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Sustainability reporting within the shipping industry

An exploratory study of the ten largest container shipping companies

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Abstract

The shipping industry is one of the driving forces of the global economy, and sustainability issues are of key importance to the future of our world. Therefore, this thesis will combine them and look at sustainability within the shipping sector by doing an exploratory study of the ten largest container shipping companies. Sustainability reporting is becoming commonplace among larger companies, and therefore this thesis sets out to look at what is reported and the quality level. First, a literature review is conducted to look at, among other, the history, current state, quality aspects and previous research into sustainability reporting. Then a content analysis with a scoring system is developed. This is based on the most commonly used framework, the GRI Guidelines, which are then adopted for the shipping industry. The quality aspects are attached to transparency, materiality, stakeholder engagement, KPIs and assurance. Furthermore, this thesis sets out to identify further research topics within sustainability reporting and especially within the shipping industry.

The findings shows that sustainability reporting among the container shipping companies varies widely in both quality and level of disclosure, from companies issuing several hundred pages long sustainability reports that are assured to companies with only a single webpage with information on sustainability. The best aspect reported is the category; Economic, Environmental and Social Aspects, with social aspects being the weakest part here. Furthermore, transparency on measurement and selection methods is weak, especially within stakeholder engagement and materiality. In addition, mandatory requirements can lift the reporting up to a common minimum, but it does not create outstanding reporting. Further research topics have been identified as; links between ownership and sustainability reporting and top executive's motivation for sustainability vs the companies sustainability reporting. Lastly, studies needs to see if good sustainability reporting is evidence of good sustainability performance.

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1 Introduction

Environmental and social issues have been something humanity has been concerned with throughout the ages, from helping the poor to improving air quality from burning heating fuel. However, these aspects first started moving into the boardrooms of corporations in the early 20th century (Buhr, 2007). This focus on environmental and social issues have evolved into a more comprehensive approach that is defined as sustainability, which was given a clear definition in the preparation towards the UN earth summit in Rio in 1992:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Bruntland, 1987, p. 41).

Sustainability reporting is about disclosing what impacts a corporation has on society. For corporations sustainability represents the ability to survive and prosper over the long-term in an increasingly globalized world. Furthermore, achieving sustainability requires engagement in the entire value chain and across the corporation’s entire range of activities and processes (Carroll & Buchholtz, 2012). In addition, sustainability also requires a level of disclosure of the corporation’s sustainability practices, which is often seen through separate sustainability reports.

However, what should a report on sustainability contain? Sustainability encompasses three dimensions, economic, environmental and social, which are often referred to as the triple bottom line. Therefore, all these aspects should be addressed in a long term perspective to fully be a sustainability report. However, how should a corporation account for these issues, especially the non-financial issues? Over the last few decades, there has emerged several different standards, frameworks, etc. to address this question regarding sustainability reporting. The leading framework is the Global Reporting Initiative (GRI) that claims to have over 22 000 reports across 7 000 organizations (GRI, 2015a). This framework lays out general aspects on what a corporation should report on and how they should report it, regardless of industry. Therefore, this is a good base to use when looking at sustainability reports, even if corporations does not specifically refer to GRI in their reporting.

One of the most comprehensive surveys on sustainability reporting is the biannual KPMG Survey of Corporate Responsibility Reporting, with the latest one published in 2013 (KPMG, 2013). This survey looks at the 100 largest companies in 41 countries, giving us an overview of the different countries, and segments them into different industries creating industry benchmarks as well. Furthermore, it gives us an overview of the quality of the reporting and looks at regulations for reporting in the different countries. From this survey we can read that reporting is becoming commonplace, and the focus is now on what is reported and how. However, there is only summarized results for each country and industry segments. Therefore, you cannot get a look at a single corporation and some industry segments are combined meaning that you will not get an overview of some specific industries.

In addition, the KPMG survey and other reports such as United Nations Environment Programme's (UNEP) report focuses on the increase in mandatory requirements for sustainability reporting (KPMG, 2013) (UNEP et al., 2013). They report that more and more countries are issuing mandatory laws regarding sustainability reporting. However, many of them are "report or explain" laws, meaning that you do not have to report but then you need to explain why. In addition, more and more stock exchanges are requiring information on sustainability for a company to be listed on the exchange. The trend is towards more mandatory reporting and therefore companies needs to start focusing on what and how they should report on their sustainability actions and impacts.

Furthermore, most research that the author could find during the initial idea face focused on whether or not to report, and looking at the motivations behind reporting. This can be because of the evolving state of sustainability reporting and the fact that just a decade ago it was not as commonplace as today. However, this has changed; symbolized with the latest report from KPMG (2013), and the debate about reporting or not is about to end. Therefore, this thesis will look at what companies report and look at the quality level of reporting.

1.1 Chosen industry

One of the industries that the KPMG (2013) survey does not address directly is the shipping industry. This is presented as a part of the larger industry *transportation*. However, a major shipping company, Maersk, is presented in the survey as one of the leading companies in the

world on sustainability reporting. This triggered the interest of the author to take a closer look at this company and the industry overall. Furthermore, during the initial idea phase little to no research was found on sustainability reporting in the shipping industry. The author felt that this was a field that needed more insight, and wanted to create an exploratory study, which would give us an overview of the industry and input for future research into this field.

According to the International Chamber of Shipping (ICS), around 90 % of the world trade is handled by the international shipping industry (ICS, 2015a). Meaning that this industry is an integrated part of the global economy, which the author feels makes it an interesting and important industry to study. Furthermore, shipping claims to be the most environmentally friendly form of transportation. However, due to the vast scale of shipping it does still account for a large amount of the greenhouse gas emissions. Around 3 % of the world's CO₂ emissions comes from this industry (ICS, 2015b). However, shipping companies should report on their sustainability performance, and do it willingly to outperform other sectors within the transportation industry.

The shipping industry is huge and with a complex ownership structure. Therefore, the author has narrowed the industry to the container shipping industry. This segment account for around a quarter of the total shipping transport measured in billions of tons (UNCTAD, 2014). Furthermore, being a part of the supply chain for many other industries the sector will be required to supply information on their sustainability to their customers (KPMG, 2013). In addition, this is one of the most recognizable segments of the shipping industry seeing that it affects the everyday transportation of consumer goods and everybody knows what a container ship is, in contrast to for example a dry-bulk ship.

Furthermore, it is the larger corporations that mainly report on sustainability and they are the drivers for reporting as well (KPMG, 2013). In addition, there is tendency towards more consolidating in the container shipping industry, which will lead to fewer and larger companies (UNCTAD, 2014). Therefore, the author has chosen to look at the ten largest container shipping companies, which accounts for around 60 % of the capacity in the industry.

1.2 Research questions and methods

The author has two research questions that this thesis tries to answer.

1. What is the status of sustainability reporting in the container shipping industry?
2. What is the quality of the sustainability reporting in the container shipping industry?

Based on the research questions the author will try to create an overview of the sustainability reporting within the container shipping industry, and investigate what they are reporting. Furthermore, this thesis will try to set up further research topics based on the findings, within sustainability reporting and especially within the shipping industry.

To answer the research questions the author first conducts a literature review to uncover the status of the research into sustainability reporting. In addition, this will give the author greater understanding of the research topic and help set up the empirical study. Furthermore, the indicators used for testing the quality levels of sustainability reporting are found through this literature review. Information on sustainability is mostly narrative text and the amount of information may be vast. Therefore, an empirical study with the goal of reducing the data and segmenting it was chosen. A qualitative content analysis was performed to analyze each company based on the indicators found in the literature review. In addition, to looking at the quality of reporting a scoring system was created for the content analysis. The findings were discussed for each company and further analyzed for the entire industry. Based on the findings and the discussion a conclusion was drawn and further research topics presented.

The structure of the thesis follows first with a literature review and a reformulation of the research questions as presented here. Then a methodology chapter, looking at the theoretical background for the analysis and then creating the scoring system to evaluate the companies. After that the empirical based findings chapter follows, where ten companies are presented and discussed. Based on the findings a discussion chapter follows where we look at the entire industry and start grouping similar reporting companies together. In addition, a reflection regarding the status of sustainability reporting within the shipping industry is presented. Furthermore, limitations with the study are addressed in this chapter. Finally, the thesis presents its conclusions and sets up further research topics. A detailed bibliography is also found at the end of this thesis.

2 Literature review

To address the research topic and help answer the research question a literature review was conducted. Due to the limited timescale, the author realized that only a portion of the relevant literature would be uncovered. Therefore, keywords were determined to help limit the search; *sustainability reporting, shipping industry, social accounting, CSR reporting* and combined with specific chapter issues such as *history, motivation, etc.* Afterwards, the Norwegian School of Economics' library search tool was utilized along with generic google searches and google scholar searches. Based on the keywords, a browsing and screening process was used. Books and journal articles were prioritized, but due to the evolving nature of the research topic, up to date consultancy and organizational reports and websites also became valuable resources. The author realizes that this is not a complete review of all literature on the topic, but it gives an overview of the most relevant aspects for this thesis.

2.1 Corporate Social Responsibility to Sustainability reporting

Corporate Social Responsibility (CSR) as we know it today has evolved over the last 50 years. However, issues of corporate responsibility has been around for centuries and are even major issues in the writings of Plato and Aristoteles. This notion that corporations have responsibilities to society around them in a legal, ethical, economic and/or philanthropic way has been central throughout time (Madrakhimova, 2013). However, there has always been a strong focus on CSR being a voluntary concept (Carroll, 1999). One of the classic explanations of CSR emphasizes this: "... It means that social responsibility begins where the law ends" (Davis, 1973, p. 313). In recent articles, this emphasis on going beyond the law and advancing a social cause has been a key definition of CSR (McWilliams & Siegel, 2011) (Dhaliwal et al., 2011). The European Commission redefined CSR as "the responsibility of enterprises for their impacts on society" (European Commission, 2011, p. 6) and states that corporations should take into account social, environmental, ethical, human rights and consumer concerns into their strategy. However, there is no clear-cut definition of CSR but the focus is on advancing society's good and the voluntary aspect of CSR.

Furthermore, communication of a corporation's CSR activities varies from TV ads, holding press events, websites on community involvements to issuing social and environmental

reports. Social accounting can be one way of this, and it can be described as “...accounting for non-financial aspects of a company’s performance” (Blowfield & Murray, 2011, p. 186). In addition, Gray et al. (1987) stated a more detailed description of social reporting:

“... the process of communicating the social and environmental effects of organizations’ economic actions to particular interest groups within society and to society at large. As such, it involves extending the accountability of organizations (particular companies), beyond the traditional role of providing a financial account to the owners of capital, in particular shareholders. Such extension is predicated upon the assumption that companies do have wider responsibilities than simply to make money for their shareholders (Gray et al., 1987, p. ix)

This definition was refined in Gray et al. (1996) to include focus on use by internal participants within the corporation, but the original definition is a good starting point and sufficient for this thesis.

It is worth noting that with both CSR and social reporting there is an assumption that corporations do have a responsibility beyond making a profit. Martin Friedman argued against this notion in his famous article, *“The Social Responsibility of Business is to Increase its Profits”* in New York Times (Friedman, 1970) and got a rebuttal from Edward R. Freeman that focused on the stakeholders (those who are impacted or have a “stack” in the company) and not just the shareholders (Freeman, 1984). This debate has been known as the Friedman-Freeman debate and is still debated within different schools of economics. For the purpose of this thesis, we will assume a position that corporations do have responsibilities beyond making a profit and we will show that this is a common assertion among companies, NGOs, governments and society.

Environmental and social impacts on society can also be thought of as sustainability. Sustainability has a commonly agreed upon definition: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Bruntland, 1987, p. 41). Therefore, sustainability incorporates a time aspect and requires long term planning to be fully addressed.

Furthermore, John Elkington coined the term Triple Bottom Line (TBL) in his book *Cannibals with Forks: The Triple Bottom Line of 21st Century Business* (Elkington, 1997). It focuses on balancing the economic, social and environmental performance by corporations. By incorporating these three dimensions, TBL is almost close enough to capture sustainability. To do so it must first define the economic dimensions more broadly and not just in a narrow financial sense. Secondly, it should incorporate the essential time aspect of sustainability and not just focus on the immediate issues (Henriques, 2004).

Therefore, sustainability reporting is a report that sets goals, measure performance, compile and report on the corporations' performance in a way that combines long-term profitability with social and environmental responsibility. It is the main source of communicating the corporations' environmental and social performance, both negative and positive (GRI, 2013).

There is a wiggly line from CSR to social accounting through Triple Bottom Line towards Sustainability reporting. No one term excludes the other and they just emphasize different aspects within the sphere of non-financial issues that corporations face. The international survey conducted biannually by KPMG (2013) shows that the most commonly used terms for reporting non-financial information are *Corporate responsibility* (14 percent), *Corporate Social Responsibility* (25 percent) and *Sustainability* (43 percent).

2.2 History of sustainability reporting

Reporting on non-financial aspects is something that has emerged in the last 100 years. However, it does not have a systematic evolution but more an ad hoc response to the issues of the day. Starting with a focus on health and safety at the workplace, to social issues, then over to environmental issues, trying to combine them into triple bottom line reporting and ending up today with sustainability reporting (Buhr, 2007). However, the notion of social and environmental issues has been around for several hundred years, from the English Parliament forbidding coal burning when it was in session in 1306 to New York appointing their first health inspector in 1804 (Neuzil & Kovarik, 1996).

Hogner (1982) conducted one of the early studies on social reporting, studying US steels' annual reports from 1901 to 1980. Among other things, he saw that the earlier reports

emphasized human resources, such as work safety, mortgage assistance for employees and homes built for workers. In addition, there were some reporting on community involvement and there were some mention of environmental issues after 1960. However, there was no separate report on these issues. It was just mention in a paragraph or on a few dedicated pages in the annual report. Other research papers looking at different corporations like Guthrie & Parker (1989) supported these findings.

Social responsibility, and more specifically employees and trade unions, was the focus of the 1970s (Gray et al., 1996). This led to an increase in the rights of employees to information and the power of trade unions. Even though social responsibility was the focus, there were also mentions of environmental issues during this decade. Ernst & Ernst (today known as EY) started in 1971 to publish annual surveys of Fortune 500 Industrial companies' social responsibility disclosure in the annual reports. Covering issues from the environment, fair business practice (including worker rights), health and safety to community involvement. However, only 1 % of the companies at that time (7 companies in 1976 and 6 companies in 1977) issued separate social responsibility reports (Buhr, 2007).

