Aalto University
School of Economics

Developing sustainability reporting - Case Cargotec

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Abstract
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DEVELOPING SUSTAINABILITY REPORTING – CASE CARGOTEC

PURPOSE OF THE STUDY

The purpose of this master's thesis is to answer a research question commissioned by the global cargo handling solutions provider Cargotec: *what do stakeholders think about Cargotec's sustainability reporting and whether they would like it to be developed?* Related to this is a sub-question: *should Cargotec's sustainability reporting focus on Global Reporting Initiative (GRI) indicators or on the impacts of using the company's products?* The GRI indicators focus on the manufacturing stage of the product life cycle, even if the use stage causes environmental and social impacts also.

RESEARCH METHOD

The research method was an empirical case study. Semi-structured interviews were conducted both with Cargotec representatives and among the key stakeholders of Cargotec's sustainability reporting, which were identified as analysts and large customers. In addition, a sustainability reporting expert was interviewed.

RESULTS

Most of the stakeholders thought that the key issues are covered in Cargotec's sustainability reporting. They presented various suggestions for developing the reporting but findings indicate that it is not cost-effective to implement all of them. Stakeholders' suggestions for improvement were therefore classified into those that should be implemented now and those that could be considered in the future. The suggestions to be implemented are: 1) figures should be put in context, i.e. reported relative to the amounts of production or employees, 2) goal setting should be included in the reporting and reporting on targets should be transparent, and 3) coverage of the reporting should be extended to the whole supply chain, i.e. there should be indicators about suppliers and products as well. The last suggestion for improvement answers also to the sub-question: in stakeholders' opinion, Cargotec's sustainability reporting should focus equally on the sustainability impacts of the company's own operations as well as of using the products.

Some of the findings can be useful to other companies as well. For example, the study indicates that stakeholders appreciate balanced, reader-friendly sustainability reporting with a life cycle perspective. The finding that stakeholders expect basic elements from reporting is encouraging to all reporters: even small amendments can help them meet stakeholders' expectations for sustainability reporting. Moreover, the study suggests that satisfying different stakeholders' information needs might not be such a great challenge in reality. However, the use of multiple communication channels seems necessary.

KEYWORDS

Sustainability reporting, Global Reporting Initiative (GRI), Cargotec

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VASTUULLISUUSRAPORTOINNIN KEHITTÄMINEN – CASE CARGOTEC

TUTKIELMAN TAVOITTEET

Tutkimuksen tavoitteena on ratkaista lastinkäsittelyratkaisujen globaalin tarjoajan Cargotecin toimeksiantama tutkimuskysymys: *mitä mieltä sidosryhmät ovat Cargotecin vastuullisuusraportoinnista ja haluaisivatko he sitä kehitettävän?* Tähän liittyy myös alakysymys: *tulisiko Cargotecin vastuullisuusraportoinnin keskittyä Global Reporting Initiative (GRI) -indikaattoreihin vai tuotteiden käytön vaikutuksiin?* GRI-indikaattorit painottuvat valmistusvaiheeseen tuotteen elinkaaressa, vaikka myös tuotteiden käyttövaihe aiheuttaa ympäristö- ja sosiaalisia vaikutuksia.

TUTKIMUSMENETELMÄ

Tutkimusmenetelmänä oli empiirinen case-tutkimus. Lähdeaineisto kerättiin puolistrukturoitujen haastattelujen avulla, haastattelemalla sekä Cargotecin edustajia että keskeisiä vastuullisuusraportoinnin sidosryhmiä, joiksi tunnistettiin analyytikot ja suuret asiakkaat. Lisäksi haastateltiin vastuullisuusraportoinnin asiantuntijaa.

TULOKSET

Valtaosa sidosryhmien edustajista oli sitä mieltä, että Cargotecin vastuullisuusraportoinnissa on käsitelty olennaisimmat asiat. Haastateltavat esittivät useita kehitysehdotuksia raportoinnille, mutta kaikkien niiden toteuttaminen ei olisi kustannustehokasta. Kehitysehdotukset luokiteltiin näin ollen niihin, jotka tulisi toteuttaa nyt sekä niihin, joita voidaan harkita tulevaisuudessa. Toteutettavat ehdotukset ovat: 1) luvut tulisi laittaa kontekstiin eli raportoida suhteessa tuotannon tai työntekijöiden määrään, 2) tavoiteasetanta tulisi sisällyttää raportointiin ja tavoitteista raportoinnin tulisi olla läpinäkyvää, ja 3) raportoinnin tulisi ulottua koko tuotantoketjuun ja sisältää indikaattoreita myös alihankkijoista ja tuotteista. Viimeinen kehitysehdotus vastaa myös alakysymykseen: sidosryhmien mielestä Cargotecin vastuullisuusraportoinnin tulisi keskittyä yhtä lailla sekä yrityksen oman toiminnan että tuotteiden käytön vaikutuksiin.

Osa tutkimustuloksista voi olla hyödyksi myös muille yrityksille. Tutkimuksen tulokset esimerkiksi osoittavat, että sidosryhmät arvostavat tasapainoista, lukijaystävällistä vastuullisuusraportointia, jossa on elinkaarinäkökulma. Kaikkien raportoijien kannalta on kannustavaa, että sidosryhmät tuntuvat odottavan peruselementtejä raportoinnilta: pienetkin parannukset voivat auttaa täyttämään sidosryhmien odotukset vastuullisuusraportoinnille. Lisäksi tutkimus viittaa siihen, että eri sidosryhmien informaatiotarpeiden tyydyttäminen ei välttämättä todellisuudessa ole merkittävä haaste. Useiden eri viestintäkanavien käyttö näyttää kuitenkin olevan tarpeen.

AVAINSANAT

Vastuullisuusraportointi, Global Reporting Initiative (GRI), Cargotec

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Contents

1. Introduction

1.1. Research problem and background

Over the past two decades interest in the environmental and social impacts of corporations has been increasing (Davis & Searcy 2010). As a result of stakeholders' demands for information, sustainability reporting has become practically mandatory especially for multinational companies (KPMG 2011). The names of the reports vary, including for example corporate responsibility, sustainability, and corporate social responsibility reports (Roca & Searcy 2012). That is why these terms are used interchangeably also in this master's thesis.

Various reporting guidelines have been published to guide companies in developing their sustainability reports. Among these are the Global Reporting Initiative (GRI) guidelines, which "have become the de facto international reporting standard" (MacLean & Rebernak 2007, p. 1). The GRI sustainability reporting framework includes the principles and performance indicators which organisations can use to measure and report their economic, environmental, and social performance – also known as the triple bottom line (GRI website).

Prior studies suggest that GRI reporting is beneficial for a company's reputation (Nikolaeva & Bicho 2011), for investors' screening of investments (Willis 2003), and for reducing information asymmetries between managers and investors (Schadewitz & Niskala 2010). Interestingly, a recent book by Sullivan (2011) disagrees with these findings and claims that companies do not understand investors' interests. According to Sullivan, even though companies see investors as one of the key stakeholders of sustainability reporting, most investors perceive these reports as irrelevant to their decision-making. Moreover, the author suggests that investors have not succeeded in explaining to companies what kind of information they are interested in. Besides, there are still questions on the information that the reports should include and on how they should be structured (Davis & Searcy 2010). This controversial background provides an interesting starting point for examining how companies could develop their sustainability reporting to better meet stakeholder expectations.

This master's thesis aims to examine the topic through an empirical case study, through a research problem commissioned by the global cargo handling solutions provider Cargotec: should the company develop its sustainability reporting and issue selection? Cargotec's annually reported key environmental indicators were chosen together with various company representatives (Cargotec's key environmental figures 2010) but stakeholders were not directly involved in the indicator selection process.

In 2011 for the first time, Cargotec's annual report was based on the GRI guidelines in order to meet stakeholder expectations for reporting. The GRI reporting framework focuses on site-specific inputs and outputs, ignoring the environmental impacts occurring upstream and downstream of the company site (Kaenzig et al. 2011). However, according to a master's thesis study (Rasi 2009) and a VTT (2011) customer report prepared for Cargotec, the most significant environmental impacts of the company are caused not at the company sites but instead while using the products, i.e. at the use stage of the product life cycle. Therefore, it is questionable whether the widely used GRI framework is actually very relevant for describing the environmental impacts of Cargotec.

Specifically, the research question is: *what do stakeholders think about Cargotec's sustainability reporting and whether they would like it to be developed?* Related to this is a sub-question: *should Cargotec's sustainability reporting focus on Global Reporting Initiative (GRI) indicators or on the impacts of using the company's products?*

The study is relevant to not only Cargotec but possibly also other companies that seek to meet stakeholders' expectations for sustainability reporting. From the theoretical point of view, the study adds to the corporate sustainability reporting literature by presenting an interesting case example.

1.2. Research method and data

The research method was an empirical case study designed for the commission by Cargotec. After investigation of relevant prior research, semi-structured interviews were conducted both with Cargotec representatives and among the company's stakeholders in order to gather empirical information. The purpose of the first interviews was to get background information and to identify the key stakeholders of Cargotec's sustainability reporting, i.e. the report users. Based on the findings from the Cargotec interviews, the stakeholders to be interviewed for the study were identified as large customers and analysts. All of Cargotec analysts and the customers' Purchasing Managers and Corporate Responsibility Managers were contacted and those who replied were interviewed. Additionally, a consultant from Tofuture, which is a company specialised in sustainability reporting, was interviewed in order to gain an expert insight into sustainability reporting. After the interviews, the empirical findings were analysed and compared to prior research. Based on the study, conclusions were finally presented in the form of a recommendation, as suggestions how Cargotec could develop its sustainability reporting to meet key stakeholders' expectations.

1.3. Research limitations

The fact that sustainability is not an unambiguous term can affect findings. Therefore, when interpreting the results, it should be kept in mind that interviewees' perceptions of sustainability can be somewhat different. Naturally, the results cannot be straightforwardly generalised into other contexts. They are only indicative to other companies that are facing the same questions.

The researcher also works within the case company as Environment, Health & Safety (EHS) Trainee. Her key responsibility is EHS accounting. Even though this provided a deeper understanding of the research area, it also opened up the possibility of problems related to subjectivity. This limitation was tackled by the researcher consciously paying attention to being as objective and neutral as possible. Moreover, all the interviews were taped so direct quotes could be used to express the opinions of the interviewees.

1.4. Structure of the thesis

This master's thesis consists of seven chapters. This introductory chapter 1 has presented the research problem and background as well as the approach to conducting the study. Chapter 2 continues with a sustainability reporting literature review, including a review of stakeholders' information needs for sustainability reporting, some of the common challenges related to it, as well as suggestions for effective reporting. Chapter 3 contrasts two different approaches to sustainability reporting, the GRI approach and the life cycle approach. Chapter 4 describes the research method and data in more detail. Chapters 5-7 cover the empirical part of the thesis. Chapter 5 describes sustainability reporting at Cargotec while chapter 6 presents the findings from interviews with Cargotec's key stakeholders. Chapter 7 discusses the findings and finally concludes the thesis.

2. Sustainability reporting literature review

2.1. Background of sustainability reporting

Interest in the environmental and social impacts of corporations has been increasing over the past two decades (Davis & Searcy 2010). There has been a shift from voluntary information disclosure by companies to demanded information, referred to as 'solicited' disclosures, which can be seen as a natural consequence of the growing pressures on corporations to be responsible (Van der Laan 2009). Many companies are already starting to recognise sustainability reporting as a business imperative, providing financial value and driving innovation (KPMG 2011).

Consequently, more and more corporations publish sustainability reports. 95% of the 250 largest companies in the world now report on their corporate responsibility activities. Corporate responsibility reporting has even become "virtually mandatory for most multinational companies, almost regardless of where they operate around the world." (KPMG 2011, p. 6) In Finland, approximately 500 companies and other organisations report on their responsibility activities either along with the annual report or in a stand-alone sustainability report (Finnish Business & Society 2011a). Between KPMG's studies in 2008 and 2011, the share of the 100 largest Finnish companies who report on their corporate responsibility initiatives increased by 41% to 85%. Corporate responsibility reports are typically released annually, usually three to six months after the end of the financial year (Sullivan 2011).

Despite their wide coverage, there exists no universally accepted definition of a corporate sustainability report (Roca & Searcy 2012). Daub (2007, p. 76) defines a sustainability report as a report that must include "qualitative and quantitative information on the extent to which the company has managed to improve its economic, environmental and social effectiveness and efficiency in the reporting period and integrate these aspects in a sustainability management system." In a similar vein, the World Business Council for Sustainable Development (WBCSD 2002, p. 7) defines sustainable development reports as "public reports by companies to provide internal and external stakeholders with a picture of corporate position and activities on economic, environmental and social dimensions."

To guide corporations in developing corporate responsibility reports, various reporting guidelines have been published, including the GRI guidelines, which "have become the de facto international reporting standard" (MacLean & Rebernak 2007, p. 1). The names of the reports vary, including sustainability, sustainable development, corporate social responsibility, corporate responsibility, triple bottom line, and accountability reports (Roca & Searcy 2012).

In most countries it is voluntary to report on corporate responsibility matters (Roca & Searcy 2012). According to Popa & Peres (2008), voluntary disclosure is an important part of current corporate reporting practices since mandatory reporting requirements are often inadequate for satisfying report users' information needs. Voluntary corporate responsibility reporting completes financial reports with information that can enhance the report users' understanding of company value drivers such as human capital, corporate governance, the management of environmental risks and liabilities, and the capability to innovate (Eccles et al. 2001). Moreover, it permits a company to distribute value-relevant information, and so provides opportunities to influence stakeholders' perceptions concerning the future financial prospects of the firm (Brammer & Pavelin 2008). Indeed, Schadewitz & Niskala (2010) note that the quality of responsibility reporting and management can help investors to distinguish efficient companies.

Corporate responsibility reporting can even help companies achieve competitive advantage: possible benefits include better management of environmental, social, and governance (ESG) impacts as well as overall risk and improved company reputation, resulting in a greater ability to attract and retain both customers and employees (MacLean & Rebernak 2007). KPMG (2011) suggests that even greater value will be gained through integrated reporting, by treating both financial and sustainability information as part of the company's comprehensive business performance reporting. Also more generally, several benefits are related to improving corporate disclosure: increased firm credibility, increased share value, increased number of potential investors, several suggestions from analysts, improved access to capital, increased balance between the share's price and the share's profit, diminution of share volatility, increased share liquidity, improved relations with suppliers, as well as less political interventions to regulate the market (Eccles & Mavrinac 1995).

