative and has not been as successful as predicted. Supporters of E2 refer to the relatively short time that has passed since the introduction of the performance class as an explanation for the low sales numbers. Since many industrial customers have long product cycles, large purchases are rarely made which makes the introduction of new performance classes a long time commitment. However, the E2 performance class does have many practical and administrative flaws which make it difficult for customers to make the switch from other bearing to E2 bearings. Because of customers' long product cycles and high standstill costs, short delivery times are of great importance. Because of the low demand for E2 bearings, they are made to order rather than made to stock which can lead to longer lead times which is a deterrent for customers.

All E2 bearings have E2 as a prefix in their denotation while it is common for performance class and other similar information to be added as a suffix. In practice this means that E2 bearings do not show up when distributors search for bearings with specific dimensions in their database. This incurs that E2 bearings have to be searched for specifically. If the customer or distributor do not have E2 in mind specifically for the purchase, E2 bearings will not show as options in the database and will therefore most likely be overlooked. Another problem is that E2 bearings do not come in all dimensions, which means that if a customer or distributor specifically searches for E2 bearings it is likely that the available bearings do not come in the required dimensions.

Changing denotation on bearings, even by adding a suffix, can cause problems for OEM customers. When buying a product with a new denotation, OEM customers often have to change the plans for their produced products and validate the new bearings. When switching to the Explorer performance class, SKF avoided this by keeping all the existing denotations but upgrading the products.

### **5.3 How SKF Sales Representatives Handle Environmental issues and the General Sales Process**

It is crucial for the purpose of this project to understand the communication between sales and customers. The goal is to find out how SKF can successfully communicate environmental aspects, what environmental performance information should be presented to customers in order to obtain a superior perceived value for the customers. Interviews have been conducted with both sales personnel and sales managers. The sales representatives who participated, work either towards OEM customers or the aftersales market. A compilation of the interviews is presented below.

#### **5.3.1 More Internal Education is Desired**

SKF has some internal environmental education, mainly web based lectures but also educational days where staff responsible for environmental issues educate and motivate the sales departments. All of the environmental education offered by SKF is voluntary and the salespeople can choose how much of the education they want to consume. One

salesperson said that it is hard to find the time to take part of the educational material offered since it takes time away from the daily workload.

Several of the interviewed sales managers and salespeople mentioned that they desired more knowledge regarding environmental issues and that the environmental education today at SKF is limited. One salesperson mentioned that there is no demand from higher levels in the organization regarding environmental communication towards customers and that the extent of the environmental communication relies on a personal interest in these issues.

### **5.3.2 Guidance and Directives**

The sales personnel all mentioned that they are largely given free hands to handle the sales process. One salesperson mentioned that the amount of guidance one salesperson gets depend on how much guidance the salesperson asks for. This person also mentioned the difficulty in asking for guidance when this might be conceived as a lack of competence and might affect the salesperson's career negatively.

One sales manager said that "it is all I do" regarding the amount of guidance the salespeople get. However, the sales manager only intervenes when a problem occurs and when a customer relationship has a non-desired development and the guidance from the manager is retroactive and not proactive. Another sale manager mentioned that SKF organize "focus days" where special products, actions or performance is discussed and declared as something that SKF will focus on in customer communication.

The salespeople must meet some demands from higher levels in the organization. The OEM salespeople are for example obligated to visit important customers a certain number of times per year and reach a certain sales volume.

Regarding guidance on how to communicate environmental issues there is none today. When the sale representatives were asked how this type of guidance should be constructed all mentioned the importance of making simple and concrete guidelines, "it should be simple and easy to understand" one salesperson said, "tangible directions and information that is custom made for different application areas" another one stated and continued "Beyond Zero only works when you talk about the big picture".

Another salesperson highlighted the importance of finding ways to communicate environmental performance as something that can be economically profitable for the customer, to clearly communicate to customers the real savings that can be achieved as an effect of the environmental performance. Another salesperson mentioned a desire for more standardized communication tools to highlight environmental aspects in the customer relationships.

### **5.3.3 Customer Environmental Demands**

Regarding environmental demands from customers; the OEM responsible salespeople mentioned that customers in some cases have a code of conduct, especially larger companies, which they want SKF to sign.

Some salespeople mentioned that customers today have the perception that SKF is sustainable and that they take for granted that SKF fulfills statutory environmental demands. One salesperson mentioned SKF's good reputation and well-established position on the market as something that bolsters customer trust in SKF as a sustainable producer. Another salesperson stated that bearings will never be sold based on SKF being

a sustainable supplier but it can be profitable to communicate these aspects in the long run.

All interviewed salespeople and sales managers said that customers do not inquire about specific products' environmental performance, other factors control what product the customer buys. Several of the salespeople highlighted the dilemma that the environmental performance of the bearing often has little effect on the environmental performance of the machine as a whole. A bearing with excellent environmental performance can therefore have almost negligible positive environmental effects for customers.

The E2 bearings, which have been given an environmental classification by SKF, are not promoted to customers as an environmentally beneficial choice. The salespeople that communicate E2 to customers do this because it is the best technical and economical solution for the customer.

A few of the interviewed salespeople and sales managers talked about the importance of creating a customer demand regarding environmental issues. One salesperson talked about the proactive approach towards environmental issues and that it is SKF's obligation to educate customers and other stakeholders in this matter.

### **5.3.4 Salespersons Environmental Engagement**

Regarding if the salespeople choose to promote environmental performance and SKF as a sustainable supplier, the answers were diverse. Some of the interviewed salespeople mentioned that they often and as soon as a possibility occurs, communicate environmental aspects to customers. They mainly did this based on a personal interest in environmental issues.

While some interviewed salespeople felt a strong environmental engagement others had difficulty finding a motivation as to why they should promote something that customers clearly did not seek. One sale manager stated that our interview would be short since all there is to say about environment is that "no customer demand exists regarding this and it is impossible to sell products only based on good environmental performance".

### **5.3.5 The Use of the Beyond Zero Concept in Customer Communication**

None of the interviewed salespeople talked about the Beyond Zero portfolio in the sales process nor used this as a selling point. Even if a certain bearing that a customer is interested in is in fact a Beyond Zero product this is not communicated. The customer can therefore be buying a bearing without even knowing that it is a Beyond Zero classified product. "No customer will buy a product just because of good environmental performance; that is just how the world looks" ones salesperson said.

Half of the interviewed salespeople do not mention the concept Beyond Zero at all to customers because they do not believe that communicating the Beyond Zero concept would improve the relationship with the customer nor make the customer buy more bearings. One salesperson mentioned that Beyond Zero felt as an internally focused concept and that it has little importance for customers.

The other half of the interviewed salespeople and sale managers used the Beyond Zero concept to promote SKF as an environmentally sustainable supplier and discussed the concept mainly at fairs and when presenting SKF's organization as a whole.

## **5.4 Pre-existing Customer Survey**

A customer survey has been made by SKF in which ten different areas were evaluated regarding how already existing customers to SKF evaluate SKF in comparison to competitors. The survey is discussed below and for the project important conclusions are presented. It must be noted that the survey includes only existing customers and that they may rank SKF better than the normal customer on the market would do. Knowledge about customer comprehension of SKF today is of great importance since this affects how SKF bearings will be received and how the environmental communication should be constructed. Due to confidentiality the survey cannot be included in the report nor concrete data from it.

### **5.4.1 Overall Company Reputation**

The customer evaluation on company brand is important knowledge since this affects the possibility to successfully communicate corporate overall environmental performance as well as product specific environmental performance. The customer survey shows that SKF has a strong brand since a majority of the participating customers ranked SKF's brand as stronger than competitors. This can be compared to the much smaller amount of customer that ranked SKF's brand as weaker. Moreover, a very low percent of the customers did not know how to rank SKF's brand, this also strengthens the assumption that SKF has a very well-known brand that many customers have a strong relationship with.

Regarding important KPI such as, response time, product range and product availability SKF has good rankings in comparison to competitors and the amount of customers that rank SKF as weaker than competitors is very small. SKF is also ranked high in supplier recommendation and a high amount of customer would recommend SKF to a colleague.

### **5.4.2 SKF's Environmental Ranking**

Evaluation of SKF's environmental care shows that customers in a much higher extent than for other areas do not know how SKF is performing compared to competitors. The amount of answers that the customer does not know is more than twice as big as the next biggest. This implies that a large amount of SKF customers do not know about SKF's environmental actions or have limited knowledge about competitors environmental performance. However, it should also be stated that few customers assume SKF has a weaker environmental performance than competitors.

### **5.4.3 Solid and Reliable Products**

Results from the survey show that SKF is price leading in comparison to competitors. The customers assume that SKF provide an absolute top quality product and this can be backed up by SKF's strong brand and image. It should also be mentioned that the price parameter has the next highest rating of customers that do not know how SKF's is in comparison to competitors. Technical performance is ranked similarly to that of SKF top three competitors and the satisfaction regarding technical performance is ranked slightly higher than the overall satisfaction.

A ranking of the three most mentioned technical parameters were made. All customer groups ranked bearing service life as the most important parameter. This parameter is a collection of many other parameters and shows how well the bearings perform as a whole.

The next most important technical aspect was carrying capacity value. Friction torque is ranked as the second to least important technical aspect.

## 5.5 Chapter Summary

The empirics from this project are, together with the theory presented in the previous chapter, the basis for the analysis and conclusions which are to follow. The empirics are divided into four parts:

(1) **Benchmark of environmental communication:** the benchmark showed only one of the participating companies use environmental classifications to communicate environmental performance and that all of the participating companies experienced low customer demand regarding product specific environmental performance. However, all participants expressed that their organization values sustainability and that a holistic perspective on sustainability is important to cultivate brand image and corporate goodwill.

(2) **How SKF sales representatives handle environmental issues and the general sales process:** sales interviews showed that SKF sales do not communicate environmental performance to any great extent. Neither Beyond Zero nor E2 are used as sales arguments. While there is education available on SKF sustainability work, it is left up to the salespersons personal interest whether to take part of the education or not. Similarly, it is the salespersons personal interest in sustainability that dictates how much they communicate environmental performance.

(3) **SKF environmental efforts:** sustainability is one of the SKF drivers and SKF sustainability work can be grouped into six categories of effort:

- (1) Strategies and policies.
- (2) Compliance with regulations and directives.
- (3) Subscription to internationally recognized principles and Charters.
- (4) Certifications and compliance with standards.
- (5) Environmental actions.
- (6) Communication tools.

(4) **Pre-existing customer survey:** SKF has previously had an external customer survey made. This survey does not focus on environmental performance but does offer insight into SKF customers' perception of SKF. The survey is confidential and is not included in the report.

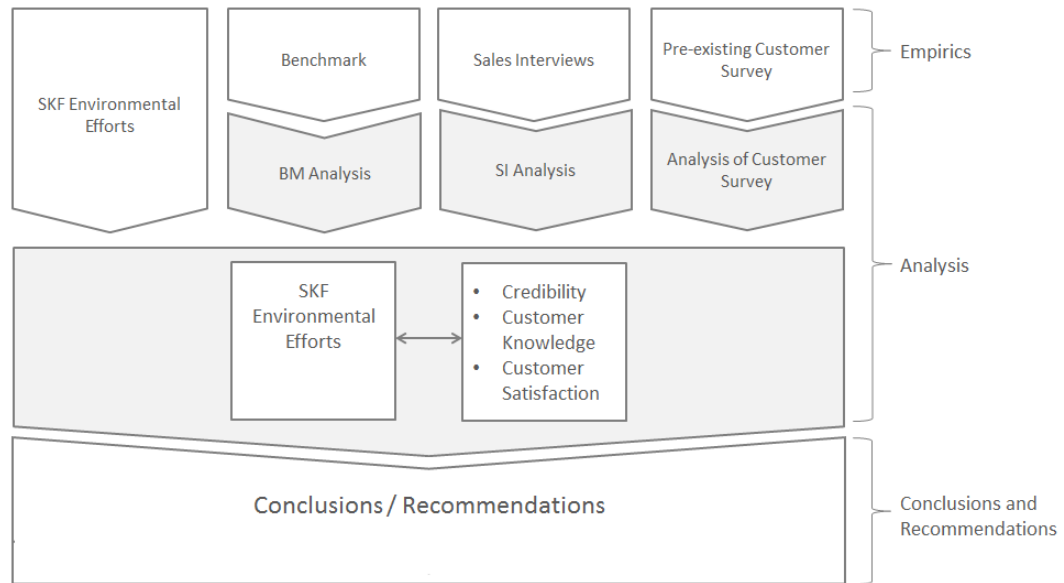
These categories are explained and examined in this chapter.