In the late 1970s and early 1980s, there was an economic decline and a major shift in politics led by Reagan and Thatcher. Leading to a decrease in social and environmental focus and it is an example of the ad hoc evolution that corporate social reporting has gone through. Towards the end of the 1980s, environmental issues were the focus arising from major environmental disasters like the Bhopal gas accident and the Exxon Valdez disaster. Showing once again the ad hoc evolution of corporate social reporting. Even though sustainability was addressed in the Bruntland Report in 1987, the focus was still on purely environmental issues towards the late 1990s (Bruntland, 1987) (Buhr, 2007).

The first separate corporate environmental report saw its light in 1989 and since then corporations that issues environmental, social or sustainability reports have increased substantially. KPMG started their biannual survey of corporate social responsibility reports in 1993 and found that 12 % of the 100 largest companies in several countries issued such reports. This had increased to 28 % in 2002. However, it varied strongly from country to country, from Japan with 72 % to South Africa with 1 % (Kolk, 2004).

In the late 1990s, the term Triple Bottom Line emerged as the next alternative in corporate social reporting. It was an attempt to combine the financial aspects of corporations with their social and environmental responsibilities (Elkington, 1997). Nola Buhr argued that this is as far as corporate social reporting has come (Buhr, 2007).

However, this view of the history of sustainability reporting has an Anglo-Saxon approach and focuses primarily on the western world (Gray et al., 1996). Nevertheless, it gives a brief overview of the evolution of sustainability reporting that helps us understand how we have arrived at the current state of sustainability reporting.

2.3 Current state of sustainability reporting

Corporate responsibility reporting is now undeniably a mainstream practice with over 71 % of the 4 100 companies surveyed in KPMG's (2013) biannual corporate responsibility reporting survey. The report surveys the 100 largest companies in 41 countries around the world. This is a clear increase from the survey in 2002 where only 28 % were reporting. However, after 2005 the KPMG survey also started to include corporate responsibility information just stated in the annual report. This was because of the trend that companies were reporting more CSR information in their annual report and a start towards Integrated Reporting (Kolk, 2004) (KPMG, 2013). However, KPMG, EY, etc. often have a self-interest in conducting such surveys. Their goal is to sell consulting and assurance services to companies and these surveys are a way for them to gain expertise and highlight it to potential customers. Therefore, even though the surveys gives us insight in to the state of sustainability reporting, we need to have a critical view of the information provided.

On the other hand, The Global Reporting Initiative states that in their database over 7 000 organizations are registered with over 22 000 reports (GRI, 2015a). An even higher number is claimed by the CorporateRegister (an independent UK based organization), that claims to have the largest online directory of corporate responsibility reports, having over 62 000 reports across more than 12 000 companies (CorporateRegister, 2015). This is a massive increase from around 50 reports in 1992 (Palenberg et al., 2006).

However, there are still major differences between different sectors and regions/nations. France, Denmark and South Africa are the leading countries with over 90 % of their largest companies reporting. South Africa has made a remarkable increase in reporting over the last decade. The main driver for this has been mandatory laws and requirements, in addition to requirements from the Johannesburg Stock Exchange (UNEP et al., 2013). On the other end of the scale, we have Kazakhstan, UAE and Israel with around 20 % reporting. By regions, the reporting amount is quite even between Europe and the Americas with around 75 %. However, the Americas has finally overtaken Europe. Mostly due to the increase in Latin America and the inclusion of Colombia where around 75 % of the largest companies are reporting. On the other hand, the largest increase from the last survey in 2011 has come in the Asia Pacific region. It has had an increase from 49 % to 71 % reporting, almost catching up to Europe (KPMG, 2013).

Sector wise the gap has narrowed with all sectors now having at least 62 % of the largest companies reporting on their corporate responsibility. There has been little change in what sectors are more likely to report, with the most likely being; heavy industry and resource intense industries while services and retail & trade is lagging behind. Therefore, corporate responsibility reporting has reach maturity across the sectors (KPMG, 2013).

However, external assurance or attestation of the sustainability reports is lagging behind. In the same way as financial statements, sustainability reports require an external and independent verification. In 2013, only 41 % of the reporting companies issued such a statement. In addition, over 70 % went for a limited assurance of the report, or even just a assurance of a limited part of the report (KPMG, 2013). The quality of these assurances has also been variable in the past (Ball et al., 2000). One reason for this might be that accountants have little to no training in this issue (Gray, 2001). However, this have changed in the later years with 67 % of the assurance statements in the KPMG (2013) survey were from major accountancy organizations. In addition, the 250 largest companies in the world are leading the pack with 56 % having assurance statements and we can expect the rest to follow suit, as they have done before (KPMG, 2013).

In conclusion, the debate is no longer on whether or not to report, but more focused on what and how to report. Based on this, the thesis will focus its scope on *what* shipping companies are reporting and how they do it.

2.4 Mandatory vs voluntary reporting

“Regulation drives growth in corporate responsibility reporting” (KPMG, 2013, p. 24).

CSR has had a strong focus on being voluntary and beyond the legal requirements. This has also been true with sustainability reporting over the years. However, while reporting is becoming mandatory, CSR is still voluntary (KPMG, 2013). This is also something regulatory bodies and governments seem to understand by issuing “report or explain” laws. A company shall report on given sustainability issues or explain why they do not report on them. Twelve out of the 44 countries in the UNEP et al. survey (2013) have issued report or explain based laws.

However, mandatory reporting requirements were not commonplace just 15 years ago (KPMG, 1999). Then the drivers for voluntary reporting were more peer pressure and to improve stakeholders/other pressure groups perception of a company’s sustainability performance (KPMG, 1999) (Cormier & Magnan, 1999) (Herremans et al., 1999). Cormier & Magnan (1999) focused on the cost-benefit of reporting, and stated that increased cost could come from lobbying campaigns from environmental pressure groups (NGOs). Therefore, companies had a pressure to report, and well, to avoid such costs. In addition, Laan (2009) identified something that she labelled as *solicited disclosures*, which occurs when NGOs or other stakeholders requests information from the company. This form of disclosure is not voluntary, neither is it mandatory but there is a pressure to comply with such request based on the cost related to non-compliance. In that sense, sustainability reporting has been de facto mandatory for certain companies. More about the reasons for sustainability disclosure can be found in the sub-chapter *Motivations/reasons for sustainability reporting*.

On the other hand, some countries started experimenting with legally required social reporting earlier, such as France’s “*Sozialbilanz*” law in 1977 (UNEP et al., 2010). Other countries followed suit, such as Germany, Austria, Denmark and Switzerland, but they were

still a minority in the world. However, Denmark (most notably) has lately pioneered the “report and explain” approach by mandating that all larger companies disclose their CSR work or explain why they have not (Danish Business Authority, 2015). Leading to 97 % of the companies reporting on their CSR work, and only 3 % that do not report on their CSR actions. (Danish Business Authority, 2013).

The “report or explain” approach has the benefit of creating a level playing field and setting a minimum of what is expected to report. In addition, regulators can focus on key reporting issues while simultaneously allow companies to focus on their most important issues. It is flexible and tries to minimize administrative burdens. As with all sustainability reporting, it enhances trust towards the public through transparency and good governance. However, the explain function can be seen as an escape for companies that do not want to disclose anything about their CSR practices (UNEP et al., 2013).

Another major drive towards mandatory reporting is coming from stock exchanges. Many of them requires sustainability disclosure before being listed (UNEP et al., 2013). Singapore Stock Exchange’s Sustainability Reporting Guide has increased the reporting rate by 37-percentage points (KPMG, 2013). A similar result occurred at the São Paulo Stock Exchange in advanced for the Rio+20 Conference when they launched their report or explain policy, increasing the reporting rate from 45 % to 58 % in just a short time (UNEP et al., 2013).

An UN initiative to promote this was established in 2009, the Sustainable Stock Exchanges Initiative (SSE). The SSE works with exchanges, investors, regulators and companies to increase transparency and performance on environmental, social and corporate governance issues and to promote long-term responsible investments (SSE, 2012). Major stock exchanges such as London Stock Exchange Group and NASDAQ have joined the initiative, even though they do not require sustainability reports before being listed (SSE, 2015). On the other hand, the major push for companies to disclose on sustainability issues before being listed on stock exchanges is found in the developing countries and non-OECD countries (KPMG, 2013) (UNEP et al., 2013).

Furthermore, at the Rio+20 conference in 2012 the UN and its member states took a stand for corporate sustainability reporting. Despite the public impression that the conference was a failure, one important paragraph was included in the final report. Paragraph 47 in the final document *The Future We Want*:

“We acknowledge the importance of corporate sustainability reporting and encourage companies, where appropriate, especially publicly listed and large companies, to consider integrating sustainability information into their reporting cycle. We encourage industry, interested governments as well as relevant stakeholders with the support of the UN system, as appropriate, to develop models for best practice and facilitate action for the integration of sustainability reporting, taking into account the experiences of already existing frameworks, and paying particular attention to the needs of developing countries, including for capacity building (United Nations Conference on Sustainable Development (Rio+20), 2012, p. 7).”

This paragraph calls on governments and other stakeholders to increase sustainability reporting through policies that goes beyond the voluntary concept. Member states have taken this approach and in 2013, there were over 180 policies across the 45 countries that were surveyed. Two thirds of these were also mandatory (UNEP et al., 2013). In addition, the paragraph emphasizes building on existing frameworks and harmonizing the reports.

In the wake of Rio+20, a group of countries went together and formed the *Group of Friends of Paragraph 47* to acknowledge the importance of the paragraph. The founding countries were pioneers in sustainability reporting practices and policies: Brazil, Denmark, France and South Africa (UNEP, 2015). Since then Austria, Colombia, Norway, Switzerland, Chile and the latest member Argentina have joined the group. (Group of Friends of Paragraph 47, 2013) (Group of Friends of Paragraph 47, 2015). The group recognizes that government has an important role in pushing sustainability reporting using both soft and hard laws. However, it is also recognizes that each government must choose the best practices for their country based on culture and jurisdiction. Furthermore, the group invites other nations to join them and other stakeholders to engage them in further improving sustainability reporting practices (Group of Friends of Paragraph 47, 2012).

The mandatory and voluntary debate is not a black-and-white issue, but more a spectrum (Buhr, 2007). They may even enhance each other and there are many overlaps between mandatory and voluntary approaches. Most notably, many mandatory requirements build on already existing voluntary reporting frameworks. Norway is an example where the government has endorsed the use of GRI as the reporting framework for large companies (Norwegian Ministry of Foreign Affairs, 2009). However, larger emerging economies are developing their own national standards (UNEP et al., 2013).

One reason against voluntary reporting is that it does not create widespread, consistent and systematic practices (Gray, 2001). This can be evident by the ad hoc evolution of sustainability reporting as we have seen in the past. However, voluntary reporting is more flexible and adaptive to the companies' need and not a "one size fit all" pushed down on them. On the other hand, mandatory reporting can be rigid and not flexible to changes in knowledge and focus. It also lacks incentives for innovation, and the experimentation part is one of the most valuable lessons from voluntary reporting. However, mandatory reporting can create lasting change in the corporate culture that may, in time, lead to innovation above the minimum requirements. In addition, it creates standardization and eliminates the free rider problem with voluntary reporting (UNEP et al., 2010).

In conclusion, voluntary and mandatory reporting can complement each other. Giving rise to innovation while increasing standardization and reporting numbers. However, there are still major differences from country to country and on which stock exchange the company is listed. The trend is towards mandatory reporting and a general increase in the focus on sustainability reporting from governments.

2.5 Overview of sustainability reporting standards, frameworks, etc.

The leading standard is the Global Reporting Initiative (GRI) with 78 % of the companies referring to GRI in their reports. When GRI is not used, companies use either their own developed framework or a national reporting guideline (KPMG, 2013). In addition, there is a trend towards more integrated reports. However, only 10 % are claiming to have integrated reports and only 1 % is referring to The International Integrated Reporting Council's (IIRC) developed framework. This will be the next development stage for sustainability reporting

(KPMG, 2013). However, there are many other standards, frameworks, principles, etc. that are in use.

2.5.1 Global Reporting Initiative (GRI)

GRI can trace its roots to the Exxon Valdez accident and is an example of the ad hoc evolution of sustainability reporting. After the Exxon Valdez accident in 1989 a group of social investors, religious organizations, pension funds, labor unions and environmental groups created The Coalition for Environmentally Responsible Economies (CERES) (Smith, 1993). They issued the Valdez Principles (later renamed the CERES principles) on environmental conduct (CERES, 2015). However, CERES, with the Tellus Institute, envisioned something bigger, and started developing a sustainability reporting framework in the late 1990s. They launched the GRI in 1997, and in 1998 the UNEP was included as a partner giving GRI increased legitimacy (Brown et al., 2009a). It was spun-off as an independent organization in 2001, and the following year, after the UN asked for a host country, it was relocated to Amsterdam (GRI, 2015b).

The goal for GRI was to create a global common framework for the voluntary reporting of the economic, environmental and social impact of corporations and, gradually, other organizations (White, 1999). In addition, one of the greatest contribution of GRI is their multi-stakeholder approach to developing and evaluating its reporting guidelines, creating social impact indicators and the concept of materiality (Brown et al., 2009b). Materiality means that an organization should focus on what is the key issues for sustainability that influences them and their stakeholders (GRI, 2013). The multi-stakeholder development and evaluation approach has evolved GRI's guidelines, from the first guidelines (G1) in 2000, G2 in 2002, G3 in 2006, G3.1 in 2011 and the latest version G4 in May 2013. There is now a transition going on from G3/G3.1 to G4 and from December 31 2015, only G4 reports are accepted (GRI, 2013). In addition, after G3 they also started issuing sector specific guidelines for some sectors such as Oil & Gas, NGOs, Financial Services, etc. However, there is no sector guidelines for shipping or even the wider term transportation, and there is none planed neither (GRI, 2015c).