As organisations look to validate and certify their corporate responsibility reports, external assurance is becoming more common. Assurance can provide several benefits, including enhanced credibility, opportunities to identify process and performance improvements, as well as opportunities for organisations to sharpen their corporate responsibility reporting to provide more value to management, customers, investors, and other stakeholders. (KPMG 2011)

Integrated reporting, in which corporate responsibility reporting is integrated into financial reporting, can be seen as the next step in corporate reporting. In the preface of *Tomorrow's Corporate Reporting* by CIMA et al. (2011), professor Mervyn E. King argues that financial reporting is no longer enough to make an informed assessment about the sustainability of a business in the new economy in which "human resource, financial, capital, information technology, natural capital and society are all critically interdependent and create value." He suggests that in the future, the annual report has to be an integrated one, with a holistic account of the financial and non-financial performance of the company. Also in Finland the trend is towards integrated reporting (Finnish Business & Society 2011a). The International Integrated Reporting Committee (IIRC) was established in 2010 in order to develop a globally accepted integrated reporting framework that combines financial, environmental, social, and governance information in a clear, concise, consistent, and comparable format (KPMG 2011).

2.2. Content of sustainability reporting

Despite the fact that several sustainability reporting frameworks have been presented – or because of that – there are still questions on the information the reports should include and on how they should be structured (Davis & Searcy 2010). Although voluntary responsibility reporting guidelines and industry best practices can be used as a starting point, there is still a lot of discretion in determining what information to disclose (Roca & Searcy 2012).

Davis & Searcy (2010) compare previous content analyses of corporate sustainability reports. According to their findings, there is a wide variety of perspectives on what should be included in the reports. However, there are some similarities in terms of what the content analyses focused on. For instance, all the studies assessed whether stakeholder relations were covered. The majority of the studies examined whether the GRI guidelines were adopted by the companies, whether there was a statement from management, if there was a corporate governance section, if there was integration with annual reports, if the sustainability reports were stand-alone vs. integrated, if the reports explicitly addressed materiality, if the report was externally verified, if the reports mostly used GRI-based indicators, if there was special treatment of climate change, and if issues related to the supply chain were addressed in some way.

According to Roca & Searcy (2012), only few studies have examined which specific indicators corporations disclose. These studies include a review of 17 corporate sustainability reports published by Greek companies (Skouloudis & Evangelinos 2009) and an analysis of the use of the GRI indicators in 19 Spanish companies (Gallego 2006). In Greece, the most frequently disclosed environmental indicators were energy and water consumption, carbon dioxide emissions, and internal initiatives to improve energy efficiency. Regarding social indicators, issues such as workplace health & safety policies and measures, employee education and skill management, and the benefits that employees receive from the organisation beyond those that are required by law were commonly reported. (Skouloudis & Evangelinos 2009) In Spain, the most commonly reported environmental indicators were related to energy, water, biodiversity and emissions, effluents and waste, while the most frequently reported social indicators were related to labour, practices and decent work, strategy and management, non-discrimination, freedom of association, child labour and forced and compulsory labour (Gallego 2006).

Using a larger sample, Roca & Searcy (2012) identify the indicators currently disclosed in corporate responsibility reports. Their analysis covered 94 Canadian reports from 2008. The findings demonstrate a high variety in disclosure: a total of 585 different indicators were used in the reports. The typical length of the reports was between 40 and 45 pages and the number of indicators per report varied from 0 to 62 with a mean number of 19.5 indicators per report. Although the exact names of the indicators varied, all three areas of the triple bottom line were widely addressed. Almost half of the corporations (47.9%) reported using the GRI G3 guidelines.

Roca & Searcy (2012) found that all of the most common indicators reported by Greek (Skouloudis & Evangelinos 2009) and Spanish (Gallego 2006) companies were also reported by the Canadian corporations. For instance, sales and benefits were some of the most widely reported economic indicators in all studies. Environmental indicators regarding energy and water were also commonly reported. Similarly, in all three studies the social indicators focused on donations, labour practices, and the breakdown of the workforce.

Roca & Searcy (2012) conclude that since different corporations face different expectations and demands from their stakeholders, it might be necessary for them to report different indicators in order to be perceived as legitimate. Moreover, the authors note that if corporations have different priorities for different stakeholders, different indicators might be disclosed accordingly.

2.3. Stakeholders' information needs for sustainability reporting

2.3.1. Users of corporate sustainability information

Deegan & Rankin (1997, p. 569) suggest that the users of corporate environmental disclosures extend beyond shareholders as companies "have a wide accountability to various parties within the community, an accountability that extends beyond those with a direct financial interest in the organisation." Indeed, a variety of stakeholder groups are currently demanding information on both social and environmental issues (Daub 2007).

Yet KPMG & SustainAbility (2008) remark that little attention has been focused on the readers of corporate responsibility reports. Their survey of almost 2,300 respondents worldwide claims to be the first extensive study about who actually reads corporate responsibility reports and what they do with them. According to KPMG & SustainAbility, corporate responsibility report users include investors, employees, customers, journalists, communities, non-governmental organisations (NGOs), academics, and individuals. In addition, rating and ranking providers (Brown et al. 2009) as well as governments (Sullivan 2011) are other groups of report users. According to the Finnish Business & Society (2011b), the salient readers of corporate responsibility reports include analysts, civic organisations, and the media, as well as students. The relative importance of these stakeholders differs from company to company (Sullivan 2011).

Companies need not only respond to various stakeholder groups' information needs, but moreover to differing needs among those groups. For instance, investors are not homogenous in terms of how they integrate environmental and social issues into their decision-making, the specific issues they emphasise or the weight that they give to environmental and social factors versus other drivers of company performance (Sullivan 2011).

Brown et al. (2009) suggest that mainstream institutional investors, NGOs, and the media have not been showing very much interest in sustainability reports. The reasons cited include uneven data quality and trustworthiness of reports, selective reporting by companies, as well as excessive and unfocused information. However, this view has been challenged recently. Sullivan (2011) suggests that the investment community is now widely seen as one of the key audiences of corporate responsibility reporting. This, according to the author, is because with nearly a thousand large investment institutions having signed the UN-backed Principles for Responsible Investment (PRI Initiative website) and similar numbers supporting the Carbon Disclosure Project (CDP website), responsible investment has become mainstream investment practice. Sullivan explains that responsible investment refers to investors considering environmental, social, and governance issues in their investment decision-making.

2.3.2. Uses for corporate sustainability information

There is much debate on how the information disclosed is used in reality (Davis & Searcy 2010). KPMG & SustainAbility (2008) suggest that even reporters themselves usually have little insight into who reads their reports and why. Without this information, it is impossible to know whether users' information needs are satisfied or whether readers think that the report provides a complete and credible disclosure of corporate sustainability performance.

According to Sullivan (2011), it is possible to use corporate responsibility information to:

- Address yes/no questions, e.g. whether or not a company has a human rights policy.
- Assess performance on a relative basis, e.g. compared to peers.
- Quantify the financial implications of specific aspects of social or environmental performance, e.g. costs of complying with new regulations.

- Assess the performance of a company in the context of wider social or environmental impacts, e.g. how much the company contributes to national greenhouse gas emissions or how the company is exposed to sustainability issues such as water scarcity.
- Identify risks and opportunities, e.g. poor management practices or innovative strategies.
- Assess the quality of a company's governance and risk management frameworks.

The survey by KPMG & SustainAbility (2008) indicates that readers use the reports to improve their understanding of the reporter and its approach to sustainability, for benchmarking, to inform education or research, and as the basis for further action, including which products to buy, which companies to do business with or work for, how to direct public action, or to make investment/divestment decisions. Even if readers would not take direct action after reading a report, the survey finds that reporting can still contribute to the longer term company reputation.

Studying shareholders' information needs specifically, De Villiers & Van Staden (2010) find that the reason why shareholders need detailed and specific environmental information from companies is for investment decision-making purposes, in order to reduce information asymmetry. Other reasons that shareholders mentioned for the need of environmental information were accountability and own interest.

2.3.3. Corporate sustainability information users' needs

The basic question of sustainability report readers is how sustainable the company is and how it is improving its sustainability performance (Isaksson & Steimle 2009). However, various stakeholder groups might also have more detailed information needs and the ability of corporate responsibility reporting to fulfil these needs remains an issue (Cormier et al. 2011).

According to Sullivan (2011), stakeholders' information needs should be evaluated through materiality analysis, in which the major stakeholders and the importance they give to environmental and social issues are identified. In this context, stakeholders' expectations for corporate responsibility governance, management systems and processes as well as reporting should be considered also. Once the company has gone through the process of understanding stakeholders' interests, the author suggests that they then need to decide what they are hoping to achieve through stakeholder dialogue and corporate responsibility reporting. As a result, Sullivan concludes that sustainability reporting should focus on the major issues that are of concern to the business and its major stakeholders.

Somewhat surprisingly, the KPMG & SustainAbility (2008) survey indicates that various reader groups tend to have the same expectations for a quality sustainability report. The main differences between the reader groups were seen in the ways they use the reports, mainly because of their differing roles in society. Another difference is that many issues considered material by other stakeholders may not be material to investors who focus on financial materiality (Sullivan 2011).

According to KPMG & SustainAbility (2008), readers think that good corporate responsibility reports should include the following:

- A link between sustainability strategy and overall business strategy: how sustainability strategy connects with core business strategy;
- Commitment to sustainability: what reporters consider sustainability to be in the context of their business;
- Sustainability impact of the organisation: reporter's total footprint, including direct and indirect sustainability impacts;
- Actions taken to address sustainability issues: how reporters respond to the issues across strategy, operations, product development and other aspects of business;
- Innovative thinking: what products, services or business models will drive reporters' sustainability performance and business value in the future;
- Translation of sustainability into (local) business: how sustainability strategy and central policy are implemented at the local level.

Also Elijido-Ten et al. (2010) find that different stakeholder groups share the same views about what kind of environmental disclosures a company should make, even if the motivations behind those views differ. According to the authors, the preferred form of disclosure across all stakeholder groups is for companies to "defend" in the sense of disclosing the issue and then explaining the reasons behind it and/or what has been done to address the issue. Similarly, De Villiers & Van Staden (2010) find that individual shareholders in Australia, the UK, and the US demand corporate disclosure of the same kinds of environmental information. Disclosure of an overview of environmental risks and impacts, the environmental policy, performance against measurable targets, and information on environmental costs and liabilities are called for and most shareholders require environmental disclosures to be audited.

Interestingly, the KPMG & SustainAbility (2008) survey finds that even non-readers share the same expectations for quality reporting. Over 450 of the nearly 2,300 respondents said that they do not read corporate responsibility reports. This, they explained, was because they feel they can use more direct means to satisfy their information needs, and because reports are too long or not valuable to them. Direct contact with the reporter, the media, and discussions with employees, suppliers, and NGOs were mentioned as key sources of information.

Another reason for not reading corporate responsibility reports could be related to their coverage. Kaenzig et al. (2011) argue that current corporate environmental disclosures do not satisfy stakeholders' information needs since they generally do not consider the whole life cycle of a product and consequently do not allow for identification of environmental priorities, opportunities and risks. Related to this, KPMG & SustainAbility (2008) suggest that if a company has significant sustainability impacts through its supply chain or the use of its products by customers, readers would expect these issues to be included in reporting – reporters should not just state what these sustainability impacts are, but also what they are doing about them.

So, Kaenzig et al. (2011) propose that stakeholders' needs would be better met with:

- An overview of the total and most important environmental impacts caused by the company's products.
- More reliable, more complete, and more accurate data.
- Standardised corporate environmental disclosures with a life cycle perspective.
- Product- and sector-specific key performance indicators.

Similarly, KPMG & SustainAbility (2008) suggest several areas of improvement. First of all, the survey finds that readers would like to see a greater role for stakeholders in reporting. They call for engaging stakeholders in issue selection, incorporating their feedback into strategy and targets, and involving critical stakeholders. Disclosing both good and bad news is seen as a key factor in demonstrating credibility and commitment to sustainability. Readers would like reporters to present the business benefits of addressing sustainability issues and to explain how innovative thinking is used to solve sustainability issues. Readers want reporters to use well-regarded, globally-applicable guidelines in order to improve the quality and comparability of reports. The GRI guidelines were regarded as the most relevant option by the majority of respondents, so adopting them should help in meeting readers' expectations. Most readers think that assurance is needed, both on sustainability reports and on sustainability performance. Readers felt that the single most significant omission in sustainability reports was an acknowledgement of the company's failures, which is clearly another area of improvement.

In the future, readers said they expect to see reports based on continuous stakeholder dialogue; new and more active readers and a higher proportion of readers using reports for their decision-making; reliability and comparability, provided through globally accepted standards and stronger assurance processes; the end of sustainability reports, i.e. the information integrated into annual reports and other communications; and easy access to information through a variety of communication channels (KPMG & SustainAbility 2008).

2.4. Challenges of sustainability reporting

In corporate responsibility reporting, companies should balance the needs and interests of their various stakeholders. However, Sullivan (2011) suggests that even though corporate responsibility reporting has been criticised by stakeholders, it is often not clear what information they are looking for and how they might use this information. The author states that as a result, companies have difficulties in effectively communicating on corporate responsibility matters and many companies feel that the information they provide is ignored.

Besides, companies are uncertain about the value of corporate responsibility reporting, which may involve significant costs (Nikolaeva & Bicho 2011). Voluntary disclosure entails costs related to collecting, processing, attaining, and auditing of data (Popa & Peres 2008). Moreover, the danger of supplying sensitive information which could be used by competitors can be regarded as an indirect cost. For example Daub (2007) found that due to being afraid of possible competitive disadvantages related to publishing ecological and/or social performance indicators, many companies failed to report information that was available and in principle could have been published. So, companies have to make trade-offs between the information that is requested and that which they can provide (Sullivan 2011). Popa & Peres (2008) suggest that a cost-profit analysis must be done for each type of information disclosed. However, the authors warn that the process is complex, subjective, and often inappropriate, sometimes inexact or even wrong since any generally accepted techniques of measuring these costs and profits do not exist.

No standard report structure has emerged (Sherman 2009) but reporting standards have increased all the time. With such a large supply of guidance, companies face the challenge of how to optimise their standard selection and implementation (Vurro & Perrini 2011). Moreover, reporting guidelines may not be directly applicable to a company's operations (Sullivan 2011).