# 6 Analysis

The analysis chapter is divided in four sections; benchmarking, analysis of sale representatives at SKF, analysis of customer survey and finally analysis of SKF's environmental efforts. The analysis aims to discuss compiled empirics by using previous research and data presented in chapter 3, Theoretical framework.

The analysis model below explains the view on environmental performance the analysis takes. The four parts of the analysis will follow and are shown in figure 9.



**Figure 9** How empirics affect the four parts of analysis

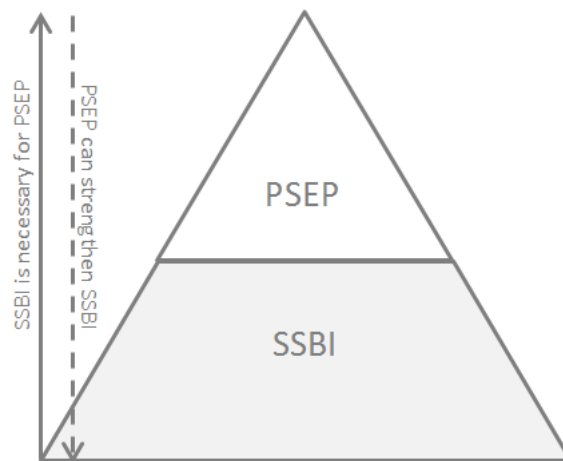
## 6.1 Framework for the Analysis - Two Different Kinds of Environmental Activities

Environmental activities can be looked at from two different angles: first, the environmental activities a company takes to decrease the company's own impact on the environment. Second, a company's efforts to produce products with high environmental performance and low environmental impact throughout its life cycle. Proficiency in one of these areas does not guarantee proficiency in the other; a company can work diligently to improve environmental performance and efficiency in their own processes but disregard environmental performance specific to the product.

The overall environmental activities aiming to strengthen corporate brand and goodwill is hereafter called Sustainable Supplier Brand Image, SSBI<sup>TM</sup>. The environmental actions that have a direct connection to product attributes have been given the name PSEP<sup>TM</sup>, Product Specific Environmental Performance. The connection between the two types of environmental actions and a closer description is presented below.

The Product Specific Environmental Performance, PSEP<sup>TM</sup>, and sustainable supplier brand image SSBI<sup>TM</sup>, will in the analysis be discussed individually and relevant conclusions regarding how to handle these two efforts will be conducted. It is crucial to

successfully communicate both sorts of environmental communications but a strong SSBI™ is a necessity to obtain a successful communication of PSEP™. SSBI™ ensures customer trust and belief that a company is truly motivated regarding sustainability. With a low SSBI™ the PSEP™ will lack the necessary base to build on. The overall reputation needs to be solid before more specific environmental performance can be discussed. Good SSBI™ will also make the communication of PSEP™ easier. If a solid environmental reputation already exists the customer can more readily embrace environmentally friendly products from the company. A model describing the two kinds of environmental action and how these correlate and affect each other is presented below in figure 10.



**Figure 10** SSBI™ and PSEP™

The two different types of environmental activities should be communicated differently towards customers due to different contributions regarding customer value. The PSEP™ is related to a direct and concrete customer value, mainly financial savings. SSBI™ can on the other hand help the customer build its own brand by being a part of a sustainable supply chain, and strengthen the customer’s competitive advantage in the long run. Both types of activities are important and should be included in a successful environmental communication.

## 6.2 Analysis of Benchmark

In this section, the analysis of the previously presented empiric information from the benchmarking will be presented. The analysis will be connected to previous research and data presented in the theoretical framework to ascertain what actions and communication, made by the companies that participated, aligns with previous collected data. The possible correlation with SKF will also be highlighted. It should be noted that the vast difference between industries the participating companies are active in affect whether the results are applicable to SKF. For example, Tetra Pak’s products may offer larger savings due to environmental performance than SKF bearings. The data presented in chapter 5, Empirics, has been chosen with this in mind and the analysis will focus on information and insights gained in the benchmark which is relevant to SKF.



## **6.2.1 The Absence of Environmental Classifications**

The article “*The construction of environmental indicators for determination of performance of ESG indicators to support decision making of investors*” by Kočmanova, Karpíšek, and Klímková (2012) presented in the theoretical framework, declared that only around 30 percent of the companies in a study used environmental labeling. The 79 companies which were included in the study were all companies that to a higher extent included environmental aspects in the organization. It can therefore be assumed that a significant number of companies do not feel that a unofficial environmental product classification is necessary in obtaining good environmental communication and brand image. The results from the quantitative benchmarking showed that only one of the companies used environmental classification of their product portfolio, which also confirms this assumption.

Some companies highlighted the problem with having environmental classifications; this can counteract the quest of promoting the whole organization and product portfolio as sustainable. By declaring some products as environmentally friendly, an assumption is made by stakeholders that the rest of the product portfolio is not. By highlighting a few products, others get overshadowed and by declaring some products as “good” the rest automatically become “not good”. A labeling system is a black-and white solution were some products “pass” the test and some do not.

### **6.2.1.1 The Risk of Green Marketing Myopia When Classification is Used**

Many of the participating companies highlighted that environmental classification is not needed since other qualities are demanded of the product from the customer. Environmental classification will not be a key deciding factor in customer product selection. Another issue with environmental classification can be that it just means that the classified products are better regarding environmental performance than others in the product portfolio. An unofficial environmental classification simply states the relationship between different products in the company’s product portfolio, not how a customer will benefit from buying the environmentally classified product. A classification system can therefore lead to a misdirected internal focus and lead to green marketing myopia. The satisfaction of customer demands cannot be overlooked in the quest of obtaining products with high environmental performance.

Research presented in the previous chapter shows that the use of an unofficial labeling system and greenwashing is not the better choice in regards to financial results. Especially when the demand is elastic and the classification cost is less than 30 percent of production cost. This research also indicates that environmental communication, in general, works best on customers who are less price sensitive. A customer who is not cost sensitive can to a higher extent obtain a better performing product in general and with a better product specific environmental performance.

## **6.2.2 Communication of SSBI™**

While communication of PSEP™ is reliant on numbers and measurements of proven validity; brand image and corporate goodwill often relies on softer values which are harder to define. As SSBI™ often depends on the entirety of a company’s actions, communicating PSEP™ in customer meetings is rarely enough to obtain strong corporate branding and goodwill.

### **6.2.2.1 Code of Conduct – It is the Content That Matters**

The benchmark strengthens the assumption that the corporate environmental image is important. All of the participating companies have a code of conduct and three, Alfa Laval, E.ON and Tetra Pak have annual sustainability reports available. The popularity of having a code of conduct can be explained by the fact that it is an established and well known concept and the low demand regarding content. A code of conduct can include whatever promises and guidelines that the company chooses and these can be as vague or distinct as the company desires. A code of conduct is an easy way of communicating environmental and sustainable desires without the need of fulfilling ISO standards, having partnerships with official organizations or doing any substantial environmental actions. In worst case scenario a code of conduct only includes vague statements and symbolic actions. With this being said, a code of conduct can be a good way of communicating environmental and sustainable performance. Just having a code of conduct does not prove high environmental performance or overall sustainability, it is the quality of the content that matters.

### **6.2.2.2 The Belief That Sphere of Action Effects SSBI™**

The view of how to build SSBI™ varies and some of the interviewed companies highlighted the importance to be in and support green industries. Both Högånäs and E.ON state that it is good for company branding when the organization works in green industries. There is no theoretical research that supports this theory. The belief that several of the interviewed companies, as well as SKF, share that corporate branding strengthens just because of a companies' existence in green industries can be incorrect. Symbolic actions, when companies talk about what they plan to do in the future and vague nonperformance based statements can have a negative effect on company success. Previous research has stated that symbolic actions and greenwashing can be harmful to a company's brand and financial results. The question is if environmental communication based only on what industry the companies are active in is greenwashing or not. Research has shown that it is the company's actions and implemented programs that improve and affect corporate image and goodwill; not whether or not the company sells products to green industries.

### **6.2.3 Communication of PSEP™**

Although previous research and benchmarking indicate that environmental classification of products is not an efficient manner in which to communicate environmental actions, this does not mean that PSEP™ is not of importance to customers. On the contrary, it is crucial to construct the communication appropriately to obtain the highest possible perceived customer value.

#### **6.2.3.1 The Lack of Demand Regarding PSEP™**

The product specific environmental performance, PSEP™, is not something that the participating companies in the benchmark focus on in the general sales process or in their communication with customers. Environmental performance is not used in the event of selling products as such but rather to obtain overall corporate goodwill. The assumption that environmental issues do not affect customers' purchasing process can be an indicator of non-successful environmental communication to the customers. Research has shown that advertisement in a B2B environment that includes an environmental messages is more beneficial than advertisement that just focuses on functional product performance.

The interviewed companies state that they do not sell products just because they are environmentally friendly and PSEP™ is not something that the normal customer asks for. One company, for example, mentioned that it is most common to speak to engineers and technically skilled purchasers whom are in most cases not well acquainted with the environmental aspects of the product. The potential environmental demand from customers comes later from the companies' units which are responsible for environmental questions. These units may want to ensure that the company can live up to stated code of conduct. The environmental demand is mainly about strengthening their own corporate brand and overall sustainability, not to obtain a better or cheaper product. Customers in a B2B environment want to ensure that they are part of a sustainable supply chain and the environmental demands to suppliers reflect this. Companies are no longer an isolated organization but part of a supply chain, and are held responsible for the entire supply chain. The demands from the end user moves through the supply chain and if one link in the chain fails to act sustainable all actors further along are negatively affected.

The benchmarking results indicate that customers in a B2B environment normally do not buy a specific product *only* because of its high environmental performance. Though it is, however, likely that the suppliers' sustainability actions and reputation are of importance when the customer chooses what supplier to enter into a long term commitment with. This proclivity can be built upon and strengthened by offering products with a high PSEP™.

### **6.2.3.2 Close Customer Relationship – Minimizes the Risk of Green Marketing Myopia**

Several of the participating actors in the benchmark highlighted the significance of a close customer relationship. The importance of having personal contact in the selling process as well as including people with high know-how in the customer relationship can be indicators of the importance of building trust between the company and its customers. To include engineers and people with high technical know-how can help the company to avoid green marketing myopia since environmental performance can be connected to the technical performance of the products and fulfilling customer demands. If successful the customer will stop regarding environmental performance as something that is disconnected from technical performance. The PSEP™ should be communicated as an attractive product attribute and something that can help the customer be more effective and cost efficient in the long term.

Including engineers in customer relationship can strengthen credibility since many purchasers come from similar technical backgrounds and can therefore communicate more readily with each other.