Companies reporting with GRI can choose to report "in accordance with GRI" or just simply state that they have used standard disclosures from the guidelines. "In accordance" implies that the corporation must follow the set criteria from GRI and cannot just choose from a list.

In G3/G3.1, there was an indicator called “Application Level”, stating on how detailed you had reported, from A (Top) to C (GRI, 2015d). In G4, it has been changed to reporting by the option “core” or “comprehensive”. However, neither the G3/3.1 nor the G4 option is a statement about the quality of the report but just a statement on the application level the GRI Guidance in the report. In addition, GRI offers an overview on how its reporting can be linked to, and in some cases complete, other standards such as Integrated Reporting, UN Global Impact, OECD Guidelines for Multinational Enterprises, etc. (GRI, 2013).

2.5.2 The International Integrated Reporting Council (IIRC)

An integrated report (IR) tries to combine different strands of reporting such as financial statements, management commentary, governance and remuneration, and sustainability reporting into a single report that explains an organizations’ ability to create and sustain value (IIRC, 2011). The IIRC is the leading authority on IR and its mission is to enable IR to be a mainstream business practice for all companies. It is a coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs (IIRC, 2015). Formed in 2010 by initiative from the GRI and the Prince’s Accounting for Sustainability Project (A4S), it can trace its roots to a speech given by the Prince of Wales in December 2009 (Flower, 2014). The goal was to create an international framework for IR and it started with discussion papers, pilot projects, draft outlines and consultancies before it launched the final version of the *International <IR> Framework* in December 2013 (Deloitte, 2015).

The leading country in the world on IR is South Africa where 93 % of the 100 largest companies issued integrated reports (KPMG, 2013). Driven by the “The King Report on Corporate Governance 2010 (King III)”, which is a non-legislated code on good corporate governance that requires integrated sustainability reporting. However, while it is not a mandatory legislation it is a requirement for listing on the Johannesburg Stock Exchange (UNEP et al., 2013). In 2014, the Integrated Reporting Committee of South Africa endorsed the IIRC’s Integrated Reporting Framework meaning that South African companies should start using IIRC’s framework for their IRs (IIRC, 2014).

2.5.3 ISO standards

ISO (International Organization for Standardization) is an independent, non-governmental membership organization made up of 163 member countries that has been around since 1946, and it is the world's largest developer of voluntary International Standards (ISO, 2015a). Standards are important to create a common and agreed definition of complex aspects. This breaks down barriers for international trade and helps consumers know that products and services are safe, efficient and good for the environment (ISO, 2015b). The first ISO standards relating to environment was the 14000 series that started in 1996. In 2003, 107 executives in multinational organizations recognized the ISO 14000 series as the most influential framework/standard on business practice (World Bank Group, 2003). In addition, these standards may help implement other reporting guidelines such as GRI. However, the ISO-14000 series are standards on environmental management and not on sustainability or sustainability reporting (Adams & Narayanan, 2007) (Herremans et al., 1999). Therefore, ISO created the ISO 26000 on Social Responsibility in 2010 after a multi-stakeholder approach much as the one for GRI. Many ISO standards are certifiable, but the ISO 26000 provides guidance and not requirements. Therefore, it cannot be certified and instead it aims at helping corporations to achieve best practices on social responsibility. In addition, ISO 26000 can be combined and incorporated with both the GRI G4 and the IIRC reporting framework (ISO, 2015c).

2.5.4 UN Global Compact (UNGC)

“The UNGC is the largest voluntary global governance initiative that addresses the social and ecological responsibilities of multinational corporations” (Voegtlin & Pless, 2014, p. 181).

With more than 12 000 corporations and organizations from over 145 countries, the UNGC is the largest voluntary corporate responsibility initiative in the world (UN Global Compact, 2015a). In 2000, Kofi Annan, then UN General Secretary, founded the UNGC and established their ten principles. They cover areas of human rights, labor, environment and anti-corruption, based on different declarations and conventions within the UN (UN Global Compact, 2015b). Corporations and organizations that want to be part of the UNGC have to sign a letter of intent by their CEO to commit to these principles. In addition, they must on a yearly basis issue a communication on progress (COP) report that is published on UNGC's website. There are no

standardized report or in-depth review of the content by the UN. However, UNCG has recently started to categorize participants based on their performance into three categories (learn, active, or advanced). In addition, by failing to issue a COP two years in a row the company is removed from the list of complying companies (Voegtlin & Pless, 2014).

2.5.5 OECD Guidelines for Multinational Enterprises

The Organization for Economic Cooperation and Development (OECD) developed their guidelines in 1976 and has updated them 5 times, most recently in 2011. The guidelines are the most comprehensive government backed instrument in existence today. Governments from 44 countries, both non-OECD and OECD, adhere to the guidelines and encourage their enterprises to observe the guidelines wherever they operate. The guidelines are a set of recommendations for responsible business conduct that cover topics such as information disclosure, human rights, employment and labor, environment, anti-corruption, competition, science and technology, taxation, and consumer interest. Even though the guidelines are voluntary, international or national law regulates some issues that are covered. In addition, the guidelines are the only multinational agreed code of conduct for responsible business (OECD, 2014).

2.5.6 AA1000

AccountAbility's AA1000 series are "principle-based standards to help organizations become more accountable, responsible and sustainable" (AccountAbility, 2015). Created in 2010 to link other specialized standards such as GRI, ISO, etc. through a common set of principles and processes and to be a stand-alone framework on accountability (Adams & Narayanan, 2007). It is comprised of a set of principles and process standards to provide guidance on sustainability challenges. However, they focus on the reporting process and not the reporting content (in contrast with GRI, but more in line with the ISO 14000 series).

2.5.7 National and Regional frameworks

There exists over 180 initiatives from over 45 nations that address sustainability reporting and frameworks. Many of them either requires or utilizes one or more of the voluntary guidelines

that exists. However, there is a trend in larger economies in the developing world towards developing their own national frameworks (UNEP et al., 2013).

This author hopes that we will see a gradual convergence towards more unifying international frameworks that are comparable, but today it is important to take into account the company's host country when analyzing their sustainability reporting and chosen framework.

2.6 Sustainability reporting quality

Nola Buhr stated that she believed that we are not seeing sustainability reporting now, but only as far as triple bottom line reporting (Buhr, 2007). In addition, the KPMG (2013) survey identified that the focus now is on the quality of the reports as sustainability reports are becoming mainstream. Therefore, what should a sustainability report contain?

One of the most important concept for sustainability reporting is the issue of *transparency*. It is the "... truthful correlation between discourse and its underlying reality" (Ivan, 2009, s. 106). Meaning that the process and methodology used for gathering information and make decisions is known and reflects reality. Transparency can be viewed as a multi-level concept that is useful for evaluating all reports, especially economic reports and financial statements. You have two transparency levels: Level 1 is the most crucial, regarding transactions and events that occur. Level 2 refers to the accounting or measurement methods used. Failure at level 1 reduces the value of transparency at level 2 (Mensah et al., 2006). Therefore, if you do not report on a specific measurement then the measurement method is off less value to identify quality. In addition, it requires openness about challenges and setbacks, and not just report on achievements. To measure and evaluate a corporation's achievements, and setbacks, it is crucial to have available data to compare from year to year (KPMG, 2013). Transparency and openness also implies that sustainability reporting should be publicly available for everyone and not just shareholders, investors, regulators, etc. Only through transparency and comparability can stakeholders assess the sustainability performance of the corporation (Graham & Woods, 2006).

However, to reliably measure elements in the sustainability reports you need a *materiality* principle. GRI contributed with an increase focus on this with their framework (Brown et al.,

2009b). They define materiality as "... [issues] that reflect the organization's significant economic, environmental and social impacts; or [issues] that substantively influence the assessments and decisions of stakeholders" (GRI, 2013, p. 17). Therefore, making corporations able to focus on what matters and not waste resources on something that has insignificant implications for them or their stakeholders. In addition, the process of determining materiality is crucial and GRI emphasizes that it requires qualitative and quantitative assessments and discussion to define a material aspect. A problem with this process has been that it is often up to the corporation to determine what is material and not (Riahi-Belkaoui, 2004). Therefore, an increased quality aspect is if this process of determining materiality has involved external stakeholders that can give a critical and different perspective on material aspects for the company. According to KPMG (2013), companies struggle with this where only 55 % have a clear link between their materiality process and stakeholder engagement. In addition, there should be in place a process to assess their material aspects on a regular basis. Companies that have such a process in place are in a stronger position to anticipate risk and managed them effectively (KPMG, 2013).

After having a materiality principle in place, companies need to have in place *key performance indicators (KPIs)* that are measurable and linked to the material aspects defined by the company. Sustainability reporting spans over three dimensions; financial, environmental and social, and therefore there should be KPIs in all these dimensions. In addition, targets should be set for the KPIs that are time-bound with a clear baseline and end date (KPMG, 2013). Both the UN Global Impact and the GRI recommends/requires identifying KPIs within their framework. However, even though KPIs helps compare results, over both time and a cross companies/sectors, the methodology of calculating some of the KPIs (especially social and environmental) are complex and there are limited references to provide guidance (Langford, 2007). Therefore, the first point of transparency needs to be present to support the chosen KPIs and the methodology of measuring them.

Stakeholder engagement has always been an important aspect of sustainability reporting, and companies agree that good stakeholder dialogue increases the quality of the reports (Kolk, 2004) (KPMG, 2013). Freeman defined a stakeholder as "any group or individual who is affected by or can affect the achievement of an organization's objectives" (Freeman, 1984, p.

46). This can be a very larger group and therefore companies should have in place a process for determining their stakeholders and the most important issues for each group of stakeholders. Therefore, Mitchell et al. (1997) described a framework that categorized stakeholders after their power, legitimacy and urgency. *Power* refers to the stakeholders ability to influence the organization, *legitimacy* is when a stakeholder has moral claims or a formal relationship (like a contract etc.), and *urgency* refers to stakeholders that have time-sensitive claims. Furthermore, Mitchell et al. (1997) established three main categories of stakeholders: Latent stakeholders (only one of the characteristics), expectant stakeholders (two of the characteristics) and definitive stakeholders (all three of the characteristics), giving highest priority to the definitive stakeholders and lowest to the latent stakeholders. However, it is equally or even more important to explain the process of determining the key stakeholders, again linking to the transparency aspect of sustainability reporting. Proper stakeholder engagement, and not just stakeholder management, is a process that creates a dynamic approach to interaction, dialogue, change and mutual respect (Andriof et al., 2002). Therefore, companies have to react to the input from stakeholders and not just inform on their input. To involve stakeholders organizations uses many different tools; surveys (both externally and internally), community panels/forums, stakeholder statements, stakeholder advisory boards, etc. (Kolk, 2004) (KPMG, 2013). One of the foremost ways to show stakeholder engagement is by allowing independent stakeholder comments in the company's sustainability report, which includes both criticism and praises from the stakeholder (KPMG, 2013) (Manetti, 2011).

However, no sustainability report can have enhance quality without some form of *assurance*. In the same way as financial statements, sustainability reports require an external and independent verification. Therefore, GRI (among other frameworks) recommends the use of external assurance, but it does not require it (GRI, 2013). However, they emphasize that this will increase the credibility and quality of the report. The two most used frameworks for assurance is the AA1000 Assurance Standard (AA1000AS) and the International Audit Assurance Standards Board's (IAASB) International Standard on Assurance Engagements (ISAE 3000). The assurance offered with ISAE 3000 focuses on a technical accountant approach by seeing if the report is accurate and not on the actual content of the report. In addition, there are two types of assurance engagements within the ISAE 3000, a reasonable assurance

engagement and a limited assurance engagement (Renzo et al., 2014). On the other hand, AA1000AS focuses on the adherence to AA1000 AccountAbility Principles and the quality of the publicly disclosed information on sustainability performance (AccountAbility, 2008). There are also some attempts at a mixed approach using both these frameworks. In addition, two different groups of assurance providers mainly use these two frameworks; the auditing firms mainly uses the ISAE 3000, while the consulting firms uses the AA1000AS (Renzo et al., 2014).

Based on the different approaches and the lack of unifying standards, the existence of assurance does not mean that the data and all its content have been checked thoroughly and does not necessarily comment on the quality of the report (Kolk, 2004). Therefore, there are some minimum requirements that should be in an assurance statement; a title, an addressee, name and location of the assessor, scope and objective of the engagement, affirmation of the assessor's independence, criteria used, assurance standard used, a clear conclusion, reporting reservations/qualifications and date of the assurance statement (O'Dwyer & Owen, 2005) (Owen, 2007). In addition, the assurance process (as the reporting process) must be transparent. Without a high level of transparency, the reader may not be aware of the methodology and scope of the assurance. The different approaches to assurance are crucial to understand what, and how much of the report, is assured, and this cannot be known without high levels of transparency surrounding the assurance process (Renzo et al., 2014).

In addition, GRI lists up their own six principles for reporting quality: *Balance*; reflecting both positive and negative aspects of performance. *Comparability*; enabling stakeholders to compare performance over time and relative to other organizations. *Accuracy*; accurate and detailed to assess the performance. *Timeliness*; organizations should report on a regular schedule. *Clarity*; information should be understandable and accessible for stakeholders. *Reliability*; open about the process in preparing the report so that it can be subject to examination (GRI, 2013).

To summarize, the sustainability reports need to be transparent on both the measurements and the process of measuring. This is the most crucial aspect and relates to all aspects of the report. In addition, it should contain discussion on materiality, KPIs, stakeholder engagement and assurance. By evaluating the level and details within these groups, the author plans to

create a scoring tool to evaluate the quality of the sustainability reports within the shipping industry.

2.7 Motivation/Reasons for sustainability reporting

Even though KPMG (2013) states that the issue of whether or not to report is over, let us look at the main reasons for issuing sustainability reports so we can see what drives reporting and why some are still not issuing them. In addition, it can give us some insight in what the companies report.