Adams & Frost (2008) suggest that the extent to which responsibility reports accurately and completely portray corporate social and environmental impacts is questionable. According to Kaenzig et al. (2011), it is very rare that sustainability reporting would cover all corporate activities and sites or the whole life cycle of a product. Instead, the authors say that disclosures often exclude non-certified sites of the company in developing countries and the prior production chain as well as use and disposal phases. Kaenzig et al. argue that considering the trend of off-shoring production processes, the coverage of the whole life cycle of products is critical to evaluating products' environmental impacts.

According to Sullivan (2011), other common critiques of corporate responsibility reporting include the following:

- The reports are inconsistent and incomplete in scope and content and their quality varies (see also Sherman (2009) and Kaenzig et al. (2011)).

- Reporting tends to focus on good news and present only positive information rather than providing a balanced account of performance (see also Deegan & Rankin (1997)).
- The business implications of social and environmental issues are not explained in the context of company strategy and key value drivers; social and environmental performance are not put into the context of the wider business.
- It is often difficult to assess how companies are performing against their own corporate responsibility policies and objectives.
- It is not stated which resources have been allocated for the achievement of the company's corporate responsibility objectives or how environmental and social issues are managed.
- The processes for assessing materiality or financial significance are not transparent.
- Companies do not tell what has been excluded from the scope of reporting.
- It is difficult to compare companies' corporate responsibility performance (see also Sherman (2009)).

Indeed, Sherman (2009, p. 15) argues that "we clearly have a long way to go before the equivalent of GAAP [generally accepted accounting principles] for sustainability reporting is established." Similarly, KPMG (2011) states that corporate responsibility reporting still has some way to go before it meets the same level of rigor as financial reporting. Related to this, Sullivan (2011) notes that corporate responsibility reporting is not an exact science, but there are significant uncertainties and limitations in the data presented in corporate responsibility reports. This is both because of the inherent limitations in the techniques available to estimate e.g. emissions and because of the resource and other constraints faced by companies. MacLean & Rebernak's (2007) case study of BHP Billiton, the largest diversified natural resources company in the world, identifies some of the technical challenges of reporting. These include definitions of terms, accounting for acquisitions and divestments, base-year issues, normalisation based on intensity or production rates, and emission factor standards.

Finally, Hausman (2008) suggests that on the one hand, reports with many pictures and stories are accused of being too marketing-oriented and not containing enough hard data. On the other hand, the author notes that overly-analytical reports are described as dense and overwhelming. Thus, the dilemma for companies is to find a balance between these two approaches. KPMG &

SustainAbility (2008) warn that trying to cover everything, reports have tended to become longer, which can overwhelm readers. Yet the authors note that the lack of an established means of assessing sustainability information is a problem. As a result, reports often provide “too much information, too little meaning” (p. 29). Due to all of these challenges, the full potential of corporate responsibility reporting has not yet been realised (Sullivan 2011).

2.5. Suggestions for effective sustainability reporting

2.5.1. Elements of effective sustainability reporting

Effective sustainability reporting quantifies how the company has performed and what it is currently doing to address stakeholder concerns, while also describing the company’s future objectives and how it is planning to achieve them (MacLean & Rebernak 2007). Regarding the elements to be included, sustainability reporting guidelines often suggest that corporate responsibility reports should contain a description of the organisation, its sustainability vision, its objectives regarding sustainability, and indicators that show the performance of the organisation (Roca & Searcy 2012). According to Brammer & Pavelin (2008), the quality of corporate environmental disclosure can be assessed through five indicators: whether disclosure discusses environmental policies, reports specific actions, quantifies environmental impact, sets formal targets, and is subject to external audit. Somewhat similarly, PwC (2011) focuses on four indicators while evaluating Finnish corporate responsibility reporting: coverage and balance, stakeholders, indicators, and independent assurance.

The findings of Vurro & Perrini (2011) indicate that it is import to structure the corporate responsibility report in a comprehensive way, and extend coverage to various stakeholders and related issues. According to the authors, sustainability reporting should mirror the diversity and complexity that characterise the stakeholders of the company. Thus, it is important to use many different communication channels besides just one annual report in order to develop comprehensive corporate responsibility communication strategies that enhance trust and value for the company within its various stakeholder groups (KPMG 2011). Related to the annual report, PwC (2011) suggests that integrating sustainability issues is another area to be improved; currently only a couple of Finnish corporations include sustainability figures among their annual report’s key figures. In order to be able to include sustainability issues among the key figures, Isaksson & Steimle (2009) note that the company has to identify its most important sustainability aspects and create relevant indicators for monitoring them.

Hausman (2008) recommends using pictures and stories to personalise the information reported to stakeholders. However, the author reminds that case examples do not give a holistic account of the corporation’s impact, so company-level numerical proof is needed and trends should be presented to make it easier for stakeholders to understand the performance of the company. According to Hausman, numbers should be put in context and data should be used meaningfully to highlight issues that are material to the company. To sum it up, “a good report provides a narrative about progress and backs up these claims with data. The stories and the numbers are put in context with the historical performance of the company and peers in their industry.”

PwC (2011) emphasises that also future plans should be reported – currently reporting is focused on past performance. They suggest that corporate responsibility management calls for explicit targets and reporting on whether targets are reached should also be improved. Similarly, Two Tomorrows (2011) highlights the importance of meaningful targets, which should be measurable and specific as well as have context and demonstrate impact against the overall issue. That way, stakeholders can assess the company’s sustainability performance. Two Tomorrows’ recommendation is that the benchmark for sustainability should be best practice.

Relevance and credibility of sustainability disclosure are very important since there are potential problems if stakeholders perceive that a company is only engaging in public relations without demonstrating concrete action that leads to social and environmental improvements (Cormier et al. 2011). According to MacLean & Rebernak (2007), there is no better way to generate trust among stakeholders than through transparency. However, the authors warn that the trend towards greater transparency in reporting has resulted in longer reports, which makes their content less manageable for the readers. MacLean & Rebernak suggest that companies should therefore avoid overwhelming readers by providing executive summaries supported by comprehensive metrics on their websites. For the same reason, it is better to use quantitative indicators and specific goals rather than qualitative descriptions. However, important impacts which cannot be quantified should not be ignored, but discussed qualitatively (Kaenzig et al. 2011).

Similarly to MacLean & Rebernak (2007), Cormier et al. (2011) suggest that a more efficient disclosure strategy is critical since stakeholders face an increasing flow of information. They criticise the fact that there is much emphasis on just increasing the amount of disclosed information, without much consideration to the incremental or substitute effect on stakeholders' decision-making. The authors remind that additional disclosure is not necessarily a reflection of better sustainability performance. Consequently, Cormier et al. suggest that transparency needs to be defined less in terms of completeness and more in terms of actual information content.

2.5.2. Effective sustainability reporting process

MacLean & Rebernak (2007, p. 3) argue that a strategic corporate responsibility reporting process should both communicate externally with stakeholders and guide the company's internal management processes. Consequently, corporate responsibility reporting should be closely linked to both the business strategy and the internal system for measuring environmental, social & governance performance. The authors recommend that a successful reporting strategy should include the following elements: "1) top-management support and direction for strategic reporting that ties ESG performance to business strategy, 2) stakeholder input, 3) identification and prioritisation of issues based on stakeholder concerns and internal analysis, 4) establishment of key ESG objectives and targets linked to specific ESG metrics, 5) a robust system for collecting, analysing, and tracking ESG metrics, 6) assurance/verification of key indicators."

According to MacLean & Rebernak (2007), reporting should be seen as a management tool rather than a communication tool and the focus should not be on imitating competitors but rather on how the information gathered helps the company achieve its strategic objectives, including strategic ESG objectives. The authors claim that a strategically orientated reporting process can help the company identify and prioritise issues and define appropriate targets, supported by metrics that will enable it to follow and improve performance.

Similarly, Adams & Frost (2008) suggest that using key performance indicators (KPIs) in corporate responsibility reporting can assist decision-making and improve sustainability performance. They note that KPIs must be used not only to trace past performance, but also as a means of evaluating risk, developing plans, and determining performance-based rewards. Importantly, MacLean & Rebernak (2007) note that in addition to the typical indicators such as regulatory metrics, energy use, waste, and emissions, also strategically significant indicators should be used. One possibility would be to use the efficiency measure “value per harm”, i.e. to try to maximise the value produced for stakeholders compared to the harm done to them (Isaksson & Steimle 2009). Adams & Frost add that consultation and regular engagement with key stakeholders are very important in KPI development as otherwise reports are unlikely to be complete regarding material impacts of key stakeholder groups.

In addition, KPMG (2011) notes that improving the level of data integrity through better governance, information systems, and controls is essential in order to avoid the risks related to misstated data. They warn that problems in data integrity can harm company credibility and reputation as well as the management insight that corporate responsibility reporting provides. KPMG acknowledges that for now sustainability reporting is still developing, but in the long run restatements, errors, and omissions in reporting will begin to destroy investor confidence in not only the data reported, but possibly also in the quality of corporate governance.

2.5.3. Sustainability reporting best practices

Awards for well-designed annual reports are another way of evaluating sustainability reporting (Daub 2007). The winner of the latest Finnish responsibility reporting competition was Kesko Corporation (Finnish Business & Society 2011a). According to the jury, Kesko’s reporting was extensive, balanced, and reader-friendly due to its organised structure. Kesko reported well on the themes that are material to the operations of the company and all of the themes were illustrated with practical examples. Also students chose Kesko’s report as the best. Both analysts and civic organisations selected Stora Enso as the best corporate responsibility reporter. This is because according to them, the company was very transparent in its reporting: it presented the criticism it had received, the challenges it was facing as well as the development needs that civic organisations had brought up. Media's choice was Wärtsilä, who in their view was able to summarise yet tell a lot at the same time. In sum, the awarded reports stood out with their strong link between corporate responsibility and core business activities as well as with their emphasis on business-specific issues. Responsibility was clearly integrated into the companies' goals, risks and opportunities as well as management practices. (Finnish Business & Society 2011b)

Two Tomorrows' (2011) analysis goes one step further as they examine annually which companies are not only good reporters but also "walk the talk in sustainability". Only publicly reported information is used for the analysis since it is the only possibility for most stakeholders to review corporate sustainability practices. The assessment of sustainability performance is based on companies' ability to control risks and realise opportunities related to socio-economic and environmental issues. In other words, Two Tomorrows (2011, p. 5) aims to "identify the companies that have the controls in place to prevent harm to people and the environment and the processes to identify opportunities for new products, greater efficiencies and new business models based on the needs of society and the environment." Their evaluation criteria include four areas of sustainability management: governance structures, management along the whole value chain, stakeholder engagement processes, and commitment to innovation.

3. Two approaches to sustainability reporting

3.1. Global Reporting Initiative approach to sustainability reporting

3.1.1. The GRI guidelines

The GRI sustainability reporting guidelines were developed to help organisations to report on their environmental, social, and economic performance and to increase their accountability (Moneva et al. 2006). Even though compliance with the guidelines is voluntary, the GRI's detailed framework is intended to create an analogy to the generally accepted accounting principles approach to financial reporting (Sherman 2009). In other words, the GRI's aim is to develop a voluntary reporting framework that will raise sustainability reporting practices to the same level as financial reporting in rigour, comparability, auditability, and general acceptance (Willis 2003). The GRI promotes, among others, greater transparency, prioritisation of issues, and stakeholder input (MacLean & Rebernak 2007). According to Schadewitz & Niskala (2010), the GRI guidelines significantly help companies in systematically measuring and communicating sustainability issues to stakeholders.

The GRI guidelines have become and continue to be the "de facto standard" for corporate responsibility reporting: 80% of the 250 largest companies in the world adhere to them (KPMG 2011, p. 21). In Finland the GRI guidelines are practically the only guidance followed in corporate responsibility reporting (Schadewitz & Niskala 2010).

The G3.1 guidelines are the most recent generation of the GRI's guidelines. It is the most comprehensive sustainability reporting guidance currently available. (GRI website) G3.1 includes three types of standard disclosures, which should be included in sustainability reports:

- Strategy and profile: overall context for reporting and for understanding organisational performance, e.g. strategy, profile, and governance.
- Management approach: how an organisation addresses a given set of topics in order to provide context for understanding performance in a specific area.
- Performance indicators: economic, environmental, and social performance of the organisation. (GRI 2011, p. 5)

Additionally, sector supplements, whose purpose is to address the unique issues faced by companies in particular industries, have been developed for different sectors (GRI 2011).

The G3.1 guidelines follow 10 principles. Principles to define report content include materiality, stakeholder inclusiveness, sustainability context, and completeness. Principles to define report quality include balance, comparability, accuracy, timeliness, reliability, and clarity. (GRI 2011) The principles are meant to guide producers of sustainability reports in making the reports useful to stakeholders (Clarkson et al. 2008). For example one of the key principles, materiality, is defined through two dimensions: significance of economic, environmental, and social impacts and influence on stakeholder assessments and decisions. The specific methods used for assessing materiality can be defined by each organisation and should be disclosed. (GRI 2011)

Reporters should declare the level to which they have applied the GRI guidelines. The levels are titled C, B, and A, where A reflects the highest coverage of the GRI reporting framework. An organisation can self-declare a "plus" (e.g. C+) if they have used external assurance. (GRI 2011)

To be launched in May 2013, G4 is GRI's fourth generation of sustainability reporting guidelines. G4 is part of the GRI guidelines' continuous development, which is influenced by changes in the reporting field, for example the introduction of new concepts, trends and tools, and requests. GRI believes that G4 will improve sustainability reporting guidance by making it more focused, helping reports become more relevant, resulting in increased value for reporters and report users. (GRI website)

3.1.2. Benefits of GRI reporting

According to Willis (2003), before the GRI guidelines were introduced companies were receiving more and more diverse, incompatible, and time-consuming information requests about their environmental and social performance. Sustainability reporting was varied in content, inconsistent, incomplete, lacked comparability between companies and reporting periods, and irregular. Thus, the author thinks that the GRI guidelines are a welcome and efficient supplement to the questionnaires, interviews, press releases, media reports, and other sources of information traditionally used in investment decision-making. Willis notes that especially different sustainability rating and ranking providers together with the socially responsible investment (SRI) community are likely to benefit from standardised GRI reports. According to KPMG (2011), standard corporate responsibility metrics suggested by the GRI can provide a consistent method for benchmarking progress both against internal objectives and external competitors.