Personal contact with the customer also provides an interaction that can be beneficial in creating a customer specific value proposition. Personal contact leads to close working relationships with the customer, where the customer needs and wants can be more effectively identified.

High transparency also contributes to trust between supplier and customer and is an indicator of the need for trust to build a successful B2B relationship. Building trust and communicating trustworthy environmental aspects can be a challenge. Many companies have failed resulting in green marketing myopia. Environmental performance has had a poor reputation and can negatively influence building trust.

The importance of trust can also be connected to the need to strengthen a company's SSBI™. There must be a strong company brand and image in order to successfully

communicate PSEP™. If the customer lacks trust or knowledge concerning the overall environmental performance of the organization the customer could be less inclined to believe that the product is environmentally friendly. A holistic perception is crucial regarding environmental communication.

### **6.2.3.3 The Importance of Communicating the Right Amount and Kind of Information**

Several of the participating companies use LCA as an environmental communication tool. Previous research supports the benchmark results that LCA is a favorable instrument for communicating environmental sustainability. It is crucial to communicate LCA with the right amount of information and correct labeling. The right balance must be found by analyzing which environmental parameters are significant to the customer.

A study, listed in the theoretical framework, analyzed consumer feedback on environmental labeling. Though the study is based on consumer assumptions and views on environmental labeling, some conclusions can be made that are relevant to the project. The study shows that the willingness to pay is higher for products with a well performing labeling declaration. Customers want to know what they buy and why it is environmentally friendly. Distinct measurements and numbers are crucial in the aim of making environmental aspects real and give them a declared product value. Companies do not have the same purchasing process as consumers and the environmental communication in B2B situations must be constructed in a different manner. Here economic factors will always be of great importance. Though, it should be noted, that ethical demands are advancing in the supply chain from the end user and more and more stakeholder's value sustainable actions. The challenge is to construct the communication of PSEP™ tailored to customer demands, wants and needs regarding product performance.

## **6.3 Analysis of SKF Sales Communication with Customers**

Research shows that B2B advertisement is more effective when it includes environmental information than not. Coupled with the fact that many industries are subject to harsher environmental scrutiny because of the shift towards sustainability in societal values, B2B companies have much to gain from communicating sustainability to customers. Despite this, SKF sales representatives rarely touch upon the subject with customers.

SKF's sustainability work can be used as a competitive advantage, but only if customers are made aware of the benefits of SKF being a sustainable supplier and PSEP™. If customers do not actively ask about SKF's environmental actions or PSEP™, it does not necessarily mean that customers would not recognize its value if it is brought up. If SKF's sustainability work is to be used as a competitive advantage, SKF sales representatives must initiate a discussion of its benefits with customers.

### **6.3.1 SKF Customers' Environmental Demands**

Interviews with SKF salespeople revealed that very few salespeople experienced any pressure from customers regarding sustainability. It is not uncommon for larger companies to ask suppliers to agree to their code of conduct, but sales representatives often did not discuss environmental issues beyond that. If SKF wants to use

environmental performance as a competitive advantage, it is incongruous for sales representatives to not communicate the environmental benefits of SKF products.

### **6.3.2 Customer Expectations and SKF's Corporate Reputation as a Sustainable Supplier**

As consumers are becoming more environmentally aware, B2C companies are experiencing pressure from consumers, governments and other stakeholders to be more transparent regarding the sustainability of their business. Companies are being held responsible for their entire supply chain and sustainability demands are being transferred backwards in the supply chain. B2B companies are not exempt from stakeholder's environmental demands and it is possible that SKF's customers have a sustainability focus higher up in the organizational hierarchy, but that this focus does not transfer to purchasing and maintenance, which ultimately have input in choice of suppliers. It is then important for SKF salespeople to be aware of customers' sustainability work and goals and be confident in their ability to communicate how SKF can aid customers in reaching those goals. If the customer does not bring up environmental issues in sales discussions, it is important for SKF sales representatives to be able to introduce the topic and to communicate the value SKF's environmental actions add to the customers supply chain. SKF may create added value for their customers if the sales teams can successfully communicate SKF's role as a sustainable supplier in the customer's supply chain. When SKF is chosen as a supplier, they guarantee a certain level of quality regarding sustainability and environmental actions and take on some of the customers' responsibility regarding sustainability towards their customers and stakeholders.

#### **6.3.2.1 SKF's Role in Protecting Customers' Corporate Reputation**

It was also stated in the interviews that customers assume SKF to be a sustainable supplier and the interviewed salesperson argued that this was the reason customers felt no need to make further inquiries about SKF sustainability actions. Hoejmoose, Roehrich and Grosvold (2013) state that customers seldom apply value to suppliers' sustainability work beyond ensuring that they as customers do not suffer reputational damage from dealing with the supplier. If customers do not inquire about SKF's environmental actions, it may be because SKF has a reputation for being sustainable that is established and trustworthy enough that customers do not fear reputational damage from working with SKF. If this is the case, it may be difficult for SKF to gain further benefits or add further value for the customer by communicating their environmental actions and other sustainability initiatives.

Industries which are regarded as environmentally unfriendly may have low expectations of their suppliers due to the fact that their reputation regarding sustainability is already bad and supplier actions which would cause reputational damage in another industry may be considered par for the course. In such a case, SKF's quality of sustainability is not only assumed to be sufficient, but may be considered excessive. Being a sustainable supplier is not a valid sales argument for these clients. It is, as stated above, important that SKF's role as a sustainable supplier is communicated heavily only when it is in line with the customers' suitability goals and practices.

### **6.3.3 Communication of Product Specific Environmental Performance**

Interviews with sales representatives also revealed that industrial customers do not specifically ask for PSEP™. It was argued that because environmental performance in bearings often made such a small difference in industrial applications, it was not a consideration for customers. It is important to communicate environmental performance that is relevant to the customer and tied to the functional or technical performance prioritized in the application. Beyond Zero mainly communicates CO<sub>2</sub>-equivalents when many customers may care more about energy or lubrication savings. If environmental performance is communicated without regard to its relevance in the customer's application and without connection to the function of the bearing, the communication risks entering green marketing myopia. It is important that PSEP™ is tied to function and application to create added value for the customer. A bearing with great environmental benefits is of no value to the customer if it does not meet the needed functional and technical performance. Although PSEP™ should be considered and communicated by sales representatives; it should not be prioritized over satisfying the customer's functional needs.

Salespeople are often in contact with purchasing or maintenance, which may have other priorities than PSEP™, such as price or dependency. The cost of unexpected operational stops is often much higher than the cost of the energy an energy efficient bearing may save, or the cost of the lubrication a sealed bearing will save. Several interviewed salespeople claimed that environmental benefits were simply not worth using as a sales argument, since the customers contribute no value to PSEP™. However, many companies consider non-financial parameters, including environmental performance, in purchasing. As with communicating sustainability actions, it is possible that the environmental focus is congregated higher up in the organizational hierarchy and that there is incongruence between business goals, strategies, purchasing and maintenance actions. It is also highly feasible that heavy industries, such as the steel industry, do not pursue sustainability beyond legislation. In such a case, it is unlikely that PSEP™ even factors into the purchasing decision. However, environmental aspects of sustainable procurement have been proven to have positive effects on operational costs and performance in some cases. OEM customers may benefit from applying environmentally friendly bearing in their production by obtaining a better performing product.

### **6.3.4 Educating Customers and Directing the Market Towards Sustainability**

It is important for SKF sales representatives to communicate the benefits of PSEP™ throughout their relationship with the customer so when an opportunity for large scale implementation presents itself, the customer is not unfamiliar with the benefits of PSEP™ in their application. If SKF acts as a proactive green marketer and efficiently communicate that their environmental actions and PSEP™ go beyond the requirements of governmental policies and the, by stakeholders, accepted sustainability standards, their sustainability work can gain SKF competitive advantage. In interviews, one salesperson stated that it is SKF's responsibility to educate customers about sustainability. By avoiding green marketing myopia and continuously tying environmental performance and actions to function, SKF can direct customer towards sustainability, and use sustainability to create added value for the customers.

### **6.3.5 Environmental Labeling – Beyond Zero and E2**

It was stated repeatedly in interviews with sales representatives that Beyond Zero and E2 are not communicated for specific products. Beyond Zero is not used as an environmental label, but rather as an example of SKF's continuous work with sustainability. Beyond Zero is used mainly in presentations of SKF as a company and neither Beyond Zero nor E2 are discussed beyond that. One salesperson claimed that Beyond Zero is more internal than it is effective externally. It is not surprising that Beyond Zero and E2 are not used as sales arguments when, as stated previously, salespeople do not believe environmental performance to be of interest to customers.

Environmental labeling is not widely spread in B2B companies as corporate customers often prefer precise information and measurable values. It is not unreasonable to believe that environmental labeling creates market signals and communicates environmental performance more efficiently than specific numbers and intricate LCAs. However, research shows that this is not the case. It is more important to communicate the environmental performance in relation to function and with relevant details and trustworthy measurements than it is to communicate environmental labels. As stated by Hicks (2007), environmental labeling may even be detrimental to corporate brand and may be perceived as greenwashing.

For specific products and PSEP™ it is important to focus on function and application and environmentally labeled products may seem like a blanket solution and unspecified to customer needs. Beyond Zero is mainly used to strengthen the trustworthiness of SKF as a sustainable supplier by exemplifying SKF's sustainability work. However, corporate reputation is affected more positively by actions and implementation of sustainability programs than by marketing actions such as environmental labeling. Environmental labels and product portfolios are only applicable to a select number of products and are therefore poorly suited for showcasing the entirety of SKF's sustainability work.

#### **6.3.5.1 The Difficulties with Promoting E2 and Beyond Zero**

Both E2 and Beyond Zero are limited in their external communication. While they showcase SKF's dedication to environment and innovation, they do not necessarily communicate the environmental benefits the customers value. While friction, which is the focus of E2, can cause energy inefficiency which can have negative effect on the environment, customers may value decreased need for lubrication more as lubrication is often more expensive than energy.

$CO_2$ -equivalents, which Beyond Zero mainly communicates, can be of great importance in the automotive industry, but in other industries issues such as lubrication and energy are more common. By mainly communicating  $CO_2$ -equivalents Beyond Zero risks customers dismissing the products in the portfolio on erroneous grounds.

Industrial customers often have very low demands on environmental performance and find little value in it. By communicating environmental benefits which the customer can recognize and relate to, as well as connecting environmental benefits to financial or functional benefits in the application, the product's perceived value can be increased.

### 6.3.6 The Importance of Internal Marketing

As stated above, there are ways to communicate environmental performance and activities that add value to the customer and direct the market towards sustainability. By being proactive green marketers, SKF can gain competitive advantage and affect change towards more sustainable industries in the long term. However, if SKF sales representatives continue to disregard environmental performance in their communications with customers because of the belief that it is irrelevant to the customers and does not add value to the product proposition, SKF cannot achieve competitive advantage from their proactive sustainability work.

In interviews, many salespeople expressed a lack of knowledge regarding SKF's environmental activities and the benefits of PSEP™ of SKF bearings. This likely contributes to sales representatives' reluctance to communicate sustainability; if the salespeople feel that they do not possess the knowledge needed to engage in a discussion, or answer questions regarding SKF as a sustainable supplier or the benefits of PSEP™, it is unlikely that they will bring up the subject. For SKF to become proactive in their environmental communications, sales representatives must feel comfortable with bringing up sustainability with customers.