Kolk (2004) summarized an UNEP and Sustainability (an independent think tank) study on the motivation for reporting, where reporting and non-reporting organizations were interviewed. The main reasons for reporting are listed below. These are not ranked, but just listed according to Kolk (2004):

- Enhanced ability to track progress against specific targets
- Facilitating the implementation of the environmental strategy
- Greater awareness of broad environmental issues throughout the organization
- Ability to clearly convey the corporate message internally and externally
- License to operate and campaign
- Reputational benefits, cost savings identification, increased efficiency, enhanced business development opportunities and enhanced staff morale

On the other hand, the main reasons for not reporting were:

- Doubts about the advantages it would bring to the organization
- Competitors are neither publishing reports
- Customers (and the general public) are not interested in it, it will not increase sales
- The company already has a good reputation for its environmental performance
- There are many other ways of communicating about the environmental issues
- It is too expensive
- It is too difficult to gather consistent data from all operations and to select correct indicators
- It could damage the reputation of the company, have legal implications or wake up “sleeping dogs” (such as environmental organizations)

To take a more theoretical approach, Buhr (2007) identifies the most popular and relevant theories that can explain the motivation behind sustainability reporting as *accountability, political economy, legitimacy and stakeholder theory*.

Accountability is about identifying what you are responsible for and then provide information about that responsibility to those who have the right to that information (Gray et al., 1996). Therefore, the firm should undertake certain actions and has a responsibility to provide an account of those actions. However, seeing that much of sustainability reporting is voluntary, defining what is the responsibility of the firm and what it should provide information on becomes a philosophical and ethical debate that is constantly changing and evolving (Moneva et al., 2006). The right for information can be layered into; (i) law, (ii) quasi-law and non-legal codes, (iii) corporate value and mission statements and (iv) moral rights. Thereby, society (i) (ii), the company (iii) and their stakeholders (iv) determine the responsibility and information right, and thus the accountability (Gray, 2001). In addition, accountability and transparency enhances each other by providing an incentive to ensure that the reason for a company's actions is properly disseminated and understood, and by facilitating monitoring (Dragomir, 2008).

Political economy emphasizes the connection between political and economic forces in society, and states that society, politics and economics are inseparable issues (Deegan & Blomquist, 2006) (Miller, 1994). In relation to accounting reports, the political economy tradition states:

“The political economy perspective perceives accounting reports as social, political and economic documents. They serve as a tool for constructing, sustaining and legitimizing economic and political arrangements, institutions, and ideological themes, which contribute to corporation's private interests. Disclosures have the capacity to transmit social, political and economic meanings for a pluralistic set of report recipients” (Guthrie & Parker, 1990, p. 166).

Legitimacy theory has developed from a broader political economy perspective (Gray et al., 1996). Hogner (1982) suggested that social disclosure by companies came from a need to

legitimize their actions. Legitimacy can be described as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed systems of norms, values, beliefs and definitions” (Suchman, 1995, p. 574). In addition, accounting is a legitimating institution and provides a way to link social values to economic actions (Richardson, 1987). If there is legitimacy gap, which is when organizations does not match the expectations of the public or stakeholders, then organizations can adopt four strategies (Dowling & Pfeffer, 1975):

1. Change its output, methods or goals to conform to the expectations of its relevant publics and then inform these relevant publics of the changes.
2. Not change its outputs, methods or goals, but demonstrate the appropriateness of its output, methods or goals through education and information.
3. Try to alter the perceptions of relevant publics by associating itself with symbols that have high legitimate status
4. Try to alter societal expectations by aligning them with the organization’s output, goals or methods.

Communicating within any of these four strategies can utilize sustainability reporting. In addition, a consequence of not legitimizing ones actions is the possible intervention by governments with legislations. However, even though legitimacy theory is one of the most common explanations for social disclosure, Hogner (1982) and Guthrie & Parker (1989) came to different conclusions regarding the explanatory power of legitimacy theory. Therefore, explaining motivation by just the use of legitimacy theory can be inadequate.

On the other hand, *stakeholder theory* has also developed from a broader perspective of political economy (Gray et al., 1996). Stakeholder theory is based on knowing which groups of stakeholders deserve and require management attention (Mitchell et al., 1997). Therefore, based on these stakeholders the relationship creates responsibility and accountability between the organization and the stakeholder (Gray et al., 1996). Furthermore, information should be provided on the four dimensions of accountability, linking stakeholder theory to accountability.

None of the theories are mutually exclusive and no single theory may be sufficient to describe the motivation for sustainability reporting. However, some may be more prominent in a single organization. To summarize, Freedman & Stagliano (1992, p. 113) suggest that:

“It is probable that there is no single motivation for making social disclosure. Social disclosure for the most part, is a function of the attitude of top management toward its stakeholders. Whether there is an economic motivation for the disclosure ... a reaction to user needs ... or a political motivation ... is probably a consequence of each management’s particular perception of the world it faces.”

2.8 Previous research on CSR in the shipping industry

First, neither the GRI guidelines nor the KPMG’s (2013) survey mentions shipping specifically. While other industries/sectors such as oil & gas, mining, etc. have their own sector guidelines there are none such for shipping, or even the wider term transportation (GRI, 2015c). However, KPMG (2013) does include them in their survey under the wider term transportation. In addition, Danish A.P. Møller Mærsk (one of the largest shipping companies in the world) is interviewed as a leading company within sustainability reporting, with a score of above 90 points out of a total of 100 points (KPMG, 2013). However, the survey does not give a clear overview of the shipping industry, even though shipping companies are a part of the survey.

McGurie & Perivier (2011) claims that maritime shipping practices are anything but sustainable in their paper *The Nonexistence of Sustainability in International Maritime Shipping: Issues for Consideration*. They argue that true sustainability is the internalization of environmental cost. Internalization means that an externality (a cost or benefit affecting a party who is not involved in the transaction, production, etc.) should be assigned a monetary value and be accounted for by the corporation creating the externality. Furthermore, the open ship registry institutionalizes the cost avoidance of not internalizing environmental cost, and limits efficient policy initiatives. Open ship registry is the process of registering a ship under a different flag/country that requires no legal or economic link between the ownership of the vessel and the jurisdiction in which the vessel is registered. This has led to regulatory failure by different regions and countries. In addition, McGurie & Perivier (2011) raised several questions that requires further academic research; such as: The need to internalize

environmental costs, the willingness to deal with greater shipping costs and the need for a more comprehensive policy approach to globalization that incorporates sustainability principles. Thereby, inviting the academic community to take up the torch and look further into the question of sustainability within shipping. However, it does not raise questions or offer mention of sustainability reporting as part of the problem and/or solution.

On a more positive note, Corby & Strandberg (2012) issued a report, as part of a research collaboration between the Lie Institute for Global Issues and the Nippon Foundation looking at CSR trends in relation to the shipping industry (Lie Institute for Global Issues, 2015). The report states that CSR activities are increasing within the shipping industry. The relevant key findings from the report is that CSR in the shipping industry is increasingly driven by regulatory agencies, customers, investors, NGOs, leading companies and collaborative initiatives from companies and their stakeholders. In addition, it identifies that small and medium-size enterprises are at risk of being left behind on CSR initiatives and actions, and that industry associations have a role to address barriers and facilitate CSR engagements. However, this report does not specifically address sustainability reporting. On the other hand, it lays out a proposal for a *CSR Framework for the Shipping Industry* that lays out some key performance areas for CSR within the shipping industry. These involves CSR governance, Social Responsibility, Environmental Responsibility and Ocean Responsibility, and can be useful to crosscheck the shipping industries sustainability reports chosen KPIs and materiality aspects.

An earlier article by Fet (2002) focuses on a life cycle approach on developing key performance indicators for the transport and shipping sector. In addition, she raises the problem of measuring data accurately within the chosen indicators. This earlier report shows that sustainability reporting for shipping companies was addressed early and stressed the importance for having comparable indicators across both the shipping industry and the wider transportation industry.

The only article relating to sustainability reporting and quality within shipping, that this author could find and access, was *Corporate sustainability reporting index and baseline date for the cruise industry* by Bonilla-Priego et al. (2014). Firstly, it creates an index to measure and report corporate performance by adapting existing reporting systems to the specifics of the cruise

industry. Secondly, it looks at the responsibility assumed by the cruise industry related to CSR. In addition, it also mentions the open ship registry as a challenge for CSR issues as McGurie & Perivier (2011) theorized. Their index works by attributing scores when a company takes actions on chosen indicators giving the possibility of numerical comparison and categorization. Indicators are chosen from reporting frameworks and industry characteristics covering environmental, socio-environmental, hard and soft management, and performance variables, which are then compared to company characteristics. The article finds that the cruise industry is in an early state of CSR reporting, and that larger companies are dominating the reporting. In addition, legitimacy theory has proven useful in explaining CSR reporting for the industry. However, the cruise industry has many similarities with hotel management and less with the transportation industry. Therefore, the article does not fully address the issues of regular shipping companies. The author will perform a similar content analysis, although more limited, for the container shipping industry.

Based on the literature review conducted by the author there are few academic articles addressing CSR within shipping and even fewer regarding sustainability reporting within the shipping industry. Thereby, validating the author's choice of research topic and the shipping industry as an unexplored segment to study.

2.9 Summary

Sustainability reporting has an ad hoc evolution through history and is a way of communicating a corporation's impacts on external stakeholders and their CSR activities. It should incorporate the three dimensions; economic, environmental and social. In addition, it should have a broad definition of financial aspects and address the long-term effects on society of the activities performed by the corporation. Today over 71 % of the largest companies issue sustainability reports. Therefore, the issue of whether to report or not is over, and the focus should now be on what is reported. However, the reason behind the reporting may help explain why aspects are reported. By utilizing existing frameworks and understanding the legal requirements, we can evaluate the sustainability reports. In addition, we must incorporate industry specifics to perform an accurate evaluation.

Based on the literature review the author can see that sustainability reporting in some form or not is becoming commonplace, and therefore I expect to see some form of it from the majority of companies in the empirical study to follow. Furthermore, the location of the corporations' headquarters should be examined and compared to mandatory requirements in that country. From the literature review, we have that the quality aspects for sustainability reporting are attached to; transparency, materiality, stakeholder engagement, KPIs and assurance. In addition, the most commonly used framework for sustainability reporting was found to be GRI. This framework will be utilized further in the empirical study to measure quality. Lastly, the literature review confirmed that there were few research papers that specifically addressed sustainability within the shipping industry. However, the few found mentioned the importance of incorporating industry specifics for the shipping industry.

The next step is to look at the methodology used to evaluate sustainability reports and create a scoring tool to evaluate the reporting quality within the shipping companies.

3 Methodology

Companies present information on their sustainability performance in many different ways. However, the most common ways are through websites, annual reports and separate sustainability reports (KPMG, 2013). There are often many hundred pages of information in each report for each company giving us a large amount of information to analyze. Therefore, the author is interested in a method that reduces and helps classify the data. Furthermore, the majority of the data is qualitative in the form of text. Based on this the author chose to focus on the most appropriate method to address the research question, namely content analysis.

3.1 Content Analysis

Abbott & Mosen (1979) defined content analysis as:

“... a technique for gathering data that consists of codifying qualitative information in anecdotal and literary form into categories in order to derive quantitative scales of varying levels of complexity.” (Abbott & Mosen, 1979, p. 504)

Furthermore, Berelson (1952) has one of the first definitions of content analysis that continues to be cited today:

“Content analysis is a research technique for the objective, systematic and quantitative description of the manifest content of communication.” (Berelson, 1952, p. 18)

There are two main forms of content analysis, quantitative and qualitative, and there are no sharp divisions between them (Groeben & Rustemeyer, 2000). Both of them follows a predetermined series of steps; creating a coding frame, generating category definitions, segmenting the material into coding units and having a pilot phase and a main phase of the analysis. However, the focus of quantitative content analysis is on the manifested meaning while qualitative content analysis can also be used for more context dependent meaning. Furthermore, the focus of qualitative content analysis is to provide a detailed description of the material that is analyzed. In addition, the process of classifying the data is only the data *collection* part in quantitative content analysis. While it is the method of data *analysis* in qualitative content analysis (Schreier, 2014). Therefore, the best suited version for this thesis

is qualitative content analysis seeing that we are most interested in what is reported and providing a description of this.

Qualitative content analysis is a method for systematically describing the meaning of qualitative data and has three characteristics; it reduces the data, it is systematic and it is flexible (Mayring, 2000) (Schreier, 2014). It reduces the data by defining categories that goes beyond the specific meaning and groups similar meanings together. The process is systematic in that it requires you to look at all the material available to answer the research question, following predetermine steps and also requires assigning parts of the material to categories in the coding framework. Lastly, it is flexible in the sense that the coding framework is adapted to the material and can be either concept driven (from theory, earlier studies, etc.) or data driven and therefore the coding frame will always fit the material (Schreier, 2014).

There are three techniques for qualitative content analysis; *summarizing*, *explicative* and *structuring* (Flick, 2014). Summarizing content analysis paraphrases the material into similar passages and summarizes it. Meaning that if ten passages focuses on the same aspect, they are bundled together and summarized for further analysis and thereby reducing the data. Explicative content analysis is more the opposite way by involving context material to clarify diffuse, ambiguous or contradictory passages in the analysis, such as using the definition of word in the text to look for similar passages based on that definition. Structuring content analysis looks for types or formal structures in the material. Based on these different approaches summarizing content analysis is most relevant for this thesis seeing that we are interested in summarizing the data to get down to certain aspects we are interested in.

In addition, the complexity of a content analysis varies widely. The Ernst & Ernst (now EY) reports from the late 1970s used a basic approach of just counting the number of instances of particular CSR disclosures. In addition, Bonilla-Priego et al. (2014) used a binary disclosure index to aggregate the level of disclosure in sustainability reports for cruise companies. The value of this approach lies in the assumption that the level of disclosure of an aspect signalizes the level of importance to the reporting entity (Krippendorff, 1980). On the other hand, using computers and analyzing all communication between two nations to look for how a defined topic is mentioned is a more complex content analysis.

Schreier (2014) has given 8 steps for performing a qualitative content analysis for all types of qualitative content analysis, independent of complexity and use of computer tools:

1. Deciding on a research question
2. Selecting material
3. Building a coding frame
4. Segmentation
5. Trial coding
6. Evaluating and modifying the coding frame
7. Main analysis
8. Presenting and interpreting the findings

The material has to be selected so that it reflects the full diversity of data sources. Furthermore, the most important step is building the coding frame. It should have at least one main category and two subcategories, but can have many more if necessary. However, having more than two levels in the hierarchy can be difficult to handle. Main categories are what we want to study, while subcategories are material within each of the main categories. Segmentation is closely linked to building the coding frame by segmenting the data into the categories created. After this you do a pilot test of the coding on part of the material and afterwards you go back and modify the coding based on your experiences. This test phase should be done by two independent coders, alternatively by one coder at two different points of time. After this you can do the main analysis where all the material is coded, and from this point forward you cannot change the coding frame. Finally, the results are presented and they can often serve as a starting point for further studies into aspects uncovered during the analysis (Schreier, 2014).