One of the key strengths of the GRI has been to promote a multi-stakeholder, multi-disciplinary approach in sustainability reporting (Willis 2003). As the GRI guidelines support identifying material issues as an explicit part of the reporting process, they can help increase the relevance of reporting for stakeholders (KPMG & SustainAbility 2008). Besides, the GRI has created a common language that companies' stakeholders can use to assess the reported performance (Nikolaeva & Bicho 2011). The GRI guidelines show several characteristics of an established institution, including widespread uptake, legitimacy, emergence of new business activities, and emergence of competitive pressures related to them (Brown et al. 2009).

According to a KPMG & SustainAbility (2008) study, readers expect reporters to use well-regarded, globally-applicable guidelines to improve the quality and comparability of reports. The GRI offers such a guideline and can thus increase the credibility of reporting. Interestingly, Nikolaeva & Bicho (2011) suggest that the more taken-for-granted the GRI guidelines are, the higher the probability that stakeholders would view it as a legitimising symbol and would reward companies that adopt the guidelines while marginalising those that do not.

Studying first-time issuance of sustainability reports, Guidry & Patten (2010) find that companies with the highest quality reports, as measured by the extent to which reports provide disclosures recommended by the GRI, displayed significantly more positive market reactions than companies issuing lower quality reports. Acts considered as insincere, i.e. lower quality reports appear to be viewed by shareholders as actually decreasing reputational value. Thus, the authors conclude that if corporations want to use sustainability reporting as a tool for enhancing their reputational capital, merely engaging in reporting is not sufficient; instead, greater use of GRI reporting standards appears to be necessary. Similarly, Nikolaeva & Bicho (2011) suggest that GRI reporting has an important role as a reputation management tool and managers should see it as a long-term investment in reputation.

Schadewitz & Niskala (2010) study the effect of corporate responsibility reporting on firm value in Finland. Their analysis includes all listed Finnish companies that have adopted the GRI guidelines. No other responsibility reporting framework was used by the companies in their responsibility reporting during the research period 2002–2005. The authors find that GRI reporting is an important explanatory factor for a firm's market value. They suggest that responsibility reporting is a part of a firm's communication tools to reduce information asymmetries between managers and investors; GRI responsibility reporting is called for to achieve a more precise market valuation of a company.

3.1.3. Challenges of GRI reporting

Moneva et al. (2006) list several typical criticisms of the GRI framework, including confusion regarding its scope, the lack of a requirement for independent verification of the report, and the fact that different levels of application allow selective reporting of the performance indicators. Instead of the indicators being divided according to the triple bottom line, the authors would like to see more integrated indicators. They suggest that integration could be achieved by introducing indicators that link two pillars, for instance eco-efficiency indicators (economic and environment relationship) and eco-justice indicators (social and environment relationship).

According to Sherman (2009), there is still a lot of discrepancy in how and what is being disclosed despite the growing acceptance of the GRI framework. Sherman's analysis of the content of Adidas' and Nike's GRI reports reveals "disturbing inconsistencies in the way in which economic, social, and environmental performance is disclosed" (p. 13). According to the author, the rival companies often use the same factories. Despite this, their metrics for measuring performance are not comparable and there is no way to determine which company is acting more responsibly. Dingwerth & Eichinger (2010) explain that GRI reports provide a lot of information on sustainability-related aspects of corporate activities, but since the information remains non-comparable, it is mainly incomprehensible and of limited value to stakeholders.

Similarly, Isaksson & Steimle (2009) suggest that because the GRI guidelines require neither the company's sustainability level nor its sustainability progress to be compared to industry benchmarks, they do not assure that the report tells how sustainable the company is and whether its sustainability performance is improving. Without benchmark information provided, it is difficult to judge how the company compares with others. That is why the authors conclude that the GRI guidelines are not sufficient to make sustainability reporting relevant and clear.

Importantly, Sherman (2009) notes that non-comparability is not necessarily to blame on the GRI guidelines themselves, but rather it may follow from inconsistent application of the guidelines, which is a result of the voluntary nature of their use. Similarly, Vurro & Perrini (2011) state that as long as reporting remains voluntary, neither a common format nor a universal reporting language, style, and practice exists to create more comparable reports. Besides, the voluntary nature of the GRI framework allows companies to leave out important indicators that suggest poor sustainability performance (Kaenzig et al. 2011). According to Moneva et al. (2006), evidence from practice shows that the guidelines are used in a biased way as some GRI reporters do not actually behave responsibly with respect to e.g. social equity.

PwC (2011) argues that the GRI guidelines do not consider company-specific corporate responsibility characteristics sufficiently. According to them, the risk of GRI reporting is that companies might not recognise the sustainability impacts that are most material to the particular business if those issues are not included in the GRI indicators.

Besides, Moneva et al. (2006) argue that too little focus has been put on understanding stakeholder expectations. For instance customers' needs might not be considered sufficiently within the GRI guidelines (Isaksson & Steimle 2009). Indeed, the GRI's key challenge is to consider the variety of disclosure expectations of different report users (Willis 2003).

As a result of trying to be as comprehensive as possible, the number of GRI indicators is steadily growing, which could make effective use of the reports difficult (Greeves & Lapido 2004). For example Cormier et al. (2011) criticise the fact that the GRI's scope is continuously being revised and disclosure is seen as an additive process where more is better. However, many of the GRI indicators are not actually used in corporate responsibility reporting (Roca & Searcy 2012).

Despite their criticism towards the GRI, Moneva et al. (2006) acknowledge that reporting in the future could better reflect corporate impacts since the GRI started to encourage companies to report in a broad sense, expanding their reporting boundaries to reflect the "footprint" of their organisation and its activities (including e.g. licensed manufacturers, contracted suppliers etc.). However, the anticipation of Moneva et al. appears not to have realised as Kaenzig et al. (2011) still criticise the fact that most of the GRI indicators are related to site-specific inputs and outputs, ignoring the environmental impacts occurring upstream and downstream of the company site. According to Kaenzig et al., most of the environmental impacts of many products occur either upstream, in the supply chain, or downstream, in the use phase or at the end of the life cycle. Therefore, they suggest that a limited number of product- and industry-specific KPIs, rather than reporting of a wide set of environmental and social indicators limited to the site level, would give a more purposeful assessment identifying the relevant differences among companies.

3.2. Life cycle approach to sustainability reporting

KPMG & SustainAbility (2008) find that readers want to see the sustainability impact of the organisation. This indicates that it is important to report the environmental and social impacts along the whole product life cycle. Similarly, Kaenzig et al. (2011) suggest that stakeholders have started to demand transparency throughout the whole value chain as the focus of environmental management is moving from cleaner production at the process level towards greener products as a whole. The authors propose a stepwise procedure for improving the quality and completeness of quantitative corporate environmental disclosures using life cycle approaches. Kaenzig et al. explain that life cycle assessment is an "established analytical approach to determine the environmental impacts and identify improvement opportunities of products and services" (p. 39).

The first step of the procedure suggested by Kaenzig et al. (2011) consists of analysing and improving the coverage and reliability of quantitative corporate environmental disclosures.

According to the authors, identification of the system boundaries reveals what is covered and left out by the report and how representative this is of the activities of the company as a whole. Then the reliability of the reported information can be estimated through different quality tests, even simple rules of thumb.

The second step of the procedure suggested by Kaenzig et al. (2011) builds on the previous step and uses environmental burden and environmental influence matrices as a means to prioritise potential environmental gains. Environmental impact studies such as life cycle assessment provide information on the main impacts of the company's products. They also reveal where these impacts occur over the production–consumption–disposal chain. In combination with studies about environmental risks of company activities, they can help to quickly focus on major environmental impacts and potential environmental improvements. The quantitative assessment should be complemented with a qualitative analysis of aspects that are not easily quantified. This can be done with the environmental burden matrix, which presents the distribution of the environmental impacts for each life cycle stage of a product. The authors propose a further step to extend the environmental matrix approach to identify also key factors, key decisions, and key actors. The environmental influence matrix shows the influence that different actors and their decisions have on environmental performance at each life cycle stage. The level of influence is indicated in comparison to the total environmental burden of a product over its whole life cycle. Both of the matrices should base on expert interviews and on quantitative data when possible.

Based on the previous steps, the third step suggested by Kaenzig et al. (2011) consists of determining which key performance indicators provide a relevant basis for environmental evaluation. KPIs can be determined based on a comprehensive selection process (e.g. steps 1 and 2) and should reflect the key environmental issues of products, acknowledging the fact that reducing the overall environmental impacts is easier at some life cycle stages than others. The authors note that a limited number of indicators makes communication easier and allows for following the improvement of key issues.

According to Kaenzig et al. (2011), each of the steps and tools proposed can be applied independently from the other steps if the necessary data is available. Companies that have numerous suppliers cannot always collect environmental data of all the companies in their supply chain. They can use available life cycle assessment databases for all process and life cycle stages for which environmental impact data is not possible to obtain from suppliers. Kaenzig et al. note that it is possible to apply the framework to all industries and products.

In conclusion, life cycle approaches can improve the quality and relevance of environmental disclosures by providing tools to analyse the coverage and the reliability of environmental disclosure (step 1), by introducing the environmental influence matrix for the assessment of the level of potential environmental gains (step 2), and by emphasising the importance of reporting key performance indicators that reflect the main environmental impacts and the potential environmental gains along the life cycle of products (step 3) (Kaenzig et al. 2011).

4. Research method and data

The research method was an empirical case study designed for the commission by Cargotec. Answer to the research question was sought first of all by examining theory-based suggestions for effective sustainability reporting as well as prior research on stakeholders' information needs for the reporting. For the sub-question, two different approaches to sustainability reporting, the GRI vs. the life cycle approach (focusing on the most material sustainability impacts during the whole product life cycle) were compared.

After the investigation of prior research, semi-structured interviews were conducted with Cargotec representatives in January–February 2012 in order to gather background information and to identify the key stakeholders of Cargotec's sustainability reporting, i.e. the report users. The first interviewees were the Environment, Health & Safety (EHS) Director Karoliina Loikkanen and the Public Relations Director Pauliina Koivunen. Loikkanen has the best knowledge of Cargotec's EHS function and sustainability reporting, while Koivunen knows the most about public relations and the annual report.

According to Karoliina Loikkanen, investors (as represented by banks and analysts) and customers are the most important stakeholders of Cargotec's sustainability reporting. Loikkanen has received feedback about Cargotec's sustainability reporting mainly from analysts and investors, who have requested for more reader-friendly (GRI) indicators. Some of the bigger customers have also asked for sustainability information. Likewise, Pauliina Koivunen suggested that investors and large customers are the most important audiences of Cargotec's sustainability reporting. According to Koivunen, smaller customers are mostly interested in specific equipment's energy efficiency which affects costs, but they do not focus so much on Cargotec's sustainability in a broader sense. In addition, Koivunen mentioned personnel as another stakeholder group whose importance will grow in the future: "especially the young want to work in a company that is an industry leader also in sustainability."

On the basis of the findings from first interviews, Cargotec's Chief Technology Officer Matti Sommarberg who is the executive level responsible for EHS; Manager of the Global Account Management function Mikko Mononen; and Special Products Vice President Elisa Nuutinen were asked about the specific stakeholders to be interviewed. Based on all the interview findings, large customers and analysts (as representing also investors and funding providers) were identified as the key stakeholders of Cargotec's sustainability reporting. Also Sommarberg confirmed that these are the target interviewees for the study.

All 16 of the analysts listed on Cargotec's investor webpage were contacted by e-mail about the interview. It was expected that those analysts who regularly follow the company could provide the most fruitful comments on its sustainability reporting. Two reminders were sent to all of the analysts in order to increase the response rate. All six of the analysts who replied to one of the three e-mails and agreed to the interview were interviewed via telephone in March 2012. A list of all the interview dates can be found in the section References.

Among customers, the Global Accounts (hereafter also: Customer Companies) were identified as the interviewees due to their size, potential, and global presence. Mikko Mononen, Manager of the Global Account Management function explained: "the Global Accounts are customers to the various business lines of Cargotec all over the world. They consist of operators that own hundreds of terminals altogether and handle most of the world's consolidated container traffic, which often makes them very demanding towards their suppliers' products and performance. Many of them also have shipping lines of their own." According to the Special Products Vice President Elisa Nuutinen, the Global Accounts are the companies that the industry generally benchmarks. Some of them have a high profile on sustainability and they promote it actively.

From within the Global Account organisations, the target interviewees were the person responsible for buying Cargotec's products (hereafter: Purchasing Manager) and the person responsible for sustainability issues (hereafter: Corporate Responsibility Manager). This is because interviewing both the person who makes the purchasing decisions as well as the person who has expertise in sustainability issues was expected to provide a balanced opinion. The exact person(s) to be interviewed were identified by the respective Global Account Managers and their contacts who have the best knowledge of the appropriate interviewees. Again, the target interviewees were contacted by e-mail about the interview and two reminders were sent to all of them in order to increase the response rate. All six of the Global Account representatives (hereafter: customers) who agreed to the interview were interviewed via telephone in February–March 2012.

In addition, Mikael Niskala, Sustainability Business Excellence Senior Vice President at Tofuture, was interviewed in February 2012 in order to gain an expert insight into sustainability reporting. Tofuture is a company specialised in sustainability reporting. They provide Cargotec's sustainability reporting system and Niskala has assisted Cargotec in the reporting process. Niskala also teaches a corporate sustainability reporting course at Aalto University, so he has detailed knowledge and experience of the area.

The preliminary interview questions (see Appendices) were sent to all of the interviewees beforehand along with Cargotec's key environmental figures 2010 and a link to the sustainability section of Cargotec's annual report 2011, so that they could prepare for the interview. As the type of the interviews was semi-structured, additional questions were also asked based on the responses and there was some time reserved for free discussion, where the interviewees could talk about issues which they felt are important but which were not included in the preliminary questions. The length of all the interviews varied from approximately a half an hour to an hour.

All of the interviews were taped so that information could be checked later and direct quotes could be used to express the opinions of the interviewees. It should be noted that all other interviews except for those with Cargotec's customers were conducted in Finnish and then translated into English during transcription. Cargotec's customers were interviewed in English. In order to avoid possible misunderstandings, all of the interviewees received the transcript of the interview so that they could check all the details.