There is environmental internal education available to all SKF employees, and there are plans to increase the environmental education available. However, during interviews, sales representatives expressed that because they feel no pressure from their sales managers to communicate SKF environmental efforts or environmental performance, they do not take the time to take part of the voluntary environmental education. How much environmental education salespeople take part of is entirely dependent upon the individual salesperson's personal interest in SKF's sustainability work. Similarly, how much SKF's sustainability work and PSEP™ is brought up in communications with customers is also dependent upon the individual salesperson's personal interest.

Expanding the available internal environmental education may be beneficial to those employees who already have an interest in SKF's sustainability work, but is unlikely to lead to a better general understanding of SKF's environmental actions and PSEP™ among those who do not already have an interest in the issue. To encourage more people to educate themselves about sustainability and, in extension, communicate sustainability, SKF needs to engage in internal environmental marketing. The purpose of the internal environmental marketing is to promote the sense that sustainability is an important part of SKF's value offer and that it is part of SKF's organizational values and culture to care about the environment and to direct the market towards sustainability. According to Sharma et al. (2010) internal marketing is especially important for sustainability issues as sustainability efforts often require the entire organization to work together to achieve sustainability goals.

Sales do not communicate sustainability as an added value because they do not believe that customers care, and they do not feel comfortable enough in their knowledge of the subject to bring it up. By employing internal environmental marketing, SKF can encourage the sales force to take the time to learn about SKF's sustainability work and the benefits of PSEP™. The salesforce can then include sustainability aspects in the value offer in communications with customers as best suited to the individual customer. If SKF sales representatives continue to not communicate sustainability to customers, there is little point to developing an efficient way of promoting environmental performance for SKF bearings.



## **6.4 Analysis of Customer Survey**

A customer survey has been made by SKF, the survey is discussed below and for the project important conclusions are presented. Knowledge about customer comprehension of SKF today is of great importance since this affect how SKF bearings will be received and how the environmental communication should be constructed.

### **6.4.1 Strong Overall Company Reputation**

The customer evaluation on company brand is important knowledge since this affects the possibility to successfully communicate corporate overall environmental performance as well as product specific environmental performance. The customer survey shows that SKF has a strong brand since a majority of the participating customers ranked SKF's brand as stronger than competitors.

### **6.4.2 Lack of Knowledge Regarding SKF's Environmental Ranking**

The fact that a large part of the customers participating I the customer survey answered that they do not know in regards to questions about SKF environmental efforts and sustainability work could be an indicator of a defective environmental communication. It can also be an indicator that a relatively large group of SKF's customers do not actively search information regarding this area. This assumption makes it even more important for SKF to communicate environmental actions to educate and inform customers.

It must be stated that very few customers assume that SKF has a weaker environmental performance than its competitors. Customers that are aware of SKF's environmental care and actions evaluate the company in most cases as equal to competitors.

### **6.4.3 Products Perceived as Solid and Reliable**

The technical performance is ranked similar to SKF's three largest competitors and a conclusion can be made that customers find SKF's technical performance similar to the standard technical solution offered on the market. The satisfaction regarding technical performance is slightly higher than overall satisfaction. This can imply that SKF offers a trustworthy product that the customer can rely on regarding performance and product attributes.

Results from the survey show that SKF is price leading in comparison to competitors. The customers assume that SKF is an absolute top quality product and this can be backed up by SKF's strong brand and image. It should also be mentioned that the price parameter has the next highest rating of customers that do not know how SKF's is in comparison to competitors. This can be an indicator that SKF's customers are not price sensitive, since they should have collected relevant knowledge of the market if they wanted to choose a supplier mainly based on price.

## 6.5 Analysis and Evaluation of SKF Environmental Efforts

Below all SKF's existing environmental efforts will be analyzed and evaluated for the efforts' ability to strengthen the launch of SKF bearings and work as a communication tool. It must be stated that due to the project limitations only the environmental efforts ability to perform as marketing towards customers will be evaluated, not the efforts ability to actually limit SKF's negative effect on environment.

The environmental efforts are divided into two general groups based on if they categorizes as strengthening product specific environmental performance, PSEP™, or aims to build SKF as a sustainable supplier as a whole, the division can be seen in table 3. The efforts will be evaluated based on Ottoman, Stafford and Hartman's three C's of avoiding green marketing myopia; *credibility*, *customer knowledge* and *customer value proposition*.

**Table 3** Division of SKF environmental efforts into PSEP™ actions and SSBI™ actions

|       | Strategies and policies                           | Regulations and directives       | Principles and charters                                     | Certifications and standards                  | Environmental actions         | Communication tools                          |
|-------|---|----------------------------------|---|---|-------------------------------|--|
| SSBI™ | Climate Strategy<br>EHS Policy<br>Code of Conduct |                                  | The United Nations Global Compact<br>ICC<br>WWF Partnership | ISO 14001<br>ISO 50001<br>OHSAS 18001<br>LEED | Environmental Compliance Team | Sustainability Report<br>Beyond Zero concept |
| PSEP™ |   | REACH and SVHC<br>RoHS 2<br>WEEE |   |   | DfE                           | LCA<br>Beyond Zero portfolio<br>E2           |

The analysis and evaluation of SKF efforts aims to support the conclusions in next chapter, how environmental marketing utopia can be obtained regarding SKF bearings. The section aims to answers the following question,

*How good are SKF's existing environmental efforts in obtaining high customer perceived value?*

### 6.5.1 Explanation of Evaluation Tool

Based on other research and analysis the three C's will to some extent be modified from its original meaning to perform as adequately as possible in evaluating SKF's environmental efforts. A description of how Ottoman, Stafford and Hartman's three C's have been redefined for this project is presented below.

**Credibility:** How credible is the environmental effort for the customer? Can the customer trust the content and what the effort communicate?

**Customer Knowledge:** Can a customer easily understand and evaluate the efforts' message and what it can do for the customer?

**Customer value proposition / Customer satisfaction:** Is the environmental effort giving the customer a perceived value? Regarding environmental efforts declared as PSEP™ the evaluation will be based on an effort's ability to fulfill product specific demand from the customer. Regarding environmental efforts to build SKF as a sustainable supplier the efforts will be evaluated based on its ability to help the customer minimize its own negative effect on environment and to strengthen the customer's goodwill and brand image.

### 6.5.1.1 Guidelines for Evaluation

In evaluating SKF's environmental effort based on the three C's some guidelines and assumptions have been made. The guidelines have been constructed based on data from previous chapters. The environmental efforts will be ranked as high, neutral or low depending on how they fulfill each of the three C's. If it cannot be outlined for a particular effort to the extent that it fulfills a demand the effort will be labeled *undetermined*.

The guidelines for determining rank for the environmental efforts are presented below.

#### **Credibility:**

*Third part support* – The credibility rank is determined partly based on if a third part supports the effort or not. If external evaluation processes exist or if the efforts, actions and content is based on externally constructed guidelines.

*Amount of substantial and measurable actions* – Credibility of an environmental effort is also determined by its content. The amount of symbolic versus substantial actions will be evaluated and to what extent the effort really is related to distinct environmental performance.

*Disclaimer* - Good corporate reputation can of course strengthen the credibility of the company's actions, including its environmental efforts. This is not regarded in the evaluation of the environmental efforts since this is unrelated to how the effort itself achieves credibility.

#### **Customer knowledge:**

*Known measurements* - Does the environmental effort communicate for the customer well-known measurements? In the evaluation the environmental measurements emission, energy saving and friction will be declared as well-known declarations for the industry.

*Known effort design* – Is the effort itself a well-known trade mark for environmental actions? This is related to the extent of which customers recognize and are familiar with an environmental effort.

**Customer value proposition:** Regarding the evaluation of how the environmental efforts fulfill customer satisfaction two types of efforts will be devised and evaluated according to the different purposes of the efforts.

*Distinct savings or higher received product value* – Can environmental actions distinguished as PSEP™ give a perceived value for the customer regarding the product? Does the effort contribute to higher customer satisfaction?

*Helping the customer to act sustainably and build corporate image and goodwill* – The environmental effort related to strengthen SKF as a sustainable supplier will be evaluated based on its ability to help the customer strengthen its brand image. Are the environmental efforts contributing to build the customers organization as sustainable and minimize its negative effect on environment?

*The uniqueness of the environmental effort* – The guideline for ranking customer value proposition focuses on the extent competitors and other actors use the same environmental effort. Whether the effort is threshold competence or more unique and unusual.

*Disclaimer* - Due to the wide focus of the project the environmental efforts ability to obtain customer satisfaction is made on a general level. SKF sells to a large amount of customers in a wide range of industries and all customers have specific and unique demands.

## 6.6 Evaluation of Environmental Efforts Declared as PSEP™

Customer and SKF sale representative analysis has shown the struggle to communicate PSEP™ in a successful way. Customers do not demand PSEP™ and have trouble to see the connection between PSEP™ and profitability. The PSEP™ have trouble fulfilling the three C’s regarding customer satisfaction and this is an indicator of green marketing myopia. To communicate PSEP™ in a successfully the customer must be informed and understand the connection between profitability and PSEP™. Bearings are often a small part in a bigger machine and even if a bearing has excellent PSEP™ it will have little effect on the overall environmental performance of the machine. PSEP™ is not only a technical performance, the products environmental footprint, determined by LCA is also a parameter incorporated in PSEP™. This parameter can be of importance to customers to a higher extent than the technical PSEP™. The products environmental footprint can help the customer fulfill their own LCA goals and customer demands regarding sustainability.

The environmental efforts that are declared as PSEP™ are presented and evaluated in table 4. The specific environmental efforts will be individually discussed and evaluated in more detail.

**Table 4** Evaluation of environmental efforts linked to PSEP™

|                            |                       | Credibility | Customer Knowledge | Customer Satisfaction |
|----------------------------|-----------------------|-------------|--------------------|-----------------------|
| Regulations and directives | REACH and SVHC        | High        | High               | Neutral               |
|                            | RoHS 2                | High        | High               | Neutral               |
| Environmental actions      | WEEE                  | High        | High               | Neutral               |
|                            | DfE                   | Neutral     | High               | Neutral               |
| Communication tools        | LCA                   | High        | High               | Neutral/High          |
|                            | Beyond Zero portfolio | Low/High    | Low/High           | Neutral/High          |
|                            | E2                    | High        | Low                | Low                   |

## **6.6.1 Regulations and Directives**

All the regulations and directives were given high credibility. This is due to the nature of the efforts and legislation.

The environmental efforts in this section were also given the same rank regarding customer knowledge and satisfaction. The regulations and directives used by SKF are very well-known and are today used as a threshold competence for manufacturers that produce products governed by these regulations. It is not a core environmental competence to fulfill legislation and it does not give the customer a higher value than the normal products available on the market.

## **6.6.2 Environmental Actions**

Design for environment, DfE, is the only PSEP™ listed as an environmental action. This tool to incorporate environmental aspects in the product development was given the rank neutral regarding credibility. DfE is a tool developed by a third part but no supervision or evaluation is made externally of the outcome and how well the tool performs.

DfE is a well-known concept and many companies use the tool in product development. The effort was therefore given the highest rank regarding customer knowledge.

Regarding customer satisfaction the effort does not guarantee a product with high environmental performance as such, only environmental parameters have been considered in the product development phase. The efforts ability to obtain high customer satisfaction is thereby given the rank neutral.

## **6.6.3 Communication Tools**

LCA, the Beyond Zero portfolio and the performance class E2 are the communication tools constructed by SKF declared as PSEP™. These efforts are evaluating and collocating of how SKF's products environmental performance is today communicated towards customers. SKF has chosen to promote its top of line products regarding PSEP™ in its Beyond Zero portfolio. Further SKF has chosen to construct an environmental performing classification, E2, and uses LCA as a calculation tool in determining a products environmental footprint.