Furthermore, the three characteristics with the data collected is that it should pass tests for *objectivity*, *systematic* and *reliability* (Krippendorff, 1980). *Objectivity* implies that an independent judge identifies the same categories as you. In addition, *systematic* requires clear, mutually exclusive and all covering categories and sub-categories. Thereby, something should clearly end up within one, and only one, category, and this should be the same for anyone doing the analysis (Gray et al., 1995). *Reliability* implies that the data is stable,

reproducible and accurate (Krippendorff, 1980). One way of increasing reliability is to select and define your categories from well-grounded literature and clearly defining them (Guthrie et al., 2004).

Applied to sustainability reports, it has been used to evaluate the level of disclosure of various aspects in annual reports of listed companies (Guthrie & Parker, 1990). These aspects can be social and environmental elements, such as water usage, human rights, etc. In addition, studies have often compared these elements towards other comparative studies. According to Parker (2005) content analysis is the most commonly used framework for collecting empirical evidence within social environmental accounting, i.e. sustainability reporting.

One of the limitations regarding content analysis has been the focus on quantity of disclosure and not on the quality. Often related to the use of a binary disclosure index, giving points for disclosure as long as certain keywords are present. However, constructing an index that considers quality and is not just binary can overcome such issues (Guthrie & Abeysekera, 2006). In addition, Guthrie & Abeysekera (2006) argues that there should be disproportionate importance for given reporting elements. Something that we will discuss further in the *scoring methodology* chapter. Secondly, an issue with content analysis is the subjective nature of capturing parts that adds up to a given category, in this case sustainability. Therefore, as mention above, the data collection has to be reliable (Guthrie & Abeysekera, 2006). Furthermore, this is also true when only one person is doing the coding (Schreier, 2014).

In addition, combinations of research methods can help answer more questions such as why corporations disclose what they do. The key to combining research methods is to use methods that do not share the same methodological weaknesses so that the confidence in the result increases (Singleton & Straits, 2005). Within sustainability reporting research, there are two main forms of combinations: Firstly, content analysis of annual reports combined with semi-structured interviews. Secondly, content analysis of several sets of information and other research methods, such as scoring methodology (Guthrie & Abeysekera, 2006). Combinations of research methods depends on what your research question is, and what you want to study. We will discuss the best combination for this thesis in the *chosen methodology* chapter below.

3.2 Scoring Methodology

Scoring methodology builds on a coding framework created for content analysis, and just adds scoring to the findings instead of just a disclosure index. Therefore, when the author talks about a scoring system it is just a further expansion of the word, coding frame. So we are building a coding frame that includes scoring, giving us a scoring system.

Holtsti (1969) describes scoring in a more general term as quantifying and classifying information, such as text, images, etc., into categories by giving them scoring symbols. Linking it to content analysis by the means of quantifying and categorizing, which are important characteristics of content analysis. Furthermore, enhancing it by creating a framework for reporting findings on more, less or increasing basis. In addition, there are two different forms of scoring methodologies, alphabetical and numerical (Krut & Munis, 1998) (Morhardt et al., 2002).

Alphabetical scoring is done by using typographical symbols instead of numbers, such as (i), (ii), (iii), (iv) (v). These can be defined as (i) no discussion of the issue, (ii) the issue was identified for consideration, (iii) partial commitment to the issue, (iv) full commitment to the issue and (v) commitment exceed the benchmarking criteria as Krut & Munis (1998) defined them. However, their study did not look at performance but on policies. Secondly, the issues are not aspects in the report, but predefined characteristics of a sustainable firm. In addition, this alphabetical scoring prevents us from creating averages, rankings and doing an overall evaluation. Krut & Munis (1998) intended this because they felt that not all their categories had the same weighting and it would be unfair seeing that different companies had different actions regarding different environmental indicators.

On the other hand, you have a numerical approach that can easily be aggregated and ranked. The numerical approach can range from a simple 0-2 range to more detailed ranges such as 0-10. However, the most commonly used method is a variation of a 0-3 or 0-4 range (Morhardt et al., 2002) (Skouloudis et al., 2010). Morhardt et al. (2002) used a 0-3 range with 0 points for no mention of an issue, 1 for anecdotal or briefly mentioned, 2 for more detailed but only on selected facilitation or using only self-comparison metrics and 3 for companywide metrics that can be compared with other companies. On the other hand, Skouloudis et al. (2010) used a

similar scoring system, but they had a 0-4 range where 2 was defined as detailed coverage and 3 extensive coverage. However, even though Morhardt et al. (2002) used a 0-3 range they combined that with allocating 4 points to important issues that were well addressed and a maximum of 1 point to items that had little impact, such as information about the company. The reasoning behind this is somewhat unclear from the article, and a better approach is weighting issues after importance rather than just widening the scale.

Daub (2007) argued for an alternative approach to this issue. Looking at a study of Swiss companies in 2003 he also argued for a 0-3 numerical scoring system. However, he defined that the performance indicators are the most important, seeing that it contains the hard facts on the performance by the company. Therefore, all the indicators related to performance were weighted by 2. Thereby, giving each important issue, 0, 2, 4 or 6 points. Afterwards, it was aggregated together to create an overall score. This is a more transparent way of weighting important indicators without compromising the scoring categories, and thereby keeping the objectivity, systematic and reliable characteristics for the categories. In addition, this study points out the importance of including all reports, not just stand-alone sustainability reports. This is growing more important today as we move towards more integrated reports.

As Guthrie et al. (2004) mention, to increase the reliability the categories used in the scoring system needs to be grounded in well-defined literature. Therefore, all these studies have used the GRI Guidelines for their scoring systems. This makes sense seeing that GRI is the most commonly used framework, as we discussed earlier. In addition, the GRI guidelines can easily be utilized even if the company is not specifically reporting according to them. However, the GRI guidelines are general oriented and needs to be adapted to the specific sector or country that is analyzed (Bonilla-Priego et al., 2014) (Daub, 2007). Furthermore, most of the aspects are capable of being treated at various levels of comprehensiveness, which makes it possible to incorporate them into a scoring system. Therefore, the scoring system being used in this thesis will be based on the GRI guidelines and adapted to the shipping industry. More about this under the *developing a scoring system* chapter.

Furthermore, benchmarking sustainability reports through a scoring system can yield potential benefits. Firstly, stakeholders gets a simple and systematic overview of the impacts

and the actions taken by the reporting company. Secondly, the company receives an evaluation on their reporting and their stakeholder communication. In addition, it identifies reporting strengths and weaknesses by comparing them to other corporations (Skouloudis et al., 2010). Lastly, it makes it easier to compare the companies with each other and across other sectors.

3.3 Questionnaires and Interviews

Academic research into sustainability reporting has used questionnaires to get an internal look on corporations sustainability reporting, from reasons why they report to how they actual conduct their business compared to what they state in their reports (Deegan & Rankin, 1997) (Guthrie & Abeysekera, 2006). Furthermore, semi-structured interviews, as substitute or addition to questionnaires, is used to gather the perception from the subject on complex issues, and allowing for clarification and the option to gather more information if necessary (Barriball & While, 1994).

A recent use of questionnaires was done by Ramos et al. (2013) studying how sustainability reporting practices are adopted in Portuguese companies, and how they are related to environmental management and evaluation systems. This study looked at the internal works of corporations and therefore needed to get an internal perspective. However, seeing that this thesis is looking at what the company is reporting, the quality and enfacing transparency on reporting the author has chosen to focus on publicly available documents. In addition, the likelihood of getting enough quality responders from multinational companies with little presences in Norway and in such a short time frame was deemed unlikely. Furthermore, Financial Times addressed this issue of questionnaire fatigue in an article from 2004, and head of sustainable development and corporate accountability at BT (a telecommunications group) stated that: "What annoys him are demands for information that is already available on [their] website, and questionnaires that ask the company to evaluate its own performance" (Maitland, 2004, p. 2). This was also mentioned by Australian CEOs at an Ethical Investment Association Conferences in 2001 and 2002 (Laan, 2009). Building on the assumption by the author, of a low response rate from the companies.

3.4 Chosen Methodology

Research into sustainability reporting are either empirical or non-empirical, where 73 % are empirical studies. Furthermore, 58 % of them are document analysis, 10 % interviews or surveys, 4 % estimation models and experimental design at 1 %. The remaining 27 % are non-empirical studies (Hahn & Kühnen, 2013). Based on this, the data available and the literature review, this author has chosen to conduct an empirical study using qualitative content analysis to answer the research questions. In addition, to evaluate the quality of the report, a scoring system is developed to create a benchmark for the container shipping industry. More details about the scoring system and the data collection are in the chapters to follow.

3.5 Developing a scoring system

The author using Daub's (2007) general layout and grouping develops the scoring system. However, it is changed to reflect a better coherence with the GRI guidelines G4. In addition, as the original research article referred to by Daub (2007) was not available to the author, nor in the right language, the definition of the themes may vary. Furthermore, most of the themes are directly linked to aspects in the GRI Guidelines G4 and the ones that are not, focuses on overall reliability, transparency and comparability. This scoring system does not contain all aspects from the GRI Guidelines. A sorting process have been done using the literature review, knowledge of the shipping sector and Bonilla-Priego et al.'s (2014) article. In summary, there are 3 main categories; *A – Context, Management and Stakeholders*, *B – Economic, Environmental and Social aspects* and *C – Transparency and General View*. Category A and C are general and not specifically adopted to the shipping industry, while category B has been adopted to address the most important aspects for the shipping industry.

The author has chosen a 0-3 scoring range. However, there is little explanation for why some articles uses a 0-3 range while others use a 0-4 range, but the most common one found during the literature review is the 0-3 range. In addition, a 0-3 range gives enough differentiation while still being objective, systematic and reliable. Furthermore, the author did a test with a 0-4 range scale and encountered some difficulties separating the two midlevel scores of 2 and 3. Leading to unclear rules for the scoring and uncertainties from the coder. In addition, adding one more scoring category does not add much information and only overcomplicates the

scoring process. Therefore, the author has chosen a 0-3 scoring range. The definition of each scoring category are as follow:

- 0 – No meaningful information on the theme, or not mentioned at all
- 1 – Anecdotal, briefly or generically mentioned
- 2 – Good information, more detailed but only on selected issues or just self-comparison metrics, or missing one or more aspects
- 3 – Full information on the theme and the information is comparable with other companies.

Furthermore, the scoring template has seven main columns, *Category, Themes, Aspects from GRI, Source, Criteria, Score, Max* and *Comments*. The scoring system can be viewed here:

Company Name							
Category	Themes	Aspects from GRI	Source	Criteria	Score	Max	Comments
A	Context, Management and Stakeholders	General Standard Disclosure G4		5	0	15	
A1	Corporate Profile	Strategy and Analysis, Organizational Profile		1		3	
A2	Materiality	Identified Material Aspects and Boundaries		1		3	
A3	Stakeholder Engagement	Stakeholder Engagement		1		3	
A4	Governance	Governance		1		3	
A5	Ethics and Integrity	Ethics and Integrity		1		3	
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4		7	0	21	
B1	Economic	Economic Performance, Indirect Economic Impacts		1		3	
B2	Environmental			3	0	9	
B2.1	- Water and Biodiversity	Water, Biodiversity		1		3	
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste		1		3	
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms		1		3	
B3	Social			3	0	9	
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms		1		3	
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms		1		3	
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society		1		3	
C	Transparency and General View	General Standard Disclosure G4		6	0	18	
C1	Reliability and Transparency (General View)			1		3	
C2	Reliability specifically in the Environmental aspects			1		3	
C3	Reliability specifically in the Social aspects			1		3	
C4	Accessibility and Comparability	Report Profile		1		3	
C5	Structure, Layout and Language	Report Profile		1		3	
C6	Assurance	Report Profile		1		3	
Total				18	0	54	

Fig. 1: The scoring template. Source: The author

Category puts each theme into the three main categories and labels them with a number. *Themes* are what we are looking for during the content analysis. *Aspects from GRI* shows how the theme is linked to the GRI G4 definitions/aspects. *Source* relates to if the information is found in the annual report, a sustainability report or on their website. *Criteria* is just a counting system over how many themes there are in each category, group and overall. *Score* is the score the company gets on each theme. *Max* is the maximum score that each theme can get.

Comments are used to input specific comments that the author feels can supplement the scoring, and all such comments will be addressed in the *Findings* chapter. Furthermore, under category B the author has grouped themes into three main themes (Economic, Environmental and Social), which are aggregated based on the themes under them. *Source*, *Criteria* and *comments* are mainly helping columns for the author which are not presented directly in the scoring template for each company, but are discussed in the findings for each company.

Below follows a detailed definition and explanation of the themes and aspects used in the scoring system. However, this is not an exhausted description. Therefore, a complete description of the GRI Guidelines G4 aspects can be viewed in the bibliography under GRI (2013). Furthermore, the author did a test phase on a part of the sample to check the scoring system. The company chosen was Maersk seeing that it was part of KMPG's (2013) survey and we have a score from there that could be compared. Based on this test score, minor modifications were done to the scoring system resulting into the system presented below. Furthermore, the test phase discovered that Maersk scored similar to KPMG's (2013) survey giving the scoring system some form of credibility.

3.5.1 Context, Management and Stakeholders (A)

The first theme is *Corporate Profile*, which uses the aspects *Strategy and Analysis*, and *Organizational Profile* from the GRI Guidelines G4. Firstly, it should outline the organization's characteristics in order to provide a context of the reporting. This should include, but is not limited to, location of the headquarters, scale of organization such as employee numbers and number of ships owned/chartered, membership in associations and charters/principles/initiatives that it adheres to or supports, and countries/regions it operates in. Secondly, there should be a statement from the CEO (or equivalent) on the relevance of sustainability to their organization, and a strategy to address it. Lastly, there should be narrative information on the impacts, risks and opportunities on the organization's economic, social and environmental performance.