After the interviews, the empirical findings were analysed and compared to prior research. Based on the study, conclusions were finally presented in the form of a recommendation, as suggestions how Cargotec could develop its sustainability reporting to meet key stakeholders' expectations.

5. Sustainability reporting at Cargotec

5.1. Cargotec

Cargotec is one of the world's leading providers of cargo handling solutions. The company was formed in 2005 through a demerger of KONE Corporation. Cargotec's sales totalled EUR 3.1 billion in 2011. The company employs approximately 11,000 people. Cargotec's products are used in ships, ports, terminals, distribution centres, heavy industry and in on-road load handling. Cargotec's key customer groups include ship owners, ship and port operators, shipyards, distribution centres, fleet operators, logistics companies and truck owner-operators as well as the defence forces of various countries. Other major customers include heavy industry, terminals and municipalities. (Cargotec annual report 2011)

Cargotec has three well-known brands: Hiab, Kalmar, and MacGregor. Hiab solutions are used in on-road load handling, Kalmar solutions in container and heavy material handling and MacGregor in offshore operations and marine cargo flows. Besides producing cargo handling equipment, Cargotec has a global network offering extensive services which ensure the reliable performance of equipment. The company aims at innovative solutions that take environmental and social considerations into account. (Cargotec website) Sustainable performance, one of Cargotec's core values, is defined as "balanced development between our financial result and the well-being of people and the environment" (Cargotec annual report 2011).

5.2. Cargotec's sustainability reporting

Cargotec's environment, health & safety (EHS) reporting was consolidated at corporate level in 2007 for the first time. The reporting was developed to focus on assembly units, since it was seen that these were the units with the highest impact on the environment due to their size and type of operations. Cargotec reports EHS issues "with the aim of supporting the company's risk management and the development of its environmental, health and safety targets and tools, on both a local and global basis." (Cargotec's key environmental figures 2010, p. 1) According to the EHS Director Karoliina Loikkanen, reporting on sustainability issues is part of fulfilling the expectations that stakeholders have for the multinational, publicly listed company. The Public Relations Director Pauliina Koivunen noted that "through sustainability reporting, Cargotec can communicate to stakeholders that the company is operating according to one of its core values, sustainable performance. Thus, sustainability reporting enables giving a correct perception of the company's operations. Internally, reporting helps in making operations and cargo handling solutions more sustainable."

In addition to mandatory reporting requirements, Cargotec has published the six most important environmental indicators annually in April/May on its website, in a pdf report called Cargotec's key environmental figures: the company's direct and indirect energy use, water use, greenhouse gas emissions and other emissions, as well as waste. Health and safety figures have not been included in public reporting since Cargotec was in the process of harmonising the reporting practices. The indicators were chosen together with representatives of various operations: local quality and environmental management, global risk management, local health and safety management and business area representatives. They are reviewed continuously together with local and global management in order to identify and manage the impacts of operations. Since the company's operations have remained similar over the years, there has been only limited need to change the basic reporting indicators. (Cargotec's key environmental figures 2010)

In 2011, for the first time, Cargotec's annual report was based on the GRI G3 sustainability reporting guidelines (Cargotec annual report 2011). The web-based annual report has a sustainability section which covers the following topics: Cargotec's sustainability focus, key stakeholder groups, environment, product safety, Port 2060[1], UN Global Compact[2], and GRI index which sums up all the GRI indicators reported. Information on other sustainability topics, e.g. regarding employees and corporate governance is incorporated in the related annual report sections. A third-party check, conducted by the corporate sustainability reporting specialist Tofuture, confirmed that Cargotec's reporting met the requirements for GRI's Application Level

[1] Cargotec's Port 2060 initiative is a platform for imagining the future of containerisation against a backdrop of revolutionary technology and innovation. http://port2060.cargotec.com/

[2] The United Nations Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. http://www.unglobalcompact.org/

B (Cargotec annual report 2011). Since the 2011 annual report was published in February when the environment, health & safety figures for 2011 were not yet completed, the latest annual report refers to Cargotec's key environmental figures 2010 for the environmental indicators.

According to Karoliina Loikkanen, external assurance of sustainability reporting has not been considered relevant at this stage since the current priority is to develop the internal reporting process. Pauliina Koivunen said that it could be a possibility after internal processes have been made more uniform – "as of yet sustainability is not very much emphasised in marketing communications, so from marketing point of view external assurance is not considered necessary for additional credibility."

Karoliina Loikkanen mentioned that investor representatives as well as some of the bigger customers have also asked for additional sustainability information occasionally. Among these, Cargotec has answered the annual Carbon Disclosure Project (CDP) questionnaire on greenhouse gas emissions, but the response details have not been made publicly available since "they contain business-specific information that Cargotec does not want to give to its competitors."

Regarding specific products, Cargotec has introduced the 'ProFuture' label for its most environmentally friendly products that meet strict criteria. The ProFuture criteria include the following indicators: source of power, energy efficiency, carbon efficiency, local emissions, noise pollution, and recyclability. (Cargotec annual report 2011)

In addition to the annual report, the key environmental figures report, occasional questionnaires, and the ProFuture label in product communications, Cargotec reports sustainability issues on its website in a sustainability section. Cargotec's intranet has environment, health & safety pages as well. According to Karoliina Loikkanen, Cargotec aims to construct a single message for all stakeholders instead of using various communication channels for different stakeholders. In her view, clarity and materiality are essential factors in communications so that various stakeholders can easily understand the key message. Pauliina Koivunen noted that Cargotec has an active instead of proactive approach to sustainability communication: the company replies when stakeholders request for additional information, which allows for targeted communication to those stakeholders.

Among the challenges of sustainability reporting, Karoliina Loikkanen mentioned the following: differing regulations and practices in different countries, defining materiality, as well as valuing and prioritising between social and environmental impacts. Besides, there exists no standard way to calculate the environmental impacts of Cargotec's products, so it is difficult to compare them to competitors' products. Loikkanen reminded that for example different operating models result in different kinds of sustainability impacts for companies and it is difficult to evaluate what is good sustainability performance. Pauliina Koivunen added that the global organisation and the short history of the corporation are also challenges; "processes are not yet uniform."

5.3. GRI approach to Cargotec's sustainability reporting

According to the EHS Director Karoliina Loikkanen, GRI reporting has currently become one of the stakeholder expectations that a multinational, publicly listed company faces. In her experience, especially investor representatives call for GRI reporting.

However, Loikkanen criticised the fact that the GRI is focused on company-specific sustainability impacts and does not consider products' impacts. Moreover, she noted that there are big differences in local laws and cultures regarding social, especially employee health & safety questions: "what is considered as good social responsibility practices differs a lot among different cultures and the GRI's European perspective may not always be the best outside Europe according to local people." Nevertheless, Loikkanen thought that the GRI index works as a good tool to sum up everything that is reported. Likewise, the Public Relations Director Pauliina Koivunen said that the GRI has helped in combining all elements of sustainability reporting together in one place in the annual report. In her opinion, "even though some of the indicators seem irrelevant, it is good that the GRI makes the company consider various kinds of issues."

5.4. Life cycle approach to Cargotec's sustainability reporting

According to Rasi's (2009) master's thesis study, using Cargotec's products is the stage of the product life cycle (see Figure 1) where the most material environmental impacts are caused: using Cargotec's products causes considerably more greenhouse gas emissions than manufacturing them. This is mostly because of the fuel that the products consume while they are being used.

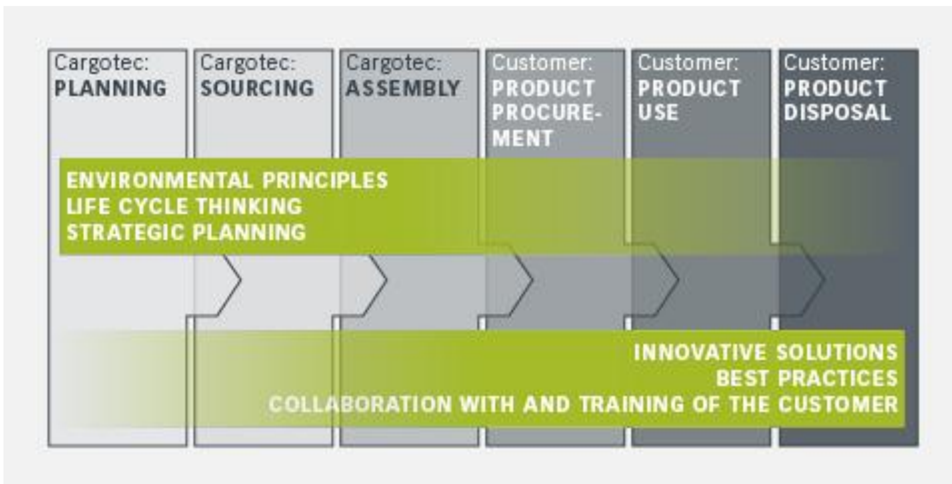

Figure 1: Life cycle of Cargotec's products (Cargotec annual report 2011).

Similarly, VTT's (2011) customer report finds that the use stage of the product life cycle has the most material environmental impacts. The report states that in terms of greenhouse gas emissions, for mineral-based fuels the most significant life cycle phase of a vehicle or work machine is the use phase. The next most significant life cycle phases are material production and fuel production. VTT's simplified life cycle assessments of the use phase covered three products: Hiab Hook Lift XR18S, Kalmar Straddle Carrier ESC-W, and MacGregor Hatch Cover. According to the report, the carbon footprints of these products result mainly from exhaust emissions.

Since the most significant environmental impacts of Cargotec are generated through the use of products by customers, the main focus of the company's sustainability work will be on enhancing customers' sustainability (Cargotec annual report 2011). The Public Relations

Director Pauliina Koivunen explained that in practice this means that Cargotec focuses on making cargo handling more sustainable by delivering cargo handling solutions that are environmentally friendly and safe to use.

The most significant environmental impacts of Cargotec’s own processes are related to those originating from the operations of assembly units, transportation, commuting to and from work, and business travel (Cargotec annual report 2011). According to the EHS Director Karoliina Loikkanen, the current focus of internal sustainability work is on developing uniform EHS processes and target setting.

Both Loikkanen and Koivunen thought that in Cargotec’s sustainability reporting, it is more effective to focus on the impacts of using the products as opposed to Cargotec’s own impacts since product use has the most material environmental impacts. Koivunen suggested that in customer communications this could be done for example by including the ProFuture criteria in every product’s marketing material so that it would be easier to compare different products to each other. She thought that carbon footprints could be another option for communicating products’ environmental impacts. However, Koivunen did acknowledge that also own operations are important to report.

5.5. Sustainability reporting specialist’s point of view to Cargotec’s sustainability reporting

Mikael Niskala, Sustainability Business Excellence Senior Vice President at Tofuture, was interviewed in order to gain an expert insight into sustainability reporting. First of all, Niskala commented that Cargotec’s current reporting reflects the company and the impacts of its operations quite well. According to Niskala, “the basic elements of reporting are ok and the groundwork has been done – Cargotec has all the possibilities to quickly rise to the level of the best sustainability reporters.” Niskala thought that the most relevant issues are covered in the reporting, but not necessarily in enough detail to satisfy stakeholders’ information needs. He suggested that more information could be reported for example on transportations due to the nature of Cargotec’s operations.

Niskala emphasised that sustainability reporting should be based on materiality analysis, in which two key elements, impacts on business and stakeholders' expectations are looked at. Regarding business impacts now and in the future, he explained that the key factors to be analysed are cash flows, risks and possibilities. For analysis of stakeholders' expectations, several possibilities exist: internal analysis, questionnaire to stakeholders, stakeholder panel or regular stakeholder forum. In Niskala's experience, companies usually use a questionnaire to stakeholders and an internal workshop about business impacts. He mentioned that it would be useful to invite also critical stakeholders in the discussion.

According to Niskala, annual report with sustainability issues incorporated in it and a more detailed stand-alone sustainability report are a good approach to reporting. In Niskala's view, GRI reporting does suit Cargotec even though it is focused on company-specific inputs and outputs. For considering different stakeholders' information needs, Niskala suggested that Cargotec could use different reporting channels for different stakeholder groups. For example "financial statement type of reporting in the annual report can serve owners and investors, while customers could be better reached through a customer magazine or other product-focused communication channel." Niskala concluded that Cargotec has to analyse its stakeholders and how they could be reached; then the message should be tailored according to each stakeholder group's needs.

Regarding external assurance of sustainability reporting, Niskala thinks that assurance brings structure to reporting and to developing internal processes. Moreover, he believes that assurance adds credibility – "at least in the eyes of analysts and those customers who themselves assure their sustainability reporting." However, the problem in Niskala's view is that assurance is not regulated. In the future, he expects sustainability reporting and external assurance of it to become mandatory. Until that, "each company must analyse the benefits of assurance for itself."

When asked about what Cargotec should focus on in the reporting, Niskala suggested that Cargotec needs to cover both the impacts of its own operations and the products' life cycle impacts. He proposed Cargotec to present a product life cycle analysis together with the possibilities that the company has for influencing the different sustainability impacts during each of the life cycle stages. Niskala mentioned that indicators related to product development and product use could be important for customers. Again, he emphasised that what is reported should be based on the materiality analysis.

Niskala had plenty of suggestions for developing Cargotec's sustainability reporting. First of all, he suggested that materiality analysis and the process behind it could be described more transparently, according to the GRI: how the content corresponds to stakeholders' expectations and which factors are important for the business. In other words, Niskala thought that the key sustainability issues and the way in which they relate to Cargotec's strategy could be described more clearly. Secondly, he proposed Cargotec to include goal setting in its sustainability reporting: KPIs, targets for them, and the measures for reaching the targets. Third, Niskala suggested that stakeholder interaction could be discussed: which issues come up and what are the weak signals. Fourth, he mentioned that implementation of the code of conduct and the measurement of it could be reported. Finally, Niskala added that reporting could be made more systematic. In the end, "the question is about how high the company wants to set the bar and how strongly it wants to emphasise sustainability." Niskala acknowledged that so far Cargotec has not emphasised sustainability very much compared to other big manufacturing companies – "if Cargotec wants to lift its profile on sustainability, more resources will be needed."