### **6.6.3.1 LCA**

LCA is not used itself as a marketing tool today by SKF, though it is incorporated in Beyond Zero.

LCA were listed as high both regarding credibility and customer knowledge. Previous research has shown LCA's ability to incorporate trust and credibility in the environmental communication. LCA is a holistic and solid tool for evaluating and communicating environmental effects of a product. The effort is based on distinct and substantial measurements and SKF does comprehensive analysis. The effort measures many parameters but SKF is today only communicating -emission.

LCA as such, is not helping the customer save money or providing the customer with a product with higher technical performance. A product with high LCA can help the customer in obtaining their own products with high LCA and to be a part of a green supply chain.

### **6.6.3.2 The Beyond Zero Portfolio – Confusion Regarding Portfolio Demand but Strong Customer Orientation**

The Beyond Zero portfolio is based on LCA's and uses substantial and distinct measurements to evaluate products environmental performance. The credibility can therefore be considered high. On the other hand, the portfolio is not supervised by a third part and is completely constructed in-house at SKF. Though the evaluation process the Beyond Zero portfolio is based on LCA. A Beyond Zero product does not have to obtain a certain level of low environmental impact to be included in the portfolio. SKF uses the term "significantly better" and the evaluation is made differently from product to product. The customer may find it difficult to understand what significantly better means. The theory states that the term significant can be misleading.

All bearings included in the Beyond Zero portfolio are not subject to the same preconditions. That bearings sold to green industries, are incorporated into the Beyond Zero portfolio automatically can lead to credibility issues. These products do not stand out from the standard solution to the market regarding customer application performance or PSEP™. The different demands regarding different products can confuse the customer regarding what the portfolio aims to achieve. Interviews at SKF indicate an internal confusion regarding the portfolio and what the Beyond Zero products should accomplish.

The absence of third-part involvement also lowers credibility. Based on the substantial measurements behind the evaluation of Beyond Zero products which gives a high credibility together with the mentioned aspects that lower credibility the overall ranking is stated as High/Low.

Moreover the concept has a very clear customer orientation. A product must be of great value to the customer to be a Beyond Zero product. This gives the concept a high rank regarding customer satisfaction. Beyond Zero products environmental performance is mainly communicated with CO<sub>2</sub>-equivalences. The portfolio may benefit from including more aspects and measurements from LCA's to better align with customer demand. CO<sub>2</sub>-equivalences is a well-known measurement but can for some customers be abstract and disconnected from financial savings and tangible benefits.

Conclusions from evaluating the Beyond Zero portfolio is that it in several aspects lack credibility. This can be resolved by letting all Beyond Zero products fulfill the same criteria without exception and be clearer regarding to which extent a Beyond Zero products is better than the standard solution. Collaboration with third-part is also recommended.

### **6.6.3.3 E2 – Performance Misaligning with Customer Demand**

Products included in the performance class E2 are communicated as environmentally friendly due to low friction. E2 were given the rank low regarding both customer knowledge and satisfaction. Customer survey as well as interviews at SKF show that customers do not use the term friction nor value the performance in a high extent. E2 is also an internal developed marketing tool and is not a well-known concept for the customers. Interviews with sale representatives shows that many of the sale representatives do not communicate E2 to customers since they believe that this is not something that the customer would want.

Due to E2's distinct and measurable performance the credibility for the effort is ranked as high.

## 6.7 Evaluation of Environmental Efforts Related to SSBI™

Corporate reputation and brand image related to sustainability is affected more positively by actions and implementation of sustainability programs than by marketing efforts. Customer analysis has also revealed that suppliers' sustainability work is considered more important when choosing suppliers than PSEP™. As stated above, PSEP™ can be used to strengthen the credibility of a sustainable supplier brand image but SSBI™ is needed to successfully communicate the value of PSEP™.

SKF environmental efforts which affect brand image and their effectiveness in environmental communications according to the three Cs is summarized in table 5 below.

**Table 5** Evaluation of environmental efforts linked to SSBI™

|                              |   | Credibility  | Customer Knowledge | Customer Satisfaction |
|------------------------------|---|--------------|--------------------|-----------------------|
| Strategies and policies      | Climate Strategy                        | High         | High               | Undeterminable        |
|                              | EHS Policy                              | Low          | High               | Undeterminable        |
|                              | Code of Conduct                         | Low          | High               | Neutral               |
| Principles and charters      | The UN Global Compact                   | Neutral/High | High               | Neutral               |
|                              | ICC Charter for Sustainable Development | Neutral/High | High               | Neutral               |
|                              | WWF Partnership                         | High         | High               | High                  |
| Certifications and standards | ISO 14001                               | High         | High               | Neutral               |
|                              | ISO 50001                               | High         | High               | High                  |
|                              | OHSAS 18001                             | High         | High               | Neutral               |
|                              | LEED                                    | High         | High               | Neutral               |
| Environmental actions        | Environmental Compliance Team           | Neutral      | Neutral            | Neutral               |
| Communication tools          | Sustainability Report                   | High         | High               | Neutral               |
|                              | Beyond Zero concept                     | Low          | Low                | Neutral               |

### 6.7.1 Strategies and Policies

While strategies and policies are originally intended for solidifying company goals and values and communicating these internally, the existence of publicly available strategies and policies relating to sustainability acts as a market signal of the company's commitment to the environment and sustainability. Because of this, environmentally relevant strategies and policies can help enhance and protect SSBI™. However, as consumers have become more aware of sustainability issues and more local legislation and international regulations and directives are constantly coming into effect, there are few companies that do not engage in at least reactive sustainability efforts. This has led to Codes of Conduct and environmental policies to becoming more common among larger companies. For strategies and policies regarding sustainability to be effectively used to enhance SSBI™ they have to fulfill all three Cs: credibility, customer knowledge and customer satisfaction.

SKF’s environmentally relevant strategies’ and policies’ effectiveness in environmental communications according to the three Cs is summarized in table 6 below.

**Table 6** Evaluation of strategies and policies linked to SSBI™

|                         | <b>Credibility</b> | <b>Customer Knowledge</b> | <b>Customer Satisfaction</b> |
|-------------------------|--------------------|---------------------------|------------------------------|
| <b>Climate Strategy</b> | High               | High                      | Undeterminable               |
| <b>EHS Policy</b>       | Low                | High                      | Undeterminable               |
| <b>Code of Conduct</b>  | Low                | High                      | Neutral                      |

### **6.7.1.1 The Credibility of SKF Environmentally Relevant Strategies and Policies**

Quantified goals and documentation of progress greatly increases the credibility of strategies and policies. Loosely phrased and generalized policy and strategy goals can be perceived as symbolic actions which lack substance and any real commitment from the company. As Codes of Conduct are becoming more common, their value as a communication tool for proactive sustainability work is diminishing. Codes of Conduct, environmental policies and strategies need detailed, quantified and substantive information to effectively be used to strengthen SSBI™.

Both SKF, EHS Policy and Code of Conduct lack quantified goals and detailed information. The EHS Policy states that all SKF units should “proactively assess health & safety risks, environmental and energy impacts and systematically define, document and implement improvement plans” (SKF Group Policy – Environment, Health and Safety, 2014) but fails to detail how such definition, documentation and implementation should be carried out or what results are expected of improvement plans. It is not uncommon for companywide policies to be vague in their phrasing to ensure that they encompass all units and actions of the company and are easily communicated, especially in the area of sustainability. However, by adding detail about procedures set in place to ensure implementation of the policy and quantifies clear goals for improvement. SKF can decrease the risk of the Code of Conduct and EHS Policy being perceived as symbolic actions.

The SKF Climate Strategy is a good example of how quantified goals add substance to environmental efforts. Though the Climate strategy does not detail how the goals will be achieved, which is understandable as it may differ greatly between units, it does specify percentages of decrease in energy use and Co2 emissions. Quantified goals give the impression that the problems have been analyzed and the solution carefully considered. It also allows readers with knowledge of SKF operations to form an opinion on the ambitiousness of the effort. The quality of the Climate Strategy has also been verified by WWF, a highly credible organization, which gives further credibility to the effort.

### **6.7.1.2 Customer Knowledge Regarding SKF Environmentally Relevant Strategies and Policies**

The SKF Climate Strategy, EHS Policy and Code of Conduct are all well aligned with customers’ level of knowledge. All documents are well-established types of strategies and policies and should be familiar to customers. While a high level of alignment with customer knowledge is desirable, the general erosion of the credibility of documents such as Code of Conduct create a barrier to achieving high credibility in environmental



strategies and policies. The SKF Climate Strategy overcomes the barrier to credibility by presenting detailed and quantified goals. The goals are set for energy use and CO2 emissions which are well-known environmental issues and by formulating goals in these areas the Climate Strategy aligns the information with customer knowledge.

### 6.7.1.3 SKF Environmentally Relevant Strategies’ and Policies’ Alignment with Customer Satisfaction

As a Code of Conduct in many ways has become expected of larger companies, the SKF Code of Conduct is most likely considered a threshold competence. Because of the low credibility of the Code of Conduct it cannot be expected to increase customer satisfaction or enhance SKF SSBI™.

It is hard to determine the effect the SKF Climate Strategy and EHS Policy can have on customer satisfaction. While they demonstrate a proactive approach to sustainability and EHS it is unlikely that it translates into added customer satisfaction. Adequate quality of sustainability work and EHS is most likely considered an order qualifier by customers, but a higher quality of sustainability work and EHS is unlikely to be an order winner. However, high SSBI™ could, for some customers, be an order winner, and the Climate Strategy and EHS Policy could therefore be considered to increase customer satisfaction if it enhances SKF SSBI™.

## 6.7.2 Principles and Charters

Sustainability principles and charters are often intended to help evolve the sustainability work of the companies that subscribe to them. It is not uncommon, however, that they are used as a mark of quality for sustainability work. Third-party principles and charters cannot guarantee an improvement in quality if the sustainability work of the subscribers and while they might be perceived as a signal of quality by the market, companies should be careful in using them as such. In worst case, communicating a high quality of sustainability work using internationally recognized principles and charters can be regarded as greenwashing by stakeholders with understanding of the function of the applied principles. However, the subscription to internationally recognized principles and charters can be seen as an indicator of a high level of commitment to sustainability.

Internationally recognized and environmentally relevant principles and charters SKF subscribes to and their effectiveness in environmental communications according to the three Cs is summarized in table 7 below.

**Table 7** Evaluation of principles and charters linked to SSBI™

|  | <b>Credibility</b> | <b>Customer Knowledge</b> | <b>Customer Satisfaction</b> |
|--|--------------------|---------------------------|------------------------------|
| <b>The UN Global Compact</b>                   | Neutral/High       | High                      | Neutral                      |
| <b>ICC Charter for Sustainable Development</b> | Neutral/High       | High                      | Neutral                      |
| <b>WWF Partnership</b>                         | High               | High                      | High                         |

### **6.7.2.1 The Credibility of Principles and Charters SKF Subscribes to**

While the credibility of principles and charters does to some extent depend on detail and quantified goals, the credibility of the organization behind the principles or charter is in large part the deciding factor for the credibility of the quality of the principles or charter. SKF subscribes to the United Nations Global Compact and the ICC Charter for Sustainable Development, both of which consist of often vague and general principles. Also, subscription to the Global Compact and the ICC Charter are entirely initiated by the subscriber and compliance with the principles is not verified by the UN or ICC. Despite this, the credibility of the Global Compact and ICC Charter can be considered high as the UN and ICC are highly credible organizations and the principles are internationally recognized as sound.