Materiality refers to the process of identifying what is important to the organization and their stakeholders, as we discussed in the *Literature Review*, chapter 2.6. The organization should explain the process of identifying material aspects, for which part of the organization is

material, where does the aspect end being material (boundaries), changes from previous materiality definitions, stakeholder participation in defining materiality, etc. Furthermore, the theme *stakeholder engagement* is interlinked with many aspects of sustainability reporting but this theme focuses on the process of identifying and selecting stakeholders. In addition, information on how stakeholders are engaged, topics they have raised and how they are addressed should be mentioned.

On the other hand, *governance* focuses on the internal aspects of the organization. There should be information on the governance structure, the role of the highest governance body, and remuneration and incentives. Specifically the role of the highest governance body on addressing strategy, values, risk management, sustainability reporting and evaluating economic, social and environmental performance should be mentioned. In addition, the competency and evaluation process of the highest governance body should be addressed. Furthermore, the *ethics and integrity* theme focuses on the organization's values, principles, standards and norms. In addition, there should be external and internal mechanisms for seeking advice on ethical and lawful behavior, and for reporting unlawful and unethical behavior and matters of integrity.

3.5.2 Economic, Environmental and Social aspects (B)

This section is split into three categories; *economic*, *environmental* and *social*. Economic has only one criteria seeing that it is the least important for sustainability reporting, however it should still be present. On the other hand, environmental and social aspects have been deemed equal with 3 criteria each. These aspects have been adjusted to the shipping industry. In addition, corporations should use key performance indicators as we discussed in *Literature Review, chapter 2.6*.

The *economic* aspect focuses on the organization's economic impacts on their stakeholders and on economic systems at local, national and global levels. In addition, financial implications of sustainability issues (both positive and negative) and financial assistance received by the government should be included. Indirect economic impacts should also be addressed such impacts of infrastructure investments.

However, based on the GRI Guidelines G4 two economic aspects have not been included, Market Presence and Procurement Practices. Market Presence is more relevant for companies with major production facilities around the world, and some of the wage aspects are covered in the social aspects. Procurement Practices are again better suited for production companies with many suppliers.

The *environmental* aspect comprises of three themes; *Water and biodiversity*, *Energy and emission/waste* and, *Compliance and cost*. *Water and biodiversity* focuses on the use and recycling of water and the effect the organization has on the biodiversity where it operates. One of the main uses of water within the shipping industry that also affect biodiversity is the use of ballast water. Ballast water is essential for safe and efficient operation of modern shipping by providing balance and stability to ships. However, marine species can piggyback with the ballast water over great distances to be released into a new environment where it does not naturally belong. It can then destroy the ecosystem or severely damage it. The International Maritime Organization (IMO) has recognized this threat and in 2004 issued the International Convention for the Control and Management of Ships' Ballast Water and Sediments (IMO, 2015a). Therefore, this should be addressed in the sustainability report, in addition to other issues related to water usage and biodiversity.

Energy and emissions/waste refers to fuel usage, emissions of greenhouse gases and other air emissions, waste released into the ocean and oil, fuel, etc. spills. The IMO addresses pollution prevention through the International Convention for the Prevention of Pollution from Ships (known as MARPOL), that covers pollution in the form of oil, chemical, sewage, garbage, air pollution and greenhouse gases (IMO, 2015b). In addition, MARPOL adopted a new charter in 2011 that includes technical and operational measures to increase fuel efficiency and reduce greenhouse gas emissions (IMO, 2015c). However, even though MARPOL has many mandatory aspects and is ratified to apply to 99 % of the world's merchant tonnage, just adhering to MARPOL will not give a company full score seeing that this is a minimum level of compliance (IMO, 2015b). Furthermore, the report should address the process of dismantling ships at the end of their lifetime and the effect on the environment.

The last theme within the *environmental* aspect is *compliance and cost*. Companies should report on fines and other sanctions for non-compliance with environmental laws and regulations. In addition, they should also report on the cost related to environmental protection actions done by the company.

Furthermore, three aspects from the GRI guidelines have been excluded under the environmental section: *Products and Services*, *Transport* and *Supplier Environmental Assessment*. Again, these are more applicable to companies with production and sales, and not for shipping companies. However, that is not saying they are irrelevant but from a materiality aspect they are less important and therefore can safely be excluded.

The last aspect within category B is *social*, which is also split into three; *Labor Practices*, *Human Rights* and *Society*. *Labor Practices* compiles of Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, and Labor Practices Grievance Mechanisms from the GRI guidelines G4. In addition, especially focus should be on working hours and condition, accommodation and shore leave seeing that workers on ships are onboard every hour of the day (Bauer, 2007). The IMO has addressed this in the Maritime Labour Convention of 2006 and in addition, the International Labour Organization has issued International Labour Standards on Seafarers (ILO, 2015). Therefore, the report should refer to these two documents or at least address the indicators coming from them. On the other hand, the only GRI aspect that was excluded under Labor Practices was *Supplier Assessment for Labor Practices*, again not relevant for a shipping company to an important extent.

Furthermore, *Human Rights* addresses issues such as Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor and Human Rights Grievance Mechanisms from the GRI Guidelines G4. Investment refers to investment contracts that include human rights issues (such as ordering a new ship) and training of employees in human rights. Furthermore, within shipping there is a focus on the right for collective bargaining, the right to strike and the issue that many workers start in debt to secure work placements (Bauer, 2007) (Lillie, 2005). In addition, IMO also refers to the independent organization Human Rights at Sea (HRAS) that works to raise awareness,

implementation and accountability of human rights provisions throughout the maritime industry (IMO, 2015d). Their goal is that “Human Rights apply at sea, as equally as they do on land”, implying that this might not be the case now (HRAS, 2015). Therefore, companies should address issues raised by HRAS and not just adhere to the Maritime Labour Convention of 2006 that does not specifically address human rights. Again, the author has excluded some aspects from the GRI Guidelines that are not material for the shipping industry; *security practices (training of security officers in human rights), Indigenous rights, assessment and supplier human rights assessment*.

The theme *society* focuses on the impacts that the origination has on society. From the GRI Guidelines G4 you have Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, and Grievance Mechanisms for Impacts on Society. On the other hand, Local Communities and Supplier Assessment for Impacts on Society has been excluded based on the fact that shipping companies main focus is on the ships and the transportation, and not on the land based activities that would affect local communities directly, and suppliers are again not that important from a sustainability perspective for the industry. Furthermore, from the GRI Guidelines G4 the sub category *Product Responsibility* has been excluded all together. Again, due to the focus on selling of products, which is of limited importance for services delivered by the shipping industry.

3.5.3 Transparency and General View (C)

As discussed in the *Literature Review, chapter 2.6*, transparency is crucial for sustainability reporting. Therefore, this section focuses on these themes; Reliability and Transparency (General View), Reliability specifically in the Environmental aspects, Reliability specifically in the Social aspects, Accessibility and comparability, Structure, layout and language, and Assurance. In more detail, Accessibility and comparability relates to how easy it is to get the information on the sustainability performance, and if it is possible to compare the sustainability work done by the company with others in the sector and in general. Structure, layout and language refers to how the information is organized and presented, and if it is accessible in major languages and not just in the company’s native language. In addition, assurance focus on the aspects discussed in the *Literature Review, chapter 2.6*.

3.6 Data collection

The shipping industry has a complex ownership structure that makes it hard to determine the real owner of a ship. An example maybe a dry-bulk ship owner by a London based company, which again has Greek nationals as owners, build in Korea, employ workers from the Philippines and fly the flag of Cyprus (UNCTAD, 2014). Furthermore, the shipping industry operates in different segments ranching from oil tankers, dry bulk, supply to container shipping. This thesis will focus on container shipping companies, which are a major part of the modern world’s economy. Furthermore, it is easier to determine their fleet size, but container shipping companies do not own all their ships either and uses chartered ships as well. This ratio is moving towards 60 % chartered ships and 40 % owned by the companies themselves, moving away from the historical 50-50 ratio (UNCTAD, 2014). Therefore, companies should report on the activity of all their controlled ships, owned and chartered. Furthermore, this segment account for around a quarter of the total shipping transport measured in billions of tons (UNCTAD, 2014). In addition, being part of the supply chain for many other industries this sector will be required to supply information on their sustainability performance to their customers (KPMG, 2013). Furthermore, this is one of the most recognizable segments of the shipping industry seeing that it affects the everyday transportation of consumer goods and everybody knows what a container ship is, in contrast to for example a dry-bulk ship. Therefore, the author finds container shipping companies an interesting sector, personally and for the public, to focus this thesis on.

The sample is the 10 largest companies measured in TEU (20-foot equivalent unit, a standard container) identified by UNCTAD (2014):

Rank	Company	Vessels	TEU	Country	Region
1	Mediterranean Shipping Company S.A.	461	2 609 181	Switzerland	EU
2	Maersk Line	456	2 505 935	Denmark	EU
3	CMA CGM S.A	348	1 508 007	France	EU
4	Evergreen Line	229	1 102 245	Taiwan	Asia
5	COSCO Container Lines Limited	163	879 696	China	Asia
6	Hapag-Lloyd Aktiengesellschaft	159	762 613	Germany	EU
7	China Shipping Container Lines Company Limited	134	750 644	China	Asia
8	Hanjin Shipping Company Limited	115	671 210	South Korea	Asia
9	APL Limited	121	629 479	Singapore	Asia
10	United Arab Shipping Company	73	610 294	Dubai	Asia

Fig. 2: Overview of largest container shipping companies. Source: Author and UNCTAD (2014).

These 10 companies account for over 60 % of the capacity in the industry. In addition, there is a move towards more consolidating, meaning that in the future we will see fewer and larger companies (UNCTAD, 2014). Therefore, the focus in this study will be on the largest companies, which is in accordance with KPMG's (2013) survey that states that the larger companies are the drivers in sustainability reporting. Expanding the sample size does not give us any major advantages seeing that we are creating an overview and we are already including over 60 % of the industry. Furthermore, the likelihood of getting good sustainability information decreases based on the size of the company (KPMG, 2013). To summarize, this sample gives us a good overview of the container shipping industry and gives us a bases for creating further research questions in sustainability reporting within the shipping industry, both in the limited sense for container shipping but also for the overall shipping industry.

After selecting the sample size, data collection was done by looking at annual reports, information on their website and sustainability reports from each company. However, under sustainability reports are all forms of non-financial reports such as CSR report, Environmental Report, Corporate Responsibility Report, Social Report, etc. By including all these data sources, the thesis can capture most of the communication on sustainability issues by each company. In addition, this method follows recommendations from Daub (2007) and is in coherence with the methodology used by the KPMG (2013) survey as well.

Reports were gathered from publicly available sources such as the company's website, www.corporateregister.com, the GRI's database and by the use of generic search engines such as Google. First, the author tried to find reports from the year 2014 and if the company did not issue a report for that period yet, reports from 2013 was used. However, no reports from before 2013 were utilized.

In addition, the data collection from websites follows a protocol used by Rikhardsson et al. (2002) stating the maximum time a normal user interested in sustainability issues would use to locate information was two hours. Therefore, if the author did not locate the information he was looking for within that period it was assumed not to be there, or not public available.

The following chapter looks at the findings from the content analysis and the scoring system. Findings are presented separately for each company, and in the *Discussion chapter* similarities, groupings, overview of the sector, etc. are addressed.

4 Findings

From the literature review, the author knew that larger companies were more likely to report on sustainability issues. Therefore, the author started looking at each company from the largest to the smallest. Furthermore, the findings are presented for each company so that the reader can get a detailed view of each company and not just an aggregated view of the industry. However, an aggregated score for the industry is also presented at the end of the chapter.

The scoring process was conducted by first gathering all relevant sources of information from the company in question. Then each category was scored across all the documents, before moving on to the next category. This was done by reading through the documents and using the scoring system to group information together, which was then read through again before giving a score in each category. Furthermore, keywords from the scoring system and the GRI Guidelines G4 were used in a search function to be sure that no aspects were missed during the initial read through. In addition, comments were noted in the scoring system so that they could be addressed further in this chapter. Finally, a complete score for each company was created and is presented to the reader here.

4.1 Mediterranean Shipping Company (MSC)

The Mediterranean Shipping Company (MSC) is a privately owned container shipping company based in Switzerland. However, the founder Captain Gianluigi Aponte has his roots from Sorrento, Italy and the company was first started in Belgium in 1970. It is now one of the leading container shipping companies in the world with over 400 vessels and over 2,6 million TEU (MSC, 2015a) (UNCTAD, 2014).

As a Swiss based company it has relaxed reporting requirements. Combined that with being privately owned leads to little public information available. Firstly, MSC does not issue an annual report, or any information on their financial performance (BMI Research, 2015). Secondly, they are not part of EU's regulations on non-financial disclosure nor does Switzerland have their own regulations on the subject (UNEP et al., 2013). However, their

ships have to comply with regulations in the water they sail and their registered flag countries, but this is not related to reporting requirements necessarily.

The only information available on MSC's sustainability actions are from their website and their code of business conduct, also found on their website (MSC, 2015b) (MSC, 2015c). There are no reports to be found within the search parameters. Therefore, the scoring is done by use of these two sources. However, if MSC would have detailed and informative information on their website this would not necessarily be a drawback. Unfortunately, that is not the case:

Mediterranean Shipping Company S.A.				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	4	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	1	3
A2	Materiality	Identified Material Aspects and Boundaries	1	3
A3	Stakeholder Engagement	Stakeholder Engagement	0	3
A4	Governance	Governance	0	3
A5	Ethics and Integrity	Ethics and Integrity	2	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	5	21
B1	Economic	Economic Performance, Indirect Economic Impacts	0	3
B2	Environmental		2	9
B2.1	- Water and Biodiversity	Water, Biodiversity	1	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	1	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	0	3
B3	Social		3	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	1	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	1	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	1	3
C	Transparency and General View	General Standard Disclosure G4	1	18
C1	Reliability and Transparency (General View)		0	3
C2	Reliability specifically in the Environmental aspects		0	3
C3	Reliability specifically in the Social aspects		0	3
C4	Accessibility and Comparability	Report Profile	0	3
C5	Structure, Layout and Language	Report Profile	1	3
C6	Assurance	Report Profile	0	3
Total			10	54

Fig. 3: Scoring for MSC.