6. Empirical findings from interviews with Cargotec's key stakeholders

6.1. Stakeholders' uses for Cargotec's sustainability reporting

6.1.1. Analysts' uses for Cargotec's sustainability reporting

Only one of the stakeholders interviewed was familiar with Cargotec's key environmental figures before the interview. Analyst D had used the figures as basis for the sustainability executive summary which the bank incorporates as part of all its company reports. According to Analyst D, the one-page executive summaries cover each company's key sustainability figures and analysts write them annually for the companies they follow based on publicly available data. Analyst D added that the idea is to bring up topical sustainability issues in the market outlooks as well. For Cargotec, three areas were seen as relevant and thus included in the 2010 sustainability executive summary: 1) environmental performance (emissions, energy, waste), 2) social performance (personnel, wages, workforce by region, societal income distribution), 3) other figures (number of members in board of directors and the share of women, research & development costs, whether a sustainability report is published). Analyst D explained: "as sustainability issues become more and more important, the idea is to give investors the possibility to assess companies from the long-term sustainability perspective." As examples, he said that high emissions might represent an investment risk whereas a high-quality report that demonstrates constant improvement conveys a positive image of the company.

The reason why Analyst E was not familiar with Cargotec's key environmental figures is the size of the company: Cargotec is not included in the bank's detailed sustainability analysis so far since its market capitalisation is below their limit. Analyst E explained that they analyse companies across industries globally to find the ones that can sustain high return on capital and therefore outperform over the next 3-5 years. The analysis covers 1) forecast return on capital over the next three years, 2) industry positioning: key drivers of long-term success in the industry, 3) management quality: ESG analysis, i.e. analysis on environmental, social, and governance issues in order to mitigate business risks. The bank lists the long-term sustainable leaders across sectors globally. To be included in the list, a company has to be very transparent and do well compared to its peers on all areas of the analysis. There is a detailed list of indicators for each of the analysis components and each of the indicators is scored based on specified objective criteria. When a company does not disclose something publicly, it automatically gets the worst score for that indicator.

However, for smaller capitalisation companies such as Cargotec, Analyst E told that the bank's ESG analysis focus is on governance "because that information is often most available." Contrary to the long-term sustainability analysis, Analyst E explained that since the bank's sector analysts give short-term recommendations on companies, their analysis differs from the sustainability analysis.

The other analysts were not familiar with Cargotec's key environmental figures before the interview as according to Analyst B, "the focus is on financial reporting." Analyst F mentioned that he follows sustainability issues via Cargotec's annual report and the company website, but not the key environmental figures report.

Regarding sustainability related criteria when analysing companies, Analyst B told that he analyses on a general level sustainability issues/risks/opportunities which could have an effect on sales. The other analysts who were not familiar with Cargotec's key environmental figures said that there are no specific sustainability related criteria, but sustainability related problems or other issues such as stricter regulation are kept an eye on. Analyst F explained: "deviations from what can be regarded as acceptable regarding corporate governance, ethical norms or the environment are paid attention to." Analyst A told that they are currently developing models to analyse sustainability issues.

Analyst E said that investors have shown increasing interest in environment, social, and governance issues particularly since the financial crisis. According to Analyst F, investors have been interested "especially in environmental issues and when sustainability related problems or other issues such as stricter regulation have occurred." Analyst D told that investors have not directly asked about sustainability issues but they appreciated the introduction of the sustainability executive summaries. The other analysts said that their customers have not been very interested in sustainability issues. Analyst B explained that investors are concerned about regulations and ethical norms being followed so that the company can build a good image in the long term – “sustainability issues can be seen as an on/off question, whether everything is ok or not.” According to Analyst C, it is mostly funds that are interested in sustainability issues; for example whether the company fits the fund criteria and whether it is included in sustainability indices.

6.1.2. Customers’ uses for Cargotec’s sustainability reporting

The customers mentioned several reasons why they were not familiar with Cargotec’s key environmental figures before the interview. The Corporate Responsibility Managers interviewed had started their employment within the organisations only recently, so they were not yet familiar with Cargotec. The Purchasing Managers, on the other hand, said that they were only familiar with product communications and do not actively follow Cargotec website where the key environmental figures can be found. Thus, some of them did not even know that Cargotec had published a sustainability report. Purchasing Manager at Customer Company A wished the figures to be advertised along with other advertisement in industry magazines which “are widely read to follow industry development and to benchmark competitors.” In addition, several of the Purchasing Managers explained that direct contact with sales people and top management are important means of communication so Cargotec representatives should talk about sustainability issues and the company’s sustainability policy when communicating with the customers.

Interestingly, Customer Company D representatives told that they do not really follow Cargotec’s sustainability reporting because they have their own, more detailed requirements for sustainability information. Customer Company D has recently introduced a UN Global Compact based responsible procurement program, which is mandatory for all of the company’s frame agreements and contracts. The program includes requirements concerning suppliers’ environmental performance and health & safety performance. An example of the environmental requirements is use of fuel/electricity: CO_2 emissions level must be at least state-of-the-art of what Customer Company D has in its best terminals. Health & safety requirements include for instance labour related issues such as child labour and anti-corruption. The requirements concern

Customer Company D's projects, not suppliers as such; for example the solutions delivered by suppliers must meet project targets. As part of the responsible procurement program, Customer Company D is also starting to audit its big suppliers. This means that they will visit Cargotec's production facilities, ask specific questions and have responsible procurement meetings and dialogue on all levels, including CEO.

Similarly, Corporate Responsibility Manager at Customer Company B told that sustainability principles are integrated into the company's procurement. Customer Company B's suppliers must therefore have a sustainability strategy and consider the sustainability impacts of their products during the whole life cycle, "for example the product's fuel-efficiency, how long it lasts, how much of it can be recycled, etc. so that Customer Company B can reduce its sustainability impacts." Likewise, Purchasing Manager at Customer Company A told that the company has sustainability related requirements for its suppliers; the most important ones being emission control and noise level. For social issues, Customer Company A expects suppliers to follow legal requirements – usually terminals have lower social impacts than environmental impacts. According to Purchasing Manager at Customer Company A, "sustainability is becoming more and more a factor when choosing suppliers so suppliers should share the sustainability values."

On the contrary, Purchasing Manager at Customer Company C told that the company has not emphasised sustainability related requirements for suppliers; "it is not a key metric at the moment but is being considered." His personal view is that "it is more about the product itself: a sustainable product usually has innovation around its total life cycle, regarding for example materials, production etc. to minimise the input needed for the product during its life cycle." Therefore, "suppliers should consider sustainability when designing products in order to increase the productivity and to lower the cost to the end user." Purchasing Manager at Customer Company E told that they require ISO 14000 [environmental management standard] compliance from suppliers. When asked about the future, he said that sustainability issues "might become more important in the next 5-10 years; in the EU the requirements are already stricter."

6.2. Impact of Cargotec's sustainability reporting on stakeholders' opinions and decisions about the company

For most of the analysts, Cargotec's sustainability reporting or performance do not affect their opinion or decisions about the company. Analyst F explained that this is because no deviations or other issues which investors should pay attention to have occurred. Analyst D added that the reporting does not affect his opinion as long as Cargotec's sustainability performance is up to par with that of benchmark companies. The analysts explained that in case there were significant sustainability related risks, problems, or material deficiencies, the reporting could have an impact. Only Analyst E said that sustainability reporting/performance definitely affect his opinion and decisions about companies.

The customers' responses regarding the impact of Cargotec's sustainability reporting/performance varied. Purchasing Manager at Customer Company D said that Cargotec's sustainability reporting/performance definitely affect both opinion and decisions about the company as they are part of supplier evaluation. For example "in case of violations, the supplier will be disqualified." This is because some of Customer Company D's customers have severe requirements regarding sustainability. Similarly, Corporate Responsibility Manager at Customer Company B told that the reporting/performance affect decision-making to an extent, as part of the complete assessment of the supplier which includes also direct contact and other means of assessment. She noted that Cargotec's sustainability reporting "has a positive impact on my opinion of the company as it shows that the issues are being considered – not reporting would raise questions."

Purchasing Manager at Customer Company A said that the reporting/performance definitely have an impact on his opinion about Cargotec, but not on decision-making at this point. He thought that Cargotec's sustainability reporting could have a positive impact on his decisions if the figures were reported in comparable terms and if there was improvement. On the other hand, there could be a negative impact if the performance was very bad or if there were serious problems such as child labour. For Purchasing Manager at Customer Company C sustainability reporting supports the view that Cargotec considers sustainability but it does not affect decisions as “it is only a minor consideration.”

On the contrary, Corporate Responsibility Manager at Customer Company D explained that Cargotec’s sustainability reporting/performance do not really affect his opinion or decisions about the company as Cargotec has low environmental impacts overall. Purchasing Manager at Customer Company E explained that “Cargotec is one of the favourite suppliers regardless of environmental concerns.”

6.3. Stakeholders’ views about Cargotec’s current sustainability reporting

Most of the interviewees’ comments about Cargotec’s sustainability reporting focused on the Key environmental figures report, with less emphasis on the annual report’s sustainability section. All of the Purchasing Managers and analysts thought that key issues are covered in Cargotec’s sustainability reporting. Purchasing Manager at Customer Company A even said that there is no need to report on more issues. However, he suggested that the figures should be linked to production or sales so that it would be easier to see the trend in performance and to make comparisons. Purchasing Manager at Customer Company C thought that the key environmental figures’ current format with graphs and not too much text works well. However, he noted that targets and the related measures are missing. According to Analyst D, Cargotec’s sustainability reporting is currently fairly similar to corresponding companies’ reporting. Analyst E estimated that most of the governance and environmental indicators and some of the social indicators that are assessed in the bank’s sustainability analysis are disclosed currently.

Both Analyst E and Analyst F mentioned that there could be more detail in the reporting regarding ethicalness of the whole supply chain. Also the Corporate Responsibility Managers considered Cargotec’s current sustainability reporting to be too narrow. For example according to Corporate Responsibility Manager at Customer Company D, “Cargotec’s key environmental figures offer a limited set of data and only the usual things”. Corporate Responsibility Manager at Customer Company B suggested that it would be important to highlight the challenges also.

6.4. Stakeholders' preferred sustainability reporting channels and formats

Regarding the preferred channel and format of sustainability reporting, all of the analysts interviewed agreed that the key thing is that the reporting is easy to find and read. They thought that annual report and a sustainability section on the company website are a good combination for sustainability reporting. Analyst E noted that "a stand-alone sustainability report is easy for analysts to read, but as sustainability issues are so crucial, companies should ideally move towards integrated reporting." Analyst D mentioned that "analysts prefer figures and time series as the basis of assessing companies on sustainability – verbal reporting is more subjective and less easy to assess." Pdf format was recommended as it is easy to look for information from a pdf file. However, some of the analysts also liked the option for hard copy.

The customers gave mixed responses when asked about the preferred channel and format of sustainability reporting. Similarly to the analysts, Purchasing Manager at Customer Company D suggested that annual report and website are good locations for sustainability reporting. Just like Analyst E, Corporate Responsibility Manager at Customer Company B mentioned that sustainability issues should be reported along other business reporting, in an integrated annual report rather than in a stand-alone sustainability report.

Contrary to them, Purchasing Manager at Customer Company C suggested that there should be a stand-alone report on the website for people to find the information. Also Corporate Responsibility Manager at Customer Company D suggested that a website is a good location for a detailed stand-alone sustainability report with lots of data. Then a paper version of the report could be more concise and include more stories and less data. He suggested the paper version to be sent to all key stakeholders. Similarly to him, Purchasing Manager at Customer Company E preferred the sustainability report to be sent to customers along with other hard copy brochures. Purchasing Manager at Customer Company A wished the key sustainability figures to be advertised in industry magazines and by sales people. Likewise, Purchasing Manager at Customer Company E wished sales people to tell about the figures.

Approximately half of the customers preferred web-based reporting with the option for pdf. Some of them even considered hard copy reporting as being against the concept of sustainability. The other half thought that hard copy is better than web-based reporting because it is more comfortable to read from paper and to automatically receive the information without having to look for it.

6.5. Stakeholders' views about external assurance

All of the analysts except for Analyst E thought that external assurance of sustainability reporting is not necessary at this point in time. Analyst B noted that "it can be hard to assure sustainability reporting in practice and there are problems of objectivity since no uniform criteria exist." Moreover, Analyst F thought that auditors might not have enough competence in the area. However, it was acknowledged that assurance adds credibility and helps in building uniform practices. Analyst E explained that assurance is one of the indicators measured in the bank's sustainability analysis since "it provides more confidence in the accuracy of the data."

The customers had mixed views about external assurance of sustainability reporting. Approximately half of them thought that external assurance is not necessary, while the other half were of the opposite opinion. For example Purchasing Manager at Customer Company D suggested that sustainability reporting should be assured; Customer Company D itself uses external auditors who audit both the reporting and the processes behind. According to Corporate Responsibility Manager at Customer Company B "external assurance works as a tool to check and balance that everything is being considered – it adds credibility and transparency, but is becoming a business for the assurers." Corporate Responsibility Manager at Customer Company D suggested that assurance is not necessary for sustainability reporting, but instead it is more important to assure the processes followed. On the contrary, Purchasing Manager at Customer Company C explained that "external assurance is not necessary, the GRI is enough."

6.6. Stakeholders' views about what Cargotec should focus on in the reporting: operations' vs. products' impacts

All of the analysts stressed the importance of focusing on both Cargotec's own sustainability impacts and the life cycle sustainability impacts of the products. For example Analyst F explained that "the two cannot be separated." Besides, Analyst B noted that "low life cycle costs can increase profitability as customers are willing to pay more for a product that is e.g. more fuel-efficient in the long term." He suggested life cycle costs to be presented in product communications and also mentioned in the annual report if they are a competitive advantage. According to Analyst F, products' life cycle impacts could be reported by describing ways of action in the whole supply chain. Another suggestion by Analyst D was that products' impacts could be presented through concrete examples, by describing what has been achieved. Even though Analyst E agreed with the other analysts, he explained that for the bank's purposes, information on Cargotec operations' sustainability impacts is more important than information on the products' impacts.

Analyst E said that the GRI indicators are very comprehensive and match closely to the bank's sustainability analysis indicators, so it is recommendable to report according to the GRI. Except for Analyst E, none of the other analysts was very familiar with sustainability reporting guidelines. Consequently, they did not require any specific guidelines to be followed. Analyst F even noted that "uniform reporting frameworks do not necessarily fit different companies very well and they might not add anything material to the investment decision." However, it was acknowledged that following widely accepted international standards can be useful for the company itself.