SKF's partnership with WWF and inclusion in the WWF Climate Savers program is tightly tied to the SKF Climate Strategy. The credibility of the partnership as seen as an environmental effort is supported by the credibility of the Climate Strategy as well as the credibility of WWF as an organization. SKF also continuously project on the progress of reaching the goals set in the Climate Strategy in the annual report, and transparency supports credibility. The credibility of the WWF partnership as a SKF environmental effort is high in all regards.

### **6.7.2.2 The Alignment of SKF Subscription to Environmental Principles with Customer Knowledge**

All principles SKF subscribes to are internationally recognized and therefore align well with customer knowledge. Where credibility of Codes of Conduct has suffered erosion because of increased popularity and customer knowledge, the principles SKF subscribe to are set by respected and credible external parties. The content of the principles is well aligned with customer knowledge, but even if it was not, the customer recognition of the UN Global Compact, the ICC Charter for Sustainable Development and the WWF Climate saver, and the organizations' credibility, weighs more heavily than the content.

### **6.7.2.3 Customer Satisfaction Derived from SKF Subscription to Principles and Charters**

Because subscription to the Global Compact and ICC Charter does not ensure improved sustainability work or even compliance with the principles, the Global Compact and ICC Charter does not ensure customer satisfaction. It does, however, showcase a commitment to sustainability which can enhance SSBI™. The WWF Partnership is both more substantial as an environmental effort, and connected to quantified goals set in the Climate Strategy. This in combination with the external verification of the quality of the environmental goals set in the Climate Strategy can increase customer satisfaction.

## **6.7.3 Certifications and Standards**

Certification in accordance with standards such as ISO 14001 and 50001, OHSAS 18001 and LEED guarantees that a company has implemented a management system or, in the case of LEED, a process for consideration of environmental issues. None of these standards guarantee that the outcome of the implementation is an improvement in environmental performance. Despite this, certification in accordance with these standards is often perceived by the market as a signifier of quality in sustainability work. Like with subscription to principles and Charters, companies should be careful in

communication of international certifications to not put themselves at risk of greenwashing.

Environmentally relevant international standards SKF is certified in accordance with and their effectiveness in environmental communications according to the three Cs is summarized in table 8 below.

**Table 8** Evaluation of certifications and standards linked to SSBI™

|                    | <b>Credibility</b> | <b>Customer Knowledge</b> | <b>Customer Satisfaction</b> |
|--------------------|--------------------|---------------------------|------------------------------|
| <b>ISO 14001</b>   | High               | High                      | Neutral                      |
| <b>ISO 50001</b>   | High               | High                      | High                         |
| <b>OHSAS 18001</b> | High               | High                      | Neutral                      |
| <b>LEED</b>        | High               | High                      | Neutral                      |

### 6.7.3.1 The Credibility of International Certifications

SKF is certified against a number of environmentally relevant management systems standards. ISO, OHSAS and LEED are all internationally recognized and, as theory suggests, commonly used to gauge the sustainability work of suppliers. This means that customers perceive the credibility of the certifications as high. However, as mentioned above, while the credibility of the effort of obtaining certification may be perceived as high, certification does not guarantee a sustainable result and SKF should therefore communicate proof of improved sustainability as a result of the certifications in conjunction with communication of the certifications themselves to further improve credibility.

### 6.7.3.2 Certifications Alignment with Customer Knowledge

ISO, OHSAS and LEED are all international and widely used standards. It is not unlikely that SKF customers are also certified against some of the standards and all certifications are well aligned with customer knowledge.

### 6.7.3.3 Certifications Alignment with Customer Satisfaction

ISO 14001 and OHSAS 18001 are common certifications for producing companies and cannot be considered to add value for customers. In many cases, ISO 14001 certification or compliance is a requirement for all of a customer’s suppliers. Both ISO 14001 and OHSAS 18001 can be considered threshold competences for being considered a sustainable supplier and do not enhance SSBI™. While LEED is not as widely used, it has no consequences for customers beyond ensuring SKF’s commitment to sustainability in all actions. Because of this LEED can be said to enhance SSBI™, but not necessarily to increase customer satisfaction.

ISO 50001 is not as common as ISO 14001 and a supplier’s ISO 50001 certification can be of interest to a customer with an interest in energy management. SKF themselves require all major suppliers with high energy use to have an energy management system which is in accordance with ISO 50001. Certification in accordance with ISO 50001 can therefore be considered to not only enhance SSBI™ but to also increase customer satisfaction for some customers.

## 6.7.4 Environmental Actions

Action is more effective than marketing in promoting and enhancing SSBI™. Many of the previously analyzed environmental effort can be considered environmental actions, such as getting certified in accordance with international standards, or implementing the Climate Strategy. The action analyzed here, the creation of SKF Environmental Compliance Team, is simply termed environmental action because it cannot be communicated as anything other than an action.

The SKF Environmental Compliance Team is an environmental effort with the purpose of ensuring that SKF complies with international environmental legislation. The team also acts as support in specific environmental customer requests.

The effectiveness of the SKF Environmental Compliance Team in environmental communications according to the three Cs is summarized in table 9 below.

**Table 9** Evaluation of environmental actions linked to SSBI™

|                                      | <b>Credibility</b> | <b>Customer Knowledge</b> | <b>Customer Satisfaction</b> |
|--------------------------------------|--------------------|---------------------------|------------------------------|
| <b>Environmental Compliance Team</b> | Neutral            | Neutral                   | Neutral                      |

### 6.7.4.1 The Alignment of SKF Environmental Actions with Credibility, Customer Knowledge and Customer Satisfaction

The Environmental Compliance Team has no other purpose than ensuring SKF complies with environmental legislation. As such, it is unsuitable for communicating in proactive green marketing. It is an internal effort and sets no goals beyond compliance with legislation. While customers may have knowledge regarding some of the environmental legislation which applies to SKF, it is unlikely that they have knowledge of all. However, customers are likely to understand the benefits of employing a team to ensure the compliance of environmental legislation. As the Environmental Compliance Team works only to ensure that SKF does not break the law, it adds no value for the customers and though it would most likely have a negative effect on customer satisfaction if SKF products and operations were not in accordance with legislation, following legislation is assumed and does not increase customer satisfaction.

## 6.7.5 Communication Tools

All of SKF environmental efforts have been evaluated for their effectiveness for enhancing SSBI™ when used in communication. SKF's existing environmental communication tools are analyzed below using the same criteria. Communication tools are specifically developed to effectively delivering a message and tools for environmental marketing should avoid green marketing myopia at all costs. As such, effective environmental communication tools should be credible and well aligned with customer knowledge and customer satisfaction.

The effectiveness of SKF environmental communication tools according to the three Cs is summarized in table 10 below.

**Table 10** Evaluation of communication tools linked to SSBI™

|                              | <b>Credibility</b> | <b>Customer Knowledge</b> | <b>Customer Satisfaction</b> |
|------------------------------|--------------------|---------------------------|------------------------------|
| <b>Sustainability Report</b> | High               | High                      | Neutral                      |
| <b>Beyond Zero concept</b>   | Low                | Low                       | Neutral                      |

### **6.7.5.1 The Credibility of SKF Environmental Communication Tools**

SKF's primary tool for communicating their sustainability work to stakeholders is the annual sustainability report. The project follows the GRI projecting principles and is externally verified. The project is also extensive, detailed and quantified. The project in itself is an SKF effort to be transparent in their sustainability work. Because of this the project is highly credible.

The Beyond Zero concept is internally developed to exemplify SKF's commitment to sustainability. The concept revolves around SKF not only decreasing their own environmental impact, but also positively effecting customers environmental impact. Because the concept is internally developed and does not set up any quantified or substantial goals for SKF products, the credibility can be concluded to be low.

### **6.7.5.2 SKF Environmental Communication Tools Alignment with Customer Knowledge**

Sustainability reporting is a common and accepted practice and is well aligned with customer knowledge. Like Codes of conduct, the popularity of sustainability reporting has led to an erosion of credibility of sustainability reports. However, SKF overcomes this by communicating detailed and quantified information in the project and by subjecting the project to third-party auditing.

There is confusion about the Beyond Zero within the company and the distinction between the concept and the portfolio is ambiguous. Sales interviews also revealed that Beyond Zero is rarely communicated. Because of this, the Beyond Zero Concept is currently not well aligned with customer knowledge.

### **6.7.5.3 SKF Environmental Communication Tools Alignment with Customer Satisfaction**

In theory, the Beyond Zero concept should communicate how SKF products can help customers decrease their environmental impact and should increase customer satisfaction. However, currently neither the Beyond Zero concept nor the sustainability report manages to communicate a value for the customer. As such, they do not increase customer satisfaction, though they may enhance SSBI™.



# 7 Conclusions and Recommendations

*Below the conclusions and recommendations will be presented. The recommendations aim to solve the discovered problems SKF is facing today and describe how environmental performance can be used to promote industrial components in B2B customer communication. First, identified problems are described, as is what has to be done to solve them. This is followed by more concrete recommendations and guidelines related to communicating SSBI™ and PSEP™, these recommendations answer the two key questions of this project:*

- 1. Which kinds of environmental performance aspects are most valuable to promote?*
- 2. How can these aspects be verified and communicated?*

*Though the recommendations and solutions are constructed to fit SKF the recommendations can be adapted to other B2B settings as many other B2B companies face the same obstacles as SKF. The recommendations regarding PSEP and SSBI are made on a general level and are adaptable to other B2B companies.*

## 7.1 Identified Obstacles and How to Overcome Them

Below the five most crucial identified obstacles regarding SKF's environmental efforts and communication is presented. Each obstacle is followed by a proposed solution and an explanation of the specific problem and the proposed resolution of the issue.

**Obstacle 1** – *Environmental performance is not discussed with customers that do not actively bring it up and customers lack knowledge about SKF's environmental efforts.*

**Solution** – *Educate and motivate sales representatives by developing internal environmental marketing and education programs.*

*Help sales representatives to communicate PSEP™ and SSBI™ by constructing marketing booklets.*

SKF's sustainability efforts are only a competitive advantage when customers are made aware of SSBI™ and PSEP™ benefits. If a customer does not actively ask about SKF's environmental efforts it does not necessarily mean that the customer would not appreciate its value if it is brought up. It is therefore crucial that SKF sales representatives introduce the subject of environmental performance in relation to the customer's needs into the sales meeting.

Currently, sales representatives at SKF do not communicate sustainability as an added value in the sales process. Interviews have revealed that sales representatives do not believe that customers value environmental performance and many sales representatives do not feel that they have enough knowledge of the subject to bring it up. By developing the internal environmental marketing, SKF can encourage the sales force to learn about SKF's sustainability work and the benefits of environmental performance. This will give the salesforce a better starting position to include sustainability in the presented value offer towards customer. To successfully

communicate environmental performance as a part of the value offer to the customer, sales and other representatives must first believe this. Environmental performance must become integrated into the products' overall performance and value offer. Furthermore, to value product specific environmental performance and other environmental efforts has to be a part of the SKF organizational culture.

To aid sales and other representatives in communicating environmental performance externally companies should construct material describing product specific environmental performance for products and other environmental efforts. By doing this the quality of the environmental communication can be controlled and a certain level of communicated information can be guaranteed. This can be obtained by constructing a marketing booklet for every bearing that includes environmental information both regarding PSEP™ and SSBI™.

**Obstacle 2** – *The internal perspective regarding environmental performance is too narrow.*

**Solution** – *Communicate environmental performance from a supply chain perspective.*

It is crucial for SKF and other B2B companies to not solely focus on how environmental efforts affect their organization and reputation. Instead environmental performance must be looked at from a holistic perspective in order to clearly communicate how a company's internal environmental efforts benefit the customer.