Source: The author, MSC's website and Code of Conduct.

MSC scores only 10 of 54 points, with a low score over the entire board. They do have a statement from their CEO on sustainability, but they provide no detailed information on the company profile. In addition, they do mention their focus areas that can be viewed as a weak

form of defining material aspects. However, they have no mention of stakeholders nor governance structures and responsibilities. On the other hand, the only aspect that is fairly well addressed is Ethics and Integrity through their code of conduct.

In category B, MSC offers no information on their economic impacts, and only briefly mentions issues regarding environmental and social aspects. However, none of them offers any hard data nor key performance indicators, giving them only a score of one in most categories.

On the other hand, the worst category for MSC is Transparency and General view. There is no information on why some issues are focus areas, how they have been chosen or if stakeholders have been consulted. In addition, without any data, performance indicators or information about measurement processes, there is no way to evaluate the reliability of MSC's information. Therefore, they score zero in these categories. In addition, it is impossible to compare information quality with other companies and there is almost no access to reliable information. However, MSC do state that you can contact your local office for more information, but there should be publicly available information about sustainability. Therefore, MSC also gets a score of zero in this category. Furthermore, with no report to assure MSC gets no points in that category as well. On the other hand, the information is available in many languages and the layout on the website gets you easily to the sustainability section from the front page. That is the only plus sign in this category giving MSC their only point in this category here.

It is important to note that this is not an evaluation of their CSR performance, but a look at their communication of that activity. On this point MSC scores poorly, and have a huge improvement opportunity. However, due to lack of transparency for privately own companies combined with headquarters in Switzerland leads the author to believe that you will not see a huge improvement any time soon from MSC.

4.2 Maersk Line

Maersk Line is one of the largest container shipping companies in the world with over 7 100 seafarers, operating in 116 countries, over 400 vessels and a TEU capacity of over 2.5 million

(Maersk Line, 2015) (UNCTAD, 2014). There are some discrepancies between the stated size of Maersk Line between their internal website and the UNCTAD report. However, the author has chosen to rely on the more independent UNCTAD report to categorize Maersk Line as the second largest container shipping company.

Furthermore, Maersk Line is part of the Maersk Group with its headquarters in Denmark. Therefore, much of the information on their sustainability actions are done by their parent company Maersk Group. However, Maersk Line does issue their own Sustainability Progress Report with the latest one from 2013 (Maersk Line, 2013). In addition, Maersk Group issues several documents related to sustainability, with the most important one being the Sustainability Report 2014 for Maersk Group (Maersk Group, 2015a).

Maersk Line scores very high in all categories and gets a total score of 47 out of 54 points:

Maersk Line				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	12	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	3	3
A2	Materiality	Identified Material Aspects and Boundaries	3	3
A3	Stakeholder Engagement	Stakeholder Engagement	2	3
A4	Governance	Governance	2	3
A5	Ethics and Integrity	Ethics and Integrity	2	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	18	21
B1	Economic	Economic Performance, Indirect Economic Impacts	3	3
B2	Environmental		7	9
B2.1	- Water and Biodiversity	Water, Biodiversity	2	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	3	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	2	3
B3	Social		8	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	3	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	3	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	2	3
C	Transparency and General View	General Standard Disclosure G4	17	18
C1	Reliability and Transparency (General View)		3	3
C2	Reliability specifically in the Environmental aspects		3	3
C3	Reliability specifically in the Social aspects		3	3
C4	Accessibility and Comparability	Report Profile	3	3
C5	Structure, Layout and Language	Report Profile	3	3
C6	Assurance	Report Profile	2	3
Total			47	54

Fig. 4: Scoring for Maersk Line.

Source: The author, Maersk Group's website, annual report, sustainability report, sustainability accounting principles, global labour principles, UN global compact index and Maersk Line's website and sustainability progress update.

Firstly, it should be noted that Maersk does prepare its report using the GRI Guidelines G4. However, they do not use the Specific Disclosures anymore nor do they report "in accordance" with GRI. In addition, they are based in Denmark that requires a stand on CSR through their report or explain laws. Therefore, this might help explain to some degree why Maersk scores so high.

The sustainability report has good information on the corporate profile, but it needs to be supplemented with information from their website and their annual report to score the maximum of three points (Maersk Group, 2015b). On the other hand, from the sustainability report we can see that Maersk has a detailed process in place to determine materiality that involves both internal and external stakeholders. Furthermore, they identify risks, opportunities and impact areas that are important. Then it is finalized in a matrix where you have stakeholder importance on one axes and importance to Maersk on the other axes. From that matrix, they focus on the issues that are important to both parties. However, other areas are also addressed but the focus is in the top right quadrant of the matrix. Therefore, they get a top score in this category.

However, even though Maersk has a good, and emphasizes their, stakeholder engagement across the board. They do not present clear and detailed information on who the stakeholders are, and more importantly the process of selecting them. Because of this Maersk cannot receive top marks here. In addition, even though the governance structure is well explained, information on who is involved on the different levels and how they are selected are missing. Leading to only two points for Maersk in this category. Furthermore, Maersk also loses a point in the Ethics and Integrity category as they lack external mechanisms for reporting and seeking advice on the issues, as suggested by the GRI guidelines G4.

With information from both the annual report and the sustainability report, Maersk receives top marks in the economic aspect. However, under the environmental aspect they are two

points short of the maximum. This is from too little information on biodiversity and ballast water management. However, it must be pointed out that regarding ballast water Maersk has done a materiality evaluation and placed this aspect in the bottom left quadrant, less important to Maersk and to their stakeholders. The other point is lost when it comes to reporting the cost related to increased focus on environmental aspects. In all the information there is only one mention of this, regarding the increase in fuel cost with the legally mandated 0.1 % sulfur fuel in certain coastal waters (Maersk Group, 2015a). On the other hand, Maersk provides excellent information on most of the topics under environment and even addresses the process of shipbreaking.

The same excellence can be found under the social aspects, special focus has been on anti-corruption and human rights. In addition, under health and safety they list up detailed information on fatalities that have occurred at the work place the last year and stated that this aspect is unsatisfactory for Maersk. This gives the report a balance view where both positive and negative aspects are included. The only minus under Society with little to no information is on lobbying and unclear/lacking grievance mechanisms. However, again Maersk has done a materiality evaluation and deemed lobbying as an unimportant aspect for them and their stakeholders.

The best category for Maersk is the Transparency and General View. This is because they explain almost all aspects of how they have determined their actions and performance measurements. In addition, they issue a document detailing their sustainability accounting principles (Maersk Group, 2015c). Therefore, they address all aspects with this category. On the other hand, even though Maersk has assurance from the well-established auditing firm KPMG, they have only gone for a limited assurance with the ISAE 3000 accounting assurance standard. Therefore, preventing them from getting a full score in this category.

Overall, Maersk provides excellent sustainability reporting with only minor flaws. They have sufficient publicly available documents that are transparent, reliable and gives a balanced picture of the sustainability reporting practices at Maersk. However, this does not mean that Maersk performs well with their CSR activities but only that they account for them well. In addition, the results from this scoring system is in line with what the KMPG survey reported

and the fact that Maersk have been given several awards regarding their sustainability reporting (KPMG, 2013) (Maersk Group, 2015d).

4.3 CMA CGM S.A.

CMA CGM is the third largest shipping company in the world with headquarters in Marseille, France. With over 20 000 employees, presence in over 150 countries, a fleet of at least 350 vessels and a capacity of over 1.5 million TEU, CMA CGM is a major conglomerate. In addition, as part of their group they have subsidiary container shipping companies that offer regional expertise such as Delmas in Africa, MacAndrews in Europa, ANL in Oceania and US Lines in North America to name a few (CMA CGM, 2015a) (UNCTAD, 2014). Furthermore, it is a privately own family business that is still lead by its founder Jacques Saadé (CMA CGM, 2015b).

Even though, France has in place the report or explain law Grenelle Act II that requires large companies to include information on their environmental and social performance for all their subsidiaries, CMA CGM has no such report publicly available on their website (UNEP et al., 2013). In addition, the only language it is prepared in is French and you have to pay for access to it either through French court registries or through third parties that may have translated it for you. Therefore, this document has not been used in this analysis seeing that we are looking for publicly available reports and the author defines documents that require a payment to fall outside the scope of this thesis. On the other hand, CMA CGM has much information on their website, a code of ethics and a consolidated financial statement (from 2013) publicly available that is used for this analysis.

Based on this CMA CGM scores just a bit below average with a score of 23 out of 54 points:

CMA CGM S.A.				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	6	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	2	3
A2	Materiality	Identified Material Aspects and Boundaries	1	3
A3	Stakeholder Engagement	Stakeholder Engagement	0	3
A4	Governance	Governance	1	3
A5	Ethics and Integrity	Ethics and Integrity	2	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	10	21
B1	Economic	Economic Performance, Indirect Economic Impacts	1	3
B2	Environmental		4	9
B2.1	- Water and Biodiversity	Water, Biodiversity	1	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	2	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	1	3
B3	Social		5	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	2	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	1	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	2	3
C	Transparency and General View	General Standard Disclosure G4	7	18
C1	Reliability and Transparency (General View)		1	3
C2	Reliability specifically in the Environmental aspects		1	3
C3	Reliability specifically in the Social aspects		1	3
C4	Accessibility and Comparability	Report Profile	2	3
C5	Structure, Layout and Language	Report Profile	2	3
C6	Assurance	Report Profile	0	3
Total			23	54

Fig. 5: Scoring for CMA CGM.

Source: The author, CMA CGM's website, consolidated financial statement and code of ethics.

CMA CGM provides information on their corporate profile on their website and in the consolidated financial statement (CMA CGM, 2014). However, they do not have a clear and detailed statement from the CEO on sustainability, and the only information is a short statement from 2003 on their website:

"I expect our company to be beyond reproach when it comes to protecting the environment and marine habitats. (...) This is a genuine commitment that we are all making together" (CMA CGM, 2015c).

In addition, there are some other minor flaws leading them to get 2 points in this category. Furthermore, there is little to no information beyond their short definition of strategic areas of focus giving them a low score in the category materiality. However, the worst aspect for

CMA CGM is stakeholder engagement. Throughout all their documentations and their website stakeholders are not mentioned at all. Only a sentence under human rights saying that, “each individual has a place as a stakeholder in the group” (CMA CGM, 2015d). The importance of stakeholders in sustainability reporting is crucial, as we have discussed earlier, so this is major flaw from CMA CGM.

In addition, with little information on the board of directors or any other governance structure only one point is given on governance. On the other hand, Ethics and Integrity gets two points based on their Code of Ethics and information on their website (CMA CGM, 2015e). However, they are missing external grievance mechanisms on this subject and therefore falls short of scoring the maximum.

Furthermore, economic aspects are poorly covered with only their consolidated financial statement. There is little information except on liabilities regarding pensions and employee benefits, and no information on the financial risks regarding sustainability issues. However, MacAndrews (one of the subsidiaries of CMA CGM) briefly mentions the cost related to the 0.1 % sulfur fuel that is becoming mandatory through MARPOL Annex VI for certain coastal waters (MacAndrews, 2015). All this is still vary scares and CMC CGM only receives 1 point here.

On the environmental aspects, CMA CGM addresses the aspect of water and biodiversity but only with a small paragraph on their website. Therefore, with no key performance indicators or information on the extent of their efforts only one point is awarded. On the other hand, they do provide clear goals and performance indicators on greenhouse gas emissions. In addition, information on how they will achieve it are provided. However, there are few quantifiable data when it comes to waste and on other air pollutants, nor information on oil spills etc. Therefore, they fall short of the maximum score and ending up with two points. In the Compliance and Cost section they have little to no information on the cost of these environmental improvements nor much information on how they have complied, or not, with legislation on environmental issues.

On the other hand, social aspects are marginally better. CMA CGM provides good information on health and safety aspects on their website and in their Code of Ethics. They provided quantifiable targets with information on how they work to achieve them. However, no information is given on the current state and progress. In addition, there is little information on worker conditions and work hours. Therefore, CMA CGM gets two points in this category. Furthermore, Human Rights are just briefly mentioned here and there on their website with little concrete information giving CMA CGM a low score. On the other hand, the society aspect is well addressed on their website and in their Code of Ethics. Especial focus has been given to anti-corruption and anti-competitive behavior. However, the problem overall, and on this aspect as well, is the lack of information on performance. Therefore, CMA CGM falls short of the maximum score here as well.

Furthermore, the Transparency and General View category is the weaker part of CMA CGM's reporting. With little information on how they have chosen their focus areas, how they have set goals and no information on performance gives the reporting little transparency and therefore reliability. Even though their annual report is not available, the information available is easy accessible and their goals and measures can be compared to others. That is also true for the layout and language aspect. On the other hand, with no report publicly available neither is there assurance available leading to zero points in this category.

Overall, CMA CGM provides narrative information on their goals and measures to deal with corporate social responsibility. However, they are lacking information on performance on all issues which leads to a below average score overall. On the other hand, CMA CGM have been given awards for their environmental and corporate social responsibility performance (CMA CGM, 2015f). However, this thesis looks at the reporting aspect and not directly at performance. Furthermore, the fact that French law requires information on sustainability actions and performance in the annual reports leads the author to believe that CMA CGM might have some performance data available. However, when that report is only in French and not publicly available from their website or any other websites they have failed to communicate their sustainability efforts in the best possible way. The author sees no good reason for not posting their annual report on their website, as for example Maersk does.

4.4 Evergreen Line

Evergreen Line is the trading name for the five companies in the Evergreen Group; Evergreen Marine Corp. (Taiwan) Ltd., Italia Marittima S.p.A., Evergreen Marine (UK) Ltd., Evergreen Marine (Hong Kong) Ltd. and Evergreen Marine (Singapore) Pte Ltd (Evergreen Line, 2015a). With over 200 ships and over 1 million TEU Evergreen Line is the fourth largest container shipping company (UNCTAD, 2014). Furthermore, it was started in Taiwan and Evergreen Line's headquarter is still there. (Evergreen Marine Corp. (Taiwan) Ltd., 2014).