Similarly to the analysts, almost all of the customers suggested that Cargotec should focus equally on the sustainability impacts of its own operations as well as of using the products since both were seen as equally important. According to Purchasing Manager at Customer Company C, "the two cannot be looked at separately so the focus should be on the total life cycle of the product." Regarding Cargotec operations, Purchasing Manager at Customer Company A explained that "there is pressure from stakeholders on our terminals to be sustainable, so it is important that as a supplier, Cargotec shares the sustainability values." Regarding products' impacts, he continued: "because the terminals are trying to become more green, they need to know the environmental impacts of the equipment they use." Only Corporate Responsibility Manager at Customer Company D suggested that Cargotec should focus on the biggest impacts, i.e. on the products' impacts and report how the company is helping its customers to reduce emissions.

The Purchasing Managers were not very familiar with sustainability reporting guidelines and consequently did not require any specific guidelines to be followed. Nevertheless, several of the customers suggested that the GRI makes benchmarking easier and adds credibility. However, Corporate Responsibility Manager at Customer Company B mentioned that "reporting guidelines can be limiting and not make organisations think outside the box." Despite that, he thought that guidelines do provide a framework for reporting and for assessing performance. Corporate Responsibility Manager at Customer Company D concluded that "as long as the issues that are of interest to key stakeholders are covered, it does not matter whether they are reported according to some guideline or not."

6.7. Stakeholders' suggestions for developing Cargotec's sustainability reporting

The stakeholders interviewed presented a lot of ideas for developing Cargotec's sustainability reporting. First of all, several of both analysts and customers suggested that Cargotec should consider sustainability not only in terms of environment, health & safety but more comprehensively instead. As Corporate Responsibility Manager at Customer Company D, put it: "environment, health & safety are only part of sustainability." Analyst E explained that reporting on social issues should go beyond health & safety to cover for example also other issues about employees and the supply chain. According to Corporate Responsibility Manager at Customer Company D, for example effect on communities, requirements for suppliers, as well as bribery and corruption are topics to be added to Cargotec's reporting.

Analyst F explained why he thinks that it is so important especially for Cargotec to extend the scope of its sustainability reporting to include more detail about the responsibility and ethicalness of subcontractors and products (i.e. the whole supply chain). The reason is that "Cargotec relies strongly on outsourcing and the company itself has relatively low environmental impacts as a result of assembly activities." What Analyst F would like to see in the report is how Cargotec ensures that its subcontractors are conducting according to local laws or group-level practices, "whichever is more demanding – undeveloped legislation should not be taken advantage of." Purchasing Manager at Customer Company D added that Cargotec's sustainability reporting should cover joint ventures in addition to subcontractors as "Cargotec has to make sure that not only the corporation but also all of its suppliers meet the responsible procurement requirements." Related to products, Purchasing Manager at Customer Company A would appreciate product-level sustainability data in addition to company-level reporting. Likewise, Corporate Responsibility Manager at Customer Company B would like Cargotec to report indicators related to products.

Analyst D reminded that stakeholders', among others investors' interests should be considered when planning sustainability reporting. Likewise, Purchasing Manager at Customer Company A suggested that customers' opinions should be taken into account. More comprehensively, Corporate Responsibility Manager at Customer Company B encouraged Cargotec to map stakeholder concerns and stakeholder engagement. Corporate Responsibility Manager at Customer Company D emphasised that in the end "materiality analysis – impact on business and stakeholders' interests – should guide issue selection" and the analysis should be presented in a clear format. Corporate Responsibility Manager at Customer Company B suggested that Cargotec personnel who have the expertise should be very much involved in the issue selection process.

Analyst E suggested that Cargotec should include ESG targets in the reporting – "even if targets were not completely fulfilled, it is better to include them in the report in order to be clear about what the company is doing and aiming at." According to Corporate Responsibility Manager at Customer Company B, reporting also bad news and the corrective actions demonstrates transparency and integrity. Also Analyst C and Purchasing Manager at Customer Company C thought that targets and the related measures/actions should be explained.

According to Analyst C, reporting should provide information on efficiency, i.e. present the data relative to sales/production or competitors. Similarly, Purchasing Manager at Customer Company A would like numbers to be put in context by presenting them relative to production or sales. According to him, it is good to have five years' history in the report and it would be nice to have industry averages also so that seeing the trend in performance and making comparisons would be easier.

Analyst D said that Cargotec could present more figures as well as be more concrete, for example describe what the improvements mean in practice. Also Analyst C suggested that examples about the way in which environmentally friendly products reduce environmental impacts could be included in the reporting. Related to the concreteness of reporting, he noted that in the key environmental figures report, it says "most of this waste is recyclable" – instead it would be better to report how much of the waste was recycled.

Analyst E suggested that Cargotec should combine all sustainability issues in a sustainability report or in the annual report. Similarly, Corporate Responsibility Manager at Customer Company B thought that sustainability information should be reported in one place to help the readers. In her opinion, all the figures should be presented in a more reader-friendly format, integrated into the website in an interactive way and with key things highlighted. Moreover, Purchasing Manager at Customer Company A suggested that top management and sales people should emphasise sustainability issues, and they should also be advertised in industry magazines. Also Corporate Responsibility Manager at Customer Company B thought that management commitment to sustainability is very important: "the CEO should demonstrate all the way through reporting how each business process reflects sustainable behaviour."

According to Corporate Responsibility Manager at Customer Company B, in the next stage of reporting, more detail would be needed for example on waste and recycling: how and what is done with the waste. Another of her remarks was that there should be more transparency regarding injuries. Similarly, Analyst E suggested that Cargotec should add information about possible recycling programs, investments in renewable energy, gender diversity, fatalities, lost time injuries, training hours, and other indicators that are included in the bank's sustainability analysis. Regarding UN Global Compact, Corporate Responsibility Manager at Customer Company B would like to see how Cargotec is doing against the principles and how it is actually committed to them; how people are being involved in the different initiatives should be discussed. Analyst E mentioned that Cargotec's international commitments such as the UN Declaration of Human Rights cover some of the above mentioned indicators already, so it would be quite easy to add those. Finally, Corporate Responsibility Manager at Customer Company B noted that performance indicators around sustainability innovations should be described.

7. Discussion and conclusions

7.1. Analysis of results

Consistently with the suggestion of Brown et al. (2009) that many stakeholder groups have not been showing very much interest in sustainability reports, only one of the stakeholders interviewed was familiar with Cargotec's key environmental figures before the interview. As found also by the KPMG & SustainAbility (2008) survey, reasons for not reading the report were availability of more direct means to satisfy information needs and the report not being valuable to the reader – direct contact with the reporter, the media, and discussions with employees were mentioned as more important sources of information.

In line with their low interest in the sustainability report, most of the stakeholders interviewed were not very familiar with sustainability reporting guidelines. Consequently, most of them did not call for any specific guidelines to be followed. This finding is somewhat surprising since Cargotec representatives suggested that especially investors request GRI reporting. Besides, KPMG & SustainAbility (2008) found that readers expect reporters to use well-regarded, globally-applicable guidelines.

Nevertheless, similarly to KPMG (2011), those customers who were familiar with the GRI guidelines acknowledged that they make benchmarking easier and add credibility. Moreover, it seems that GRI reporting can be beneficial for the company itself since the GRI framework is very comprehensive and thus encourages to consider various kinds of issues. On the other hand, the stakeholders mentioned that standard reporting frameworks might not fit different companies very well (see also Sullivan 2011) and they might not make organisations think outside the box; companies might not recognise the sustainability impacts they have which are not included in the GRI indicators (PwC 2011). In conclusion, to most of the stakeholders it does not seem to matter if sustainability information is reported according to the GRI guidelines or not – what matters is that the key issues are covered.

Despite their low awareness of Cargotec's sustainability reporting the customers showed significant concern over sustainability. Also the analysts were interested in identifying sustainability related risks and opportunities (see Sullivan 2011). This probably reflects the growing pressures on corporations to be responsible (Van der Laan 2009) since interest in their environmental and social impacts has been increasing (Davis & Searcy 2010). For instance, the customers require specific information about their sustainability related requirements for suppliers. Similarly to the findings of KPMG & SustainAbility (2008), the customers told that they use sustainability information to improve their understanding of suppliers' approach to sustainability and as the basis for further action, including which companies to do business with. Customer Company D is even taking the next steps to ensure that their suppliers are conducting responsibly by starting to audit the biggest suppliers according to a responsible procurement program. As a matter of fact, Cargotec could use it as a reference that it fulfils the sustainability related requirements that its customers have.

When it comes to developing sustainability reporting, it first needs to be decided what the company aims to achieve through the reporting (Sullivan 2011) and, as noted by Mikael Niskala, how high it wants to set the bar. Based on the interviews, it seems that aiming to become a frontrunner in sustainability reporting will not pay off at this point in time. For most of the analysts, Cargotec's sustainability reporting does not affect their opinion or decisions about the company as long as there are no material sustainability related risks or problems. Also the customers said that the quality of Cargotec's sustainability reporting does not have a major impact on their opinion or decisions about the company; what is more important to them is that Cargotec is committed to sustainability. The customers explained that sustainability reporting shows to them that the issues are being considered, but it is only a part of supplier evaluation – the more detailed sustainability information they require is acquired through other channels than public reporting. Therefore, it seems that staying on par with competitors in sustainability reporting is enough for Cargotec.

Since most of the stakeholders interviewed thought that the key issues are already covered in Cargotec's sustainability reporting, it would not be cost-effective to widen the scope of reporting very much. As Mikael Niskala noted, more extensive reporting would require more resources. In addition, possible competitive disadvantages related to voluntary disclosure of information can be seen as an indirect cost (Daub 2007). In fact, only the Corporate Responsibility Managers considered Cargotec's sustainability reporting to be clearly too limited – as expected, those with more expertise in sustainability have higher requirements for the reporting as well. However, customers get the sustainability information they need any way through their requirements and audits for suppliers.

So, due to the direct and indirect costs of reporting, the company has to make trade-offs between the information that is requested and that which they provide (Sullivan 2011). For that reason, implementing only those of stakeholders' suggestions for developing Cargotec's sustainability reporting that are relatively easy to realise could be the best solution now. Then in the future, if stakeholders start to follow Cargotec's sustainability reporting more actively, the more difficult or costly suggestions for improvement could be implemented. Also if Cargotec's market capitalisation increases, it will then become more important to invest in sustainability reporting because a higher market capitalisation usually means more interest on the part of analysts and different (sustainability) indices. For example Analyst E told that they conduct a very detailed sustainability analysis for companies with a large market capitalisation. Of course, the bigger the company, the more interest it usually attracts among all stakeholders, including among others the general public and NGOs.

7.1.1. Stakeholders' suggestions for improvement to be implemented

Among the suggestions for improvement that are easier to realise, some of the stakeholders wished the figures to be linked to production/sales or competitors so that it would be easier to see the trend in performance and to make comparisons. Similarly, Hausman (2008) suggests that putting the numbers in context makes it easier for stakeholders to understand the performance of the company, which can add value to them (Dingwerth & Eichinger 2010). Reporting the figures relative to the amounts of production or employees (whichever is more relevant for the indicator in question) would be a fairly simple means to demonstrate how efficient Cargotec has been. On the contrary, industry comparisons suggested also by Isaksson & Steimle (2009) would not be a realistic option since the data would be practically impossible to obtain from competitors. Also more generally, the interviewees called for more concreteness in reporting: for example giving examples about the way in which innovative products reduce environmental impacts and describing what the improvements mean in practice.

Secondly, several of the stakeholders and also Mikael Niskala proposed Cargotec to include goal setting in its sustainability reporting: KPIs, targets for them, and the measures for reaching the targets. This is basically a question of describing how sustainability issues are managed within the company. Naturally, the prerequisite is that the company has identified its most important sustainability aspects and created relevant indicators for monitoring them (Isaksson & Steimle 2009). Goal setting is a basic condition of effective sustainability management and reporting; the report should quantify how the company has performed and what it is currently doing to address stakeholder concerns, while also describing the company's future objectives and how it is planning to achieve them (MacLean & Rebernak 2007).

Regarding the targets, Two Tomorrows (2011) suggests that they should be measurable and specific. Even if there are no group-wide sustainability targets yet for all production units, Cargotec could publish the local targets that its production units have. As suggested by PwC (2011), reporting on whether targets were reached could also be improved. According to the stakeholders interviewed, reporting on targets should be transparent: presenting also bad news and the corrective actions was seen to demonstrate integrity. Similarly, MacLean & Rebernak (2007) suggest that transparency helps in building trust among stakeholders. Unfortunately, it is common that sustainability reporting tends to present only positive information rather than providing a balanced account of performance (Sullivan 2011).

Thirdly, even though product use is the life cycle stage with the highest environmental impacts, several of the stakeholders mentioned that Cargotec's sustainability reporting should include more information about the responsibility of the whole supply chain. As suggested by Kaenzig et al. (2011), stakeholders have started to demand transparency throughout the entire value chain. Thus, Cargotec should extend the coverage of its sustainability reporting to include indicators about suppliers and products as well.

In order to report how the company ensures that its suppliers – including joint ventures and subcontractors – are conducting responsibly, Cargotec could describe the key requirements that it has for its business partners. Besides, the analysts suggested explaining ways of action in the whole supply chain and giving concrete examples. Mikael Niskala recommended Cargotec to present a product life cycle analysis together with the possibilities that the company has for influencing different sustainability impacts during each of the life cycle stages. The analysis could be presented in the form of a visual life cycle line in order to increase reader-friendliness. This could also help in explaining to stakeholders why the main focus of Cargotec's sustainability work is on enhancing the sustainability of product use. Related to that, Cargotec should disclose product-level indicators, for instance by presenting data that has been acquired in the process of developing the ProFuture criteria. Since the most significant impacts of the company's own operations and of product use are already discussed in brief in the annual report, the most important impacts still to be reported are those related to suppliers and sub-suppliers. Of course, all of the impacts could be analysed more comprehensively.

The last suggestion for improvement gives also the answer to the sub-question: Cargotec should focus equally on the sustainability impacts of its own operations as well as of using the products – based on stakeholders' responses, focusing only on GRI indicators or on the impacts of using the company's products is not enough. In fact, the focus should be on the total life cycle of the product (see also Kaenzig et al. 2011).