Companies should communicate that by making environmental efforts internally they take on some of the customer's responsibility regarding environmental performance and sustainability. By communicating their environmental efforts as a link in a sustainable supply chain, a supplier can draw attention to the benefits the internal environmental efforts has for the customer as keep a clear customer focus in their communication. Companies close to the end user often experience more environmental scrutiny than companies buried in the supply chain, and therefore benefit greatly from a sustainable supply chain. Environmental efforts made by companies further back in the supply chain protects the companies closer to the end user from reputational damage. Reputational damage can occur if a company's supply chain is inspected and found to not live up to the environmental and sustainability standards held by the stakeholders or by societal values. Because of this, B2B companies need to communicate their environmental efforts as a part in the customer's environmental efforts and focus on their role in aiding the customer in becoming a more sustainable organization.

**Obstacle 3** – *Environmental communication lack customer orientation*

**Solution** – *Environmental communication must be custom made to a wider extent and focus on customer value.*

The evaluation of SKF's environmental efforts shows that the company today lacks, to some extent, the ability to construct and communicate environmental efforts that obtain a high customer satisfaction. Therefore it is crucial to have customer orientation when an environmental effort is constructed and communicated. Companies should communicate aspects of environmental performance and other environmental efforts that affect the customer in a positive way and obtain an understanding regarding what environmental parameters the customer values.



**Obstacle 4** - *Customer skepticism and lack of environmental knowledge.*

**Solution** – *Build credibility and customer awareness by incorporating trustworthy environmental communication in every customer contact.*

To overcome the obstacle regarding customer skepticism the customer must be given evidence of actual substantial environmental actions. It is not enough to communicate symbolic actions. Bigger environmental strategies and policies must be backed up by concrete and measurable efforts that works as a proof of the company's commitment to environmental issues. Companies should strive to quantify measurements and environmental goals to as great an extent as possible and give concrete guidelines for all parts of the organization to follow in order to fulfill environmental and other ethical commitments.

**Obstacle 5** – *Low customer demand regarding environmental efforts.*

**Solution** – *Get to know the customer in order to find out why the environmental demand is low. Is the reason of the low demand something that SKF can affect or not?*

*Segment customers based on environmental commitment.*

A low customer demand regarding environmental performance is of course an extensive problem when the desire is to use environmental performance as a competitive advantage. If no demand exists the customer satisfaction will not be affected by the quality of the environmental performance. This is especially relevant for customers active in industries which are considered environmentally unfriendly. It is unlikely that customers who themselves do not, or cannot, receive competitive advantage from environmental efforts, value their suppliers' environmental efforts. It is important to identify these customers and not distribute resources on communicating environmental performance to any great extent to these customers.

Customers should be segmented into categories based on their environmental commitment and amount of the customers' implemented environmental efforts. The segmentation should not be reliant on the demands the customers make on suppliers' environmental efforts, but rather focus on the customers' own environmental ambitions.

Before these obstacles are overcome, the effectiveness of any environmental communication is greatly hindered. By segmenting the customers, promoting the value of SKF's environmental efforts internally and adopting a holistic perspective in environmental marketing, SKF can overcome these obstacles and effectively communicate environmental performance to customers.

## **7.2 Division of Environmental Efforts in Relation to PSEP™ and SSBI™**

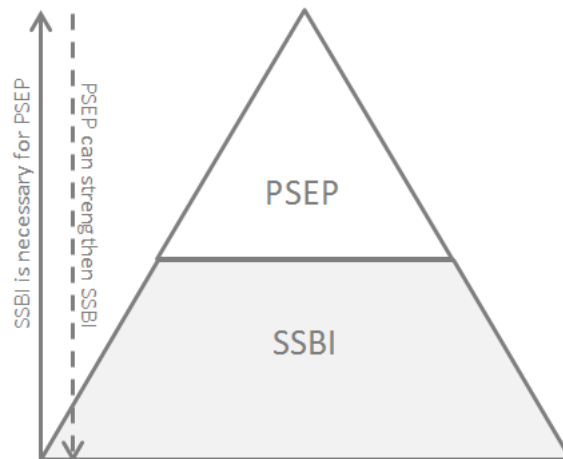
When communicating environmental performance it is important to distinguish between product specific environmental performance, PSEP™, and environmental performance which enhances sustainable supplier brand image, SSBI™. SKF's environmental efforts have been divided into six categories and the specific actions in these categories have been divided into PSEP™ and SSBI™ based on the appropriateness of the effort to be used to communicate product specific environmental performance or to enhance SKF's

brand image as a sustainable supplier. This division can be seen in table 11 below and is recommended to have in mind when developing environmental communication.

**Table 11** Division of SKF environmental efforts into PSEP™ actions and SSBI™ actions

|       | Strategies and policies                           | Regulations and directives       | Principles and charters                                     | Certifications and standards                  | Environmental actions         | Communication tools                          |
|-------|---|----------------------------------|---|---|-------------------------------|--|
| SSBI™ | Climate Strategy<br>EHS Policy<br>Code of Conduct |                                  | The United Nations Global Compact<br>ICC<br>WWF Partnership | ISO 14001<br>ISO 50001<br>OHSAS 18001<br>LEED | Environmental Compliance Team | Sustainability Report<br>Beyond Zero concept |
| PSEP™ |   | REACH and SVHC<br>RoHS 2<br>WEEE |   |   | DfE                           | LCA<br>Beyond Zero portfolio<br>E2           |

It is important to include both SSBI™ and PSEP™ in all environmental communication. Communication of PSEP™ alone lacks weight and needs a solid base of SSBI™ to build on, and the credibility of SSBI™ can be strengthened by communication of PSEP™, as illustrated in figure 11. How communication of PSEP™ and SSBI™ should be constructed differs and it is therefore important to first determine which of the two, or both, an environmental effort is most suited for communicating.



**Figure 11** The relationship between Product Specific Environmental Performance, PSEP™, and Sustainable Supplier Brand Image, SSBI™

## 7.3 Recommendations for SSBI™

Successful communication to enhance SSBI™ has to be credible and customer oriented to create a value for the customer. Credibility is achieved by communicating quantified and substantial information, and is strengthened by third-party verification.

Customer focus and orientation is achieved by communicating environmental efforts in SKF operations as well as efforts in both directions of the value chain. SKF needs to communicate its responsibility for ensuring a sustainable supply chain for the customer as well as communicating how SKF environmental efforts can aid customers in their sustainability work. This is currently mainly done through communication of the Beyond Zero concept. However, it is recommended that Beyond Zero is only a part of a larger SSBI™ communication. Communication attempting to enhance sustainable supplier brand image often focuses on how internally implemented environmental efforts have enhanced the sustainability of the organization and loses sight of how these sustainability improvements affect the customer.

### 7.3.1 Environmental performance aspects most valuable to promote for SSBI™

Communication to enhance sustainable supplier brand image should include three main aspects of environmental performance:

- (1) SKF's commitment to continuously improving environmental performance.
- (2) Certifications.
- (3) Third-party verification and partnership.

Inclusion of environmental performance information in the bearings catalogue can also be beneficial for communicating SSBI™.

How these aspects of environmental performance can be used to promote SKF bearings will be examined further below.

### 7.3.2 How the environmental performance aspects valuable to promote for SSBI™ can be verified and communicated

**Recommendation 1** – *Communicate SKF's commitment to continuously improving environmental performance.*

- Focus on implemented processes, mainly DfE, and use the Beyond Zero concept and portfolio to exemplify the effort.

Substance is always preferable over symbolism in environmental communication and the communication of SKF's commitment to continuously improving environmental performance should therefore always be based on implemented processes and concrete examples. SKF should communicate their use of DfE to a greater extent and should strive to always communicate the results of the implementation of DfE. The Beyond Zero concept exemplifies SKF's commitment to improving environmental performance, but it is more important to communicate the ideals behind the concept than the concept itself.

**Recommendation 2** – *Use certifications in environmental communication.*

- Focus on communicating ISO 50001, as ISO 14001 and OHSAS 18001 are often considered threshold competences.
- Communications should also include that all of SKF's energy intensive major suppliers have energy management systems that comply with ISO 50001.

Certifications do not guarantee results. While it is common for customers to view certifications as a guarantee of quality it is important not to use it as such in communications, as this is dangerously close to greenwashing. Instead, certifications should always be communicated with focus on the results of the implantation of the standard rather than the certification itself.

Communication of certifications should also focus on certifications which are not considered threshold competences within the industry. SKF should therefore primarily communicate ISO 50001. The ISO 50001 certification can be used as a competitive advantage by communicating how SKF implantation of the standard as well as SKF's requirement for energy intensive major suppliers to adhere to the standard, can help the customer reach their energy goals and ensure an energy efficient supply chain.

**Recommendation 3** – *Use third-party verification and partnerships in environmental communication.*

- Focus on WWF Climate Savers membership and having a climate strategy which has been recognized by a respected organization as being leading in the industry.

Third-party verification and partnerships add credibility to environmental communication. By using the WWF Partnership and their recognition of the SKF climate strategy in communication SKF can strengthen the credibility of their entire environmental communication.

**Recommendation 4** – *Include information regarding environmental performance connected to SSBI™ in the bearings catalogue.*

By including information about SKF environmental efforts connected to SSBI™ in the bearings catalogue SKF can showcase their environmental efforts in a manner that reaches all customers, regardless of their interest in sustainability. It will also enhance the credibility of the products specific environmental performance information which is also recommended to be included in the catalogue.

## **7.4 Recommendations for PSEP™**

The recommendations for PSEP™ will help SKF's existing environmental communication to better align with environmental marketing utopia. The recommendations are constructed to solve the declared problems and challenges SKF's environmental communication is facing. The customers have been divided into two groups, one were the customers clearly value environment and work actively with sustainability. The other group represents customers who are not as aware about the environment and do not work actively with sustainability.

### **7.4.1 Environmental performance aspects most valuable to promote for PSEP™**

Communication of product specific environmental performance should always:

- (1) Limit the use of unofficial environmental classifications.
- (2) Clearly communicate the correlation between PSEP™ and financial savings.
- (3) Include environmental performance aspects in bearings catalogue.

For environmentally aware customers communication of products specific environmental performance should:

Communicate LCA on a more complex and comprehensive level.

For environmentally unaware customers communication of products specific environmental performance should:

Communicate effective and easily comprehensible information in every customer contact.

How these aspects of environmental performance can be used to promote SKF bearings will be examined further below.

### **7.4.2 How the environmental performance aspects valuable to promote for SSBI™ can be verified and communicated**

**Overall Recommendation 1** – *Limit the use of unofficial environmental classifications*

An unofficial environmental classification made in-house is simply a statement of how products in the company's product portfolio relates to each other, not how the products will benefit the customer. A classification system can therefore, as stated in the analysis, lead to a misdirected internal focus and lead to green marketing myopia. The customer satisfaction can be overlooked and this is something that may have happened regarding the environmental effort E2.

Products must be presented with measurements that the customer can relate to in order for the customer to clearly understand what benefits arise from buying the environmentally friendly product. It is important that PSEP™ is tied to function and application to create added value for the customer.

**Overall Recommendation 2** – *Clearly communicate the correlation between PSEP™ and financial savings.*

- Use knowledge about customers most important KPI's and communicate PSEP™ that is connected to those.
- Communicate in as high extent as possible measurements that the customer understands and can relate to savings.

**Overall Recommendation 3** – *Include environmental performance aspects in bearings catalogue.*

By including relevant aspects of environmental performance in the bearings catalogue, SKF emphasizes the importance environmental performance has as part of the SKF value offer.

**Recommendation for environmentally aware customers** – *Communicate LCA on a more complex and comprehensive level.*

- Include all parameters measured in a LCA, not just CO<sub>2</sub> → “more is more”.
- Communicate LCA regarding all products, not just Beyond Zero products.
- Use visual tools.

Both literature study and empirics point in the same direction: LCA is a successful way to communicate product specific environmental performance, PSEP™. LCA is a truly comprehensive evaluation process for a products environmental footprint from its construction to its end life solution. LCA is also a well-known evaluation tool in the industry and is connected to credibility and a commitment regarding environmental aspects. It is an extensive work to conduct high quality LCA and SKF should in a higher extent communicate and use information gathered in its life cycle analyses and not just communicate CO<sub>2</sub>-equivalences.

Well aware customers can handle extensive data, and research states that it is better to include a large amount of data rather than too little. It may be hard to obtain, since LCA is costly and time-consuming, but to communicate and conduct LCA regarding more products could be beneficial. Hence SKF shows a true commitment towards sustainability and can further enhance the company’s brand image and goodwill. It will also in a higher extent help the customer conduct own life cycle analysis and environmental goals and thereof give the customer a higher value.

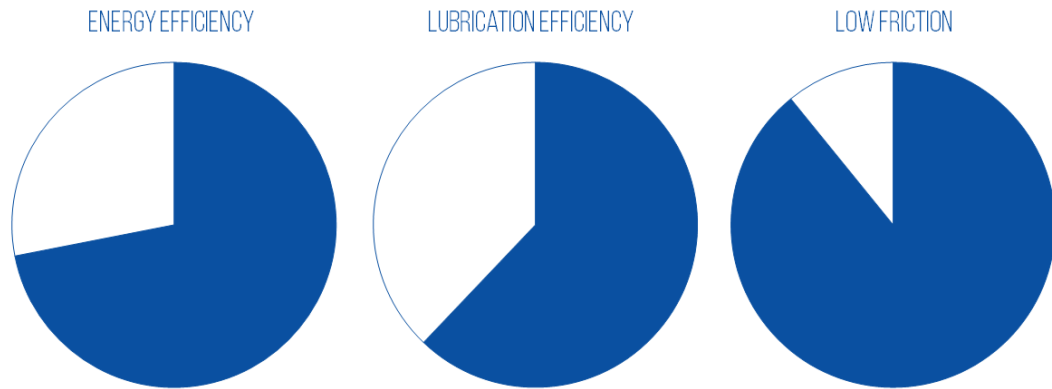
As presented in theory, it is important to include visual tools in the customer communication. Since LCA is so extensive with a large amount of different measurements and parameters, charts and diagrams can strengthen the communications appeal.

**Recommendation for environmental unaware customers** – *Communicate effective and easily comprehensible information in every customer contact.*

- Have an illustration of fundamental environmental parameters printed on every bearing packaging. Must be concrete and eye catching.

By consistently communicating easily accessible environmental information not yet aware customers can be educated and motivated regarding environmental aspects and sustainability. This can be seen in B2C companies today, where environmental performance is communicated in every customer contact by incorporate information in product design and packaging. By printing three to four different PSEP on every bearing packaging environmental performance can on a higher extent be connected to product performance and customer value. But it is once again important to communicate performance that the customer can relate to and find valuable.

An example of how the information can be illustrated is presented in figure 12 below. It is in this model presumed that a half circle symbolizes the standard product, and a full circle is an excellent product regarding that specific environmental performance.



**Figure 12** Example of how fundamental environmental parameters can be displayed on bearing packaging

## 7.5 Final Thoughts

The literature study, empirics, and evaluation of SKF's environmental efforts all point to the same direction: it is crucial for environmental performance to align with customer value and that this is something that companies struggle with today. B2B companies believe that the customer demand for environmental performance is low. In fact, it is environmental performance that is unrelated to customer value that customers do not demand. When environmental performance is correctly communicated to customers and the benefits are highlighted, the customer demand arises. If the customers' only focus is financial saving or low costs, environment aspects need to be communicated as something that can lower the operation cost. If the customers' main concern is to buy components with a long life time, product specific environmental performance, PSEP™, related to this should be communicated. Environmental aspects are not always the selling point but can always be communicated and connected to other aspects of performance.

This report proposes that the perceived customer value does not necessary have to be connected to the products performance, on the contrary, customer value can also be found in efforts connected to sustainable supplier brand image, SSBI™. These efforts can help the customer build its own organization as sustainable and obtain goodwill and a strong corporate brand.

Companies tend to have an internal focus regarding environmental efforts; focusing only on fulfilling their own environmental goals or ethical policies. However, to successfully use environmental efforts in communication with customers the perspective has to be wider. B2B companies must look at the entire supply chain and understand how its actions positively affect the actors closer to the end user and how to communicate this to its customers.

To summarize some key learning:

- (1) Know your customer and construct the communication to suit your specific customer segments as well as possible.
- (2) Communicate relevant information regarding both products specific environmental performance, PSEP™, and sustainable supplier brand image, SSBI™, and apply a supply chain perspective.

(3) Environmental performance is like every other performance, it must be credible, communicated in a way that customer understand and can relate to, and it must fulfill customer demand.

When this is obtained a B2B company can have the best of two worlds; building its own brand as sustainable and at the same time gaining a strong competitive advantage by giving the customer what others fail to do.





# 8 Academic Contribution and Future Research

*This chapter will state the academic contribution of this project and the areas in need of further research.*

The benefits of environmental efforts and environmental communication are subject to many studies. This project has disregarded the effectiveness of environmental effort and focused only on their appropriateness in communications. As such, the academic contribution of this project lies in the field of environmental communication. While there is much research concerning environmental communication in B2C marketing, distinctly less has been written about environmental communication in B2B marketing. What has been written focuses mainly on the use of EMS certification in communications and other isolated environmental communication possibilities such as environmental labeling and building brand image through SSCM.

This project contributes academically by presenting guidelines for developing efficient environmental communications in a B2B setting and makes a distinction between communication of product specific environmental performance, PSEP™, and overall environmental performance which enhances sustainable supplier brand image, SSBI™.

Furthermore, the focus of this project is bearings, an industrial component, and the project examines environmental communication from the perspective of a company that is buried in the value chain. This project is in many aspects a case study but the data gathering process has taken many different points of view into consideration and we feel that the results are sufficiently significant to be generalized.

Existing research calls for cooperation and collaboration to achieve successful sustainability work throughout the supply chain. Future research should aim to investigate how this should be achieved and which role environmental communication plays in building sustainable supply chains and directing the market towards sustainability.



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# Appendix 1 – Benchmarking Interview Guide, Swedish

**KQ:** *Which kinds of environmental performance aspects are most valuable to promote?*

Hur ser er promotion för era produkter ut, i allmänhet? Vilka argument är bäst för er?

Hur transparenta är ni mot era kunder gällande miljöprestanda och ursprungsmärkning (m&u)?

Är detta m&u något som efterfrågas av kunder? Hur kommunicerar ni m&u till kunder?

Har ni delat in era produkter i olika miljöklasser eller på något annat sätt utifrån miljöprestanda?

Märker ni att ni säljer mer av produkter för att de är “miljövänliga”?

Hur starkt anser ni att miljöprestanda är jämfört med andra produktattribut?

Hur viktigt är det för er att ha ett varumärke som kan kopplas samman med miljömässig hållbarhet?

Anser ni att miljökommunikation bäst används för att stärka varumärket och ge goodwill (ökar indirekt försäljningen) eller kan det fungera som en direkt parameter för att öka den direkta försäljningen?

**KQ:** *How can these aspects be verified and communicated?*

Vilka mått, specifikation, standarder använder ni för att fastställa ert miljömässiga hållbarhetsarbete?

Hur verifierar ni detta?

Är det allmänt vedertagen verifiering?

Hur väljer ni att lyfta fram och / eller marknadsföra specifika produkter som ni deklarerar som “miljövänliga” (om företaget har några sådana)

Vilka verktyg använder ni (om ni använder några)? (LCA o.dyl.)

Vilka plattformar använder ni? (egna hemsidan, direktkontakt, klassisk reklam)

**KQ:** *How shall the preferred method or tool for verifying and communicating environmental performance be used in the launch?*

Hur lyfter ni in miljömässig hållbarhet i er FoU, produktframtagning?



# Benchmarking Interview Guide, English

**KQ:** *Which kinds of environmental performance aspects are most valuable to promote?*

How does the promotion of your products look, in general? Which arguments are best for you?

How transparent are you towards your customers regarding environmental performance and origin labeling?

Is this something your customers ask for? How do you communicate environmental performance and origin to your customers?

Have you divided your products into environmental classes or in any other way based on environmental performance?

Do you sell more of your products because they are environmentally friendly?

How do you think environmental performance relates to other product attributes?

How important is it for you to have a brand that is connected to environmental sustainability?

Do you believe environmental performance to be best used to enhance corporate image and strengthen the brand (indirectly increasing sales) or as a parameter which directly increases sales?

**KQ:** *How can these aspects be verified and communicated?*

Which measurements, specifications and standards do you use to determine the quality of your environmental efforts?

How do you verify this?

Is the verification / verification process generally accepted?

How do you market specific products which you declare to be environmentally friendly? (If the company has any labeled as such.)

Which tools do you use, if any? (LCA and similar.)

Which platforms do you use? (Web page, direct customer contact and similar.)

**KQ:** *How shall the preferred method or tool for verifying and communicating environmental performance be used in the launch?*

How do you work with environmental sustainability in product development?



# Appendix 2 – Sales Interview Guide, Swedish

Hur går den generella säljprocessen till? Vad går bra resp. vad hade kunnat fungera bättre?

Hur mycket vägledning får du som säljare idag gällande vad du ska förmedla/kommunicera?

Hur går den initiala kontakten till med nya kunder? med befintliga kunder?

Vilken typ av prestanda efterfrågar kunder vanligen?

Är det några specifika siffror, utöver bäringstal, som vanligtvis efterfrågas?

(Hur många kunder har du ansvar över? )

## **Miljö**

Efterfrågar kunder miljöegenskaper?

Vilka i sådana fall?

Är kunder intresserade av SKF's generella hantering av hållbarhet? (Sustainable supplier.)

Om kunder inte frågar om miljö, är detta något som du ändå väljer att lyfta upp?

Känner du att du har de rätta kunskaperna kring miljö och hållbarhet eller hade du önskat mer intern utbildning?

Nämns det någonsin i en säljprocess om en produkt är en Beyond Zero produkt?

Hur kommuniceras Beyond Zero (om alls)?

Är kunder bekanta med Beyond Zero eller E2? (Om de inte nämns i er kommunikation.)

Vad anser du om att miljöklassificera produkttyper eller produktlinjer? (Likt E2.)

## **Övrigt**

Tanken är att vi ska producera riktlinjer för marknadsavdelningen hur miljöprestanda ska kommuniceras och vad som ska kommuniceras, upplever du att detta behövs?



# Sales Interview Guide, English

Can you describe the general sales process? What works well and what could be improved?

How much guidance do you receive regarding what you should communicate to customers?

What does the initial contact with new customers look like? With existing customers?

Which type of performance do customers generally demand / request?

Are there any specific measurements that are usually requested?

(How many customers do you handle?)

## **Environment**

Do customers ask about environmental attributes?

Which?

Are customers interested in SKF's general handling of sustainability (sustainable supplier)?

If customers do not ask about environmental issues, do you bring it up?

Do you feel that you have the right knowledge about environmental performance and sustainability or do you wish for more internal education on the subject?

Does it ever come up during the sales process if a product is a Beyond Zero product?

How is Beyond Zero communicated, if at all?

Are customers familiar with Beyond Zero or E2?

What do you think about environmental classification of products or product lines?

## **Other**

We are supposed to develop guidelines for communicating environmental performance, do you believe this is needed?