7.1.2. Reporting channel and format

When it comes to the reporting channel, the stakeholders thought that all sustainability issues should be reported in one place for the reporting to be easy to find. PwC (2011) recommends the annual report since they think that sustainability reporting should be included in business reporting. However, the problem is that the annual report cannot go into much detail. Therefore, as suggested by some of the stakeholders and also Mikael Niskala, a pdf sustainability report on the company website's sustainability section is needed. All sustainability or ESG data could be combined in the report, whereas the annual report would include only the key sustainability information. Similarly, the sustainability section of the company website could include the key sustainability information. As a general remark for any reporting channel, the stakeholders wished the reporting to be more reader-friendly with the key things highlighted.

If Cargotec wants to reach more stakeholders with its sustainability reporting, more should be done to make stakeholders aware of it. There could be a link to the sustainability report also on Cargotec's investor pages next to financial reports, so that more stakeholders would come across the report. Some of the customers also wished Cargotec to send a concise paper version of its sustainability report to all of its key stakeholders. The problem with the hard copy report is that several of the stakeholders considered hard copy as not being sustainable per se. E-mailing a link to the pdf sustainability report to those stakeholders who have showed interest in sustainability issues could be a solution; paper would not be wasted if only those who dislike web-based reporting would print out the report. With the links sent, Cargotec would no longer have the problem of key stakeholders not even being aware that the company has published a sustainability report.

However, also other reporting channels should be used since for example several of the Purchasing Managers told that they are only familiar with product communications and do not follow supplier websites actively. Thus, as suggested by KPMG (2011) and Mikael Niskala, Cargotec could use different communication channels for different stakeholder groups. Niskala explained that Cargotec has to analyse how each of its stakeholder groups could be reached; then the message should be tailored according to their needs. For instance some of the Purchasing Managers thought that Cargotec could advertise its sustainability reporting in industry magazines. Moreover, they suggested top management and sales people to emphasise sustainability issues and tell about the company's sustainability policy and performance; management commitment to sustainability was considered very important.

As expected, the analysts said that they focus on financial reports. Therefore, emphasising sustainability issues more prominently in the annual report might be an efficient way to make analysts aware of Cargotec's sustainability performance. As suggested by PwC (2011), the most important sustainability figures could be included among the annual report's key figures. Also some of the stakeholders mentioned that companies should ideally move towards integrated reporting; readers expect sustainability information to be integrated into annual reports and other communications (KPMG & SustainAbility 2008). The advantage of quantitative indicators compared to qualitative descriptions is that they can be less overwhelming for readers (MacLean & Rebernak 2007). However, important impacts which cannot be quantified should not be ignored, but discussed concisely (Kaenzig et al. 2011).

7.1.3. Stakeholders' suggestions for improvement to be considered in the future

Among the more difficult or costly suggestions for improvement, Cargotec could start considering sustainability more comprehensively instead of only in terms of environment, health & safety. Consequently, if it seems that in the future there is a need to invest more in sustainability reporting, then reporting on social issues could be extended beyond health & safety to cover further issues about employees and the supply chain also. E.g. effect on communities as well as bribery and corruption were mentioned as topics to be added to Cargotec's reporting.

For the issue selection, stakeholders suggested Cargotec to present a materiality analysis in a very clear, well-structured format. As noted by Sullivan (2011), the processes for assessing materiality are often not transparent enough. Consequently, Cargotec could improve the transparency and presentation of its materiality analysis. Mikael Niskala explained that materiality analysis and the process behind it could be described according to the GRI: how the report content corresponds to stakeholders' expectations and which factors are important for the business. In other words, Niskala suggested that the key sustainability issues and the way in which they relate to Cargotec's strategy could be presented more clearly. Regarding stakeholders' interests, the interviewees encouraged the company to map stakeholder concerns and stakeholder engagement. Similarly to KPMG & SustainAbility (2008), engaging stakeholders in issue selection and incorporating their feedback into strategy and targets was called for. Regular engagement with key stakeholders is very important also in KPI development (Adams & Frost 2008).

Besides, it was suggested that Cargotec personnel who have the expertise should be very much involved in the issue selection process. For example waste management and recycling programs, investments in renewable energy, gender diversity, fatalities, lost time injuries, training hours, and performance indicators around sustainability innovations were mentioned as possible issues to be included in the reporting. In addition, Mikael Niskala suggested that indicators related to product development and product use might be important for customers – keeping in mind that the reporting should always base on the materiality analysis; sustainability reporting should focus on the major issues that are of concern to the business and its major stakeholders (Sullivan 2011).

Regarding international commitments such as the UN Global Compact, it was suggested that Cargotec could report how it is doing against the principles and how it is committed to them in practice. Moreover, as mentioned by Mikael Niskala, implementation of the code of conduct and the measurement of it could be described.

Contrary to KPMG & SustainAbility (2008), the majority of stakeholders interviewed thought that external assurance of sustainability reporting is not necessary at this point in time. However, validating KPMG's (2011) suggestion, some of the interviewees noted that external assurance can provide enhanced credibility and opportunities to identify process and performance improvements. Based on his experience in the field, Mikael Niskala expects sustainability reporting and external assurance of it to become mandatory sooner or later, so external assurance could be another consideration for the future – especially if more stakeholders start to demand it.

7.1.4. Wider implications of the Cargotec case

Similarly to the findings of KPMG & SustainAbility (2008), De Villiers & Van Sanden (2010), and Elijido-Ten et al. (2010), this study indicates that stakeholders share largely the same expectations for quality sustainability reporting. Findings suggest that as to the content of reporting, it all comes down to basics: stakeholders do not seem to call for extraordinary features or very technical details but instead appreciate balanced, reader-friendly sustainability reporting with a life cycle perspective. This should encourage all reporters: stakeholders' requirements are not extremely high, but instead they expect basic elements from reporting. Thus, even small amendments can help reporters meet stakeholders' expectations for sustainability reporting.

Of course stakeholders' information needs are not exactly the same. There are differences e.g. in what different stakeholders focus on in sustainability reporting, but broadly their views seem quite similar to each other. This finding is in contradiction with the common argument about the difficulty related to stakeholders' differing information needs (see e.g. Willis 2003). Thus, findings indicate that satisfying various stakeholders' information needs might not be such a great challenge in reality.

Interestingly, there were noteworthy differences not so much in stakeholders' expectations about the report content but instead about the channel of reporting: stakeholders had different preferences for reporting channels. Therefore, the use of multiple communication channels seems necessary. Consequently, reporters should analyse how their key stakeholder groups can be reached and use different reporting channels accordingly to communicate balanced, reader-friendly sustainability information with a life cycle perspective.

7.2. Summary of findings

Based on the interviews among two key stakeholder groups – analysts and large customers, i.e. the Global Accounts – it seems that most stakeholders think that the key issues are covered in Cargotec's sustainability reporting. Nevertheless, the interviewees presented various suggestions for developing the reporting.

When considering which of the suggestions for improvement should be implemented, it should be acknowledged that the stakeholders do not appear to follow Cargotec's sustainability reporting very actively. Besides, most of the analysts explained that Cargotec's sustainability reporting does not influence their opinion or decisions about the company as long as there are no significant risks related to sustainability. Similarly, the customers said that the quality of Cargotec's sustainability reporting does not have a major impact on their opinion or decisions about the company – the more specific sustainability information they require from suppliers is acquired through other channels than public reporting. As a matter of fact, Cargotec could use it as a reference that it fulfils the sustainability related requirements that its customers have.

So, on the basis of the interview findings and due to the direct and indirect costs of reporting, the best solution at this point in time could be to implement only those of stakeholders' suggestions for improvement that are relatively easy to realise. In the future, in case stakeholders begin to follow Cargotec's sustainability reporting more actively, also some of the more difficult or costly suggestions could be implemented. Also if Cargotec's market capitalisation increases, it might then become more important to invest in sustainability reporting.

Based on the study, the following of stakeholders' suggestions for developing Cargotec's sustainability reporting should be implemented:

1) Figures should be reported relative to the amounts of production or employees (whichever is more relevant for the indicator in question); also more generally, the reporting should be made more concrete e.g. by presenting examples.
2) Cargotec should include goal setting in its sustainability reporting: KPIs, targets for them, the measures for reaching the targets, and reporting on whether targets were reached. Reporting on targets should be transparent, so also bad news and the corrective actions should be presented.
3) In order to describe responsibility of the whole supply chain, Cargotec should extend the coverage of its sustainability reporting to include indicators about suppliers and products as well. This could be done e.g. by explaining ways of action in the supply chain and by presenting data that has been acquired in the process of developing the ProFuture label for the most environmentally friendly products. Cargotec could also present a visual product life cycle analysis together with the possibilities that the company has for influencing different sustainability impacts during each of the life cycle stages. The most important impacts still to be reported are those related to suppliers and sub-suppliers.

The last suggestion for improvement answers also to the sub-question: in stakeholders' opinion, Cargotec's sustainability reporting should focus equally on the sustainability impacts of the company's own operations as well as of using the products. In fact, the focus should be on the total life cycle of the product. Somewhat surprisingly it does not seem to matter to most of the stakeholders if sustainability information is reported according to the GRI guidelines or not – what matters is that the key issues are covered.

If Cargotec wants to reach more stakeholders with its sustainability reporting, the following suggestions should help make stakeholders aware of it:

- Sustainability report (all ESG data should be combined in the pdf report): there should be a link to the report also on Cargotec's investor pages, next to financial reports, and the link should be e-mailed to key stakeholders.
- Annual report (only the key sustainability information should be included in the report): sustainability information should be integrated into the annual report and the most important sustainability figures/KPIs should be included among the report's key figures.
- Sustainability performance and report should be advertised in industry magazines.
- Top management and sales people should tell about Cargotec's sustainability policy and performance to customers and also other stakeholders.

If it seems that in the future there is a need to invest more in sustainability reporting, then the scope of reporting could be extended beyond environment, health & safety. Among the other suggestions for improvement to be considered in the future, Cargotec could improve the transparency and presentation of its materiality analysis and map stakeholder engagement. A number of possible indicators were suggested, but it should be kept in mind that the reporting should base on the materiality analysis. Besides, implementation of the code of conduct and international commitments could be described in more detail. Finally, external assurance of sustainability reporting does not seem necessary at the moment and thus remains an option to be considered in the future.

In addition to Cargotec, also other companies that seek to meet stakeholders' expectations for sustainability reporting can find the study useful – perhaps not straightforwardly, but rather through a similar logic of reasoning. For example, findings of the study indicate that different stakeholders' expectations for quality sustainability reporting are largely the same: stakeholders seem to value balanced, reader-friendly reporting that has a life cycle perspective. In other words, stakeholders expect basic elements from reporting. This finding is encouraging to all reporters: even small amendments can help them meet stakeholders' expectations for sustainability reporting. Moreover, the study suggests that satisfying different stakeholders' information needs might not be such a significant challenge in reality. However, in order to reach various stakeholder groups, it seems necessary to use different communication channels.

As this master’s thesis study covered only two of Cargotec’s key stakeholder groups, examining also other stakeholders’ views about Cargotec’s sustainability reporting remains an opportunity for further research. In order to cover stakeholders’ opinions more broadly, for example a web-based questionnaire could be used. On the other hand, a questionnaire could be utilised to survey several companies’ stakeholders to get more general results.

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Niskala, Mikael: Senior Vice President, Sustainability Business Excellence at Tofuture 21.2.2012

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Analyst A 5.3.2012

Analyst B 6.3.2012

Analyst C 6.3.2012

Analyst D 7.3.2012

Analyst E 16.3.2012

Analyst F 21.3.2012

Purchasing Manager at Customer Company A 17.2.2012

Corporate Responsibility Manager at Customer Company B 22.2.2012

Purchasing Manager at Customer Company C 28.2.2012

Corporate Responsibility Manager at Customer Company D 6.3.2012

Purchasing Manager at Customer Company D 15.3.2012

Purchasing Manager at Customer Company E 7.3.2012

Appendices

Appendix 1: Preliminary interview questions for analysts

Background

1. Do you use sustainability related criteria when analyzing companies? If yes, what kind and how do the criteria fit in the overall company assessment/valuation?
2. Were you familiar with Cargotec's Key Environmental Figures before this interview? If yes, when had you looked at them and why? If no, why?

Impact

3. Does Cargotec's environment, health & safety (EHS) reporting/performance have an impact on your opinion of the company?
4. Does Cargotec's EHS reporting/performance affect your decision-making? If yes, how?

Content

5. What do you think about Cargotec's EHS reporting/issue selection currently; what are the pros and cons?
6. Do Cargotec's EHS reporting/key issues address the most relevant issues in your opinion?

Format

7. Which reporting channels/formats (e.g. part of annual report, stand-alone sustainability report, integrated report, website etc. / pdf, web-based, hard copy etc.) do you prefer?
8. Do you think that Cargotec should follow some sustainability reporting guidelines?

Future

9. In your opinion, is it more important for Cargotec to focus on the EHS impacts of its own operations or the life cycle EHS impacts of the products?
10. What do you think about external assurance – is it necessary for EHS reporting?
11. How could Cargotec's EHS reporting/issue selection be improved; what and how would you like Cargotec to report about EHS in the future?

Appendix 2: Preliminary interview questions for customers

Background

1. How is responsibility for sustainability issues organized at your company?
2. What sustainability issues does your company follow and why?
3. Does your company have sustainability related requirements for suppliers? If yes, what kind?
4. Were you familiar with Cargotec's Key Environmental Figures before this interview?
   If yes, when had you looked at them and why? If no, why?

Impact

5. Does Cargotec's environment, health & safety (EHS) reporting/performance have an impact on your opinion of the company?
6. Does Cargotec's EHS reporting/performance affect your decision-making? If yes, how?

Content

7. What do you think about Cargotec's EHS reporting/issue selection currently; what are the pros and cons?
8. Do Cargotec's EHS reporting/key issues address the most relevant issues in your opinion?

Format

9. Which reporting channels/formats (e.g. part of annual report, stand-alone sustainability report, integrated report, website etc. / pdf, web-based, hard copy etc.) do you prefer?
10. Do you think that Cargotec should follow some sustainability reporting guidelines?

Future

11. In your opinion, is it more important for Cargotec to focus on the EHS impacts of its own operations or the EHS impacts of using the products?
12. What do you think about external assurance – is it necessary for EHS reporting?
13. How could Cargotec's EHS reporting/issue selection be improved; what and how would you like Cargotec to report about EHS in the future?