Evergreen Line does not issue a separate sustainability report but include some information in their annual report. In addition, they have information available on their website. Even though they are based in Taiwan all this information is available in English, and these two primary sources have been used for the analysis and scoring process. Furthermore, Evergreen Marine Corp. (Taiwan) Ltd. prepares the annual report but they report on the actions for the entire Evergreen group.

Based on this the Evergreen Line scores just above average with 29 out of 54 points:

Evergreen Line				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	5	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	2	3
A2	Materiality	Identified Material Aspects and Boundaries	1	3
A3	Stakeholder Engagement	Stakeholder Engagement	0	3
A4	Governance	Governance	1	3
A5	Ethics and Integrity	Ethics and Integrity	1	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	14	21
B1	Economic	Economic Performance, Indirect Economic Impacts	3	3
B2	Environmental		8	9
B2.1	- Water and Biodiversity	Water, Biodiversity	2	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	3	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	3	3
B3	Social		3	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	1	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	1	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	1	3
C	Transparency and General View	General Standard Disclosure G4	10	18
C1	Reliability and Transparency (General View)		2	3
C2	Reliability specifically in the Environmental aspects		3	3
C3	Reliability specifically in the Social aspects		1	3
C4	Accessibility and Comparability	Report Profile	2	3
C5	Structure, Layout and Language	Report Profile	2	3
C6	Assurance	Report Profile	0	3
Total			29	54

Fig. 6: Scoring for Evergreen Line.

Source: The author, Evergreen Line's website and annual report

However, the score under Context, Management and Stakeholders are far below average. The main reason for this is little information on materiality, stakeholders, governance, and ethics and integrity. There is no discussion on why something is material in the annual report. Furthermore, the only aspect of materiality is that Evergreen Line states some focus areas for their CSR policy, plus what we can read out of the focus of the information on their website. Even worse, is that the word stakeholder is not mention once, neither on their website nor in their annual report. Furthermore, the annual report is addressed to shareholders giving the impression that their reporting is primarily for their own shareholders and not the stakeholders that are affected by their operations. Under governance, the only information is on the board and some information on their remuneration but no information on their role in risk management, performance measures, sustainability work, etc. Furthermore, Evergreen

Line is one of the few companies scoring only one point in ethics and integrity category. This is because there is a weak code of conduct that does not address ethics within the organization. However, corporate profile is covered well with two exemptions; little information on number of employees and their diversity, and only a short statement on sustainability from their CEO on their website (Evergreen Line, 2015b).

On the other hand, Evergreen Line addresses economic and environmental aspects very well. Economic aspects are covered in the annual report, and they even have breakdowns on revenue from different regions. Furthermore, environmental aspects are especially well covered on their website, and covered in the annual report. However, water and biodiversity has no performance data available, while air pollution has data on performance from the last 7 years. Furthermore, they even address in detailed the shipbreaking process. In addition, Evergreen Line has detailed information on the cost of their environmental projects and information on fines and grievance that have come up the last year.

However, the social aspect is inadequately covered both in the annual report and on their website. There is little information on labor relations and worker conditions. Training, as well as health and safety, are covered well with detailed information on their website, and in addition, Evergreen won Lloyd's Training Award in 2014 (Evergreen Line, 2015c). On the other hand, the entire social aspect gives an impression of just being in compliance with laws that have been issued. Illustrated by this statement in the annual report: "The Company *set up* Labour Safety and Health Division in accordance with Labor Safety and Health Law for the purpose of ... providing labors with a safe and healthy place of environment" (Evergreen Marine Corp. (Taiwan) Ltd., 2014, p. 55). The author then wonders if they did not have a Safety and Health division before seeing that the report for 2013 focuses on what has happen the last year, and the sentence structure "The Company *set up*..."

Evergreen Line scores average in the Transparency and General View section. However, they score top points in the reliability within the environmental aspects because they provided information on how their emissions, waste, etc. are calculated and measured on their website. On the other hand, with little information on social aspects and subsequently on their measurements they score low in this aspect. On the other aspects, they provide good

information but there are improvement points overall. For example, their website is hard to navigate and you are sent between the different websites of the members of the Evergreen Group to end up on the same side on the Evergreen Line website. In addition, with no sustainability report to be assured, and only the financial aspect is assured in the annual report, Evergreen Line gets zero points here.

Overall, Evergreen Line has good information on their environmental actions on their website and supplemented from the annual report they receive almost top score. In addition, the economic aspect is fully covered in the annual report. The down side for Evergreen Line is their communication of their social aspects. Furthermore, their approach with CSR information in their annual report fails to cover it as well as a separate sustainability report would do. However, this is more because of Evergreen Line's priority of information and less on the actual communication format. In addition, Evergreen shows that you can provide enough and good information by just using your website. Lastly, more concrete information on the company, their process of determining CSR, stakeholders, governance and a more proactive focus on ethics would have given Evergreen Line a better score, and communicated their actions in better way to their stakeholders and the public.

4.5 COSCO Container Lines Limited (COSCON)

COSCO Container Lines (COSCON) is the fifth largest container shipping company with over 150 ships and over 800 000 TEU (UNCTAD, 2014). It is part of the larger China Ocean Shipping Company (COSCO), which is the largest group in China and the 327th largest corporation in the world on the Fortune Global 500 (COSCO, 2015). Furthermore, COSCON has their headquarters in Shanghai and is fully own by their parent corporation the COSCO group. In addition, COSCO group is a state-owned enterprise controlled by the Chinese government.

Both COSCON and the parent company COSCO group issues sustainability reports. In addition, the COSCO group issues an annual report and both the companies presents some information on sustainability performance on their websites. Furthermore, COSCON issues a separate environmental report in addition to their sustainability report. There are more details on environmental aspects in the environmental report. However, there is sufficient

environmental information in the sustainability report to give COSCON full score in the environmental aspect. Therefore, the environmental report just confirms the findings in the sustainability report and enhances them. The structure of the reporting can be seen as the COSCO Group’s sustainability report provides the overview of processes and aspects, that are further addressed in COSCON’s sustainability report and more detailed information on the environment is found in the stand-alone environmental report from COSCON.

COSCON provides complete and comprehensive communication of their sustainability actions. Therefore, they score the maximum of 54 out of 54 points:

COSCO Container Lines Limited (COSCON)				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	15	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	3	3
A2	Materiality	Identified Material Aspects and Boundaries	3	3
A3	Stakeholder Engagement	Stakeholder Engagement	3	3
A4	Governance	Governance	3	3
A5	Ethics and Integrity	Ethics and Integrity	3	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	21	21
B1	Economic	Economic Performance, Indirect Economic Impacts	3	3
B2	Environmental		9	9
B2.1	- Water and Biodiversity	Water, Biodiversity	3	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	3	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	3	3
B3	Social		9	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	3	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	3	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	3	3
C	Transparency and General View	General Standard Disclosure G4	18	18
C1	Reliability and Transparency (General View)		3	3
C2	Reliability specifically in the Environmental aspects		3	3
C3	Reliability specifically in the Social aspects		3	3
C4	Accessibility and Comparability	Report Profile	3	3
C5	Structure, Layout and Language	Report Profile	3	3
C6	Assurance	Report Profile	3	3
Total			54	54

Fig. 7: Scoring for COSCO Container Lines Limited (COSCON).

Source: The author, COSCO Group’s annual report, sustainability report, website and COSCON’s website, sustainability report and environmental report.

Most of the information used in the scoring is from COSCON’s sustainability report (COSCON, 2014a). However, supplemental information, especially on stakeholder engagement, was

collected from the COSCO group's sustainability report (COSCO, 2014). Furthermore, under environmental aspects some findings were better explained in the stand-alone environmental report from COSCON (COSCON, 2014b). Information from COSCO and COSCON websites and COSCO's annual report were of limited use seeing that they often refer to the sustainability reports, which were comprehensive enough.

COSCO and COSCON have the most comprehensive reporting that is available. However, both actively uses the GRI Guidelines, which might help explain their high score. In addition, they even provide a GRI Index which details where in the report you can find information on given GRI Aspects. Furthermore, COSCO actively uses both ISO standards, UN Global Compact and other minor initiatives when reporting. Therefore, getting the best of many worlds. COSCON's report also builds on this, but only reports in detail according to the GRI Guidelines and lets the parent company report in more detailed on the other standards. However, COSCON does address ISO standards etc. in their report but not in details.

COSCON scores fully in the Context, Management and Stakeholders theme. They address all themes from detailed breakdown of their employees, a thorough materiality process that involves many stakeholders, good information on their governance and ethics to an excellent stakeholder engagement. COSCON even addresses the process of determining stakeholders. However, this information needed to be found in the sustainability report of its parent company COSCO. Nevertheless, the information was provided in full detail giving them a full score also here. On the other hand, the CEO statement from COSCO did not address sustainability well enough to give a full score but the CEO statement from COSCON was definitely addressing sustainability on all aspects well enough and therefore scoring them three points.

Furthermore, all the economic, environmental and social aspects are covered by COSCON in their sustainability report. However, information from the environmental report was needed to give a detailed picture of their key performance indicators. Furthermore, environmental grievance mechanisms was better addressed in the sustainability report from the COSCO group. There is detailed information on goals, performances, failures, measurement processes etc. on all aspects.

In Transparency and General view, COSCON also scores the maximum. There is detailed information on all aspects throughout the reports. Furthermore, they report number of grievances, failures to reach targets as well as reporting their reduction of pollutants. Thereby, giving the report a balance view. In addition, the reliability is increased by their detail explanation regarding processes for reporting and the process of reporting non-compliance. COSCON has gone for an assurance through the AA1000AS standard provided by DNV GL. This assurance is of the entire sustainability report evaluating reliability, completeness, materiality, neutrality, etc. In addition, this type of assurance also comes with recommendation on further improvements on the report. Therefore, COSCON receives full score in the assurance aspect. Furthermore, the structure, layout and language is excellent with the reporting being both in Chinese and English side-by-side in the report and not as separate reports. Giving the impression that both languages are equally important and that nothing has been changed, omitted or added in the translation.

Again, it is important to point out that this scoring does not necessarily reflect COSCON's sustainability performance, but it gives us a picture of how well they report on their actions and impacts. However, as far as reporting goes COSCON is among, if not, the best container shipping company at the moment.

4.6 Hapag-Lloyd

Hapag-Lloyd is based in Hamburg, Germany and was the sixth largest container shipping company in January 2014 with over 150 ships and around 750 000 TEU (UNCTAD, 2014). However, they are in a process of merging with Compania Sud Americana de Vapores (CSAV), which was the 19th largest container shipping company. Combined they will have over 1 million TEU moving them up to a possible 4th place (Hapag-Lloyd, 2015a) (UNCTAD, 2014). Furthermore, the major owners are CSAV, the city of Hamburg and Kühne Maritime with a combine market share of over 78 % (Hapag-Lloyd, 2015a) (Hapag-Lloyd, 2015b).

Information on Hapag-Lloyd's sustainability impacts and actions are retrieved from their website, annual report, code of ethics and their environmental brochure "Driven by

responsibility” (Hapag-Lloyd, 2015c) (Hapag-Lloyd, 2015d). Furthermore, Hapag-Lloyd does not issue a separate sustainability report but their annual report has some information or refers you to their website or their environmental brochure. There are not strict regulation on sustainability reporting in Germany, and the only requirement is the non-financial indicators and that risks should be addressed in the annual report (UNEP et al., 2013). In addition, even though CSAV and Hapag-Lloyd is in a process of merging the reporting content is mainly about Hapag-Lloyd, and Hapag-Lloyd is the company analyzed here. However, it is likely that CSAV will be incorporated into the same reporting framework and therefore the results can be a prediction of the CSAV reporting as well.

Based on these sources of information Hapag-Lloyd scores average with 27 out of 54 points:

Hapag-Lloyd				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	9	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	3	3
A2	Materiality	Identified Material Aspects and Boundaries	1	3
A3	Stakeholder Engagement	Stakeholder Engagement	0	3
A4	Governance	Governance	2	3
A5	Ethics and Integrity	Ethics and Integrity	3	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	10	21
B1	Economic	Economic Performance, Indirect Economic Impacts	3	3
B2	Environmental		4	9
B2.1	- Water and Biodiversity	Water, Biodiversity	1	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	2	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	1	3
B3	Social		3	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	1	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	1	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	1	3
C	Transparency and General View	General Standard Disclosure G4	8	18
C1	Reliability and Transparency (General View)		2	3
C2	Reliability specifically in the Environmental aspects		2	3
C3	Reliability specifically in the Social aspects		0	3
C4	Accessibility and Comparability	Report Profile	1	3
C5	Structure, Layout and Language	Report Profile	2	3
C6	Assurance	Report Profile	1	3
Total			27	54

Fig. 8: Scoring for Hapag-Lloyd.

Source: The author, Hapag-Lloyd’s website, annual report, environmental brochure (Driven by Responsibility) and code of ethics.

Within the Context, Management and Stakeholders theme Hapag-Lloyd scores just above average. Through their annual report and their website, they provide full information on their company profile including brake-downs of employees etc. In addition, in their environmental brochure there is sufficient statements from the company leaders on the issue of sustainability, giving them a full score in this theme. Furthermore, they also scores three points in the Ethics and Integrity category because Hapag-Lloyd has good information in their Global Code of Ethics and, as one of the few, they have an external grievance mechanisms through external law firms (Hapag-Lloyd, 2015e). On the other hand, they only briefly mention their priority areas with little or no explanation of why they are priorities. Furthermore, stakeholder is not mention once in their annual report or their environmental brochure. In addition, it is not mention on their website except to describe Hapag-Lloyd as a stakeholder in an external project. Governance is well addressed in the annual report, but it lacks some information on the relationship between sustainability actions and the executive board to get a full score.

Economic aspects are fully covered in the annual report, but environmental and social aspects are just briefly mention. Furthermore, there are almost no key performance indicators in neither environmental nor social aspects. The only exception is under emissions and energy usage, where there are some information on goals and performance in the environmental brochure. The worst aspect is the social where the only information is in the code of ethics with no performance indicators. Human rights is only mention in one sentence in the code of ethics and on the website, where the statement “Protection of human rights” occurs as one of their principles (Hapag-Lloyd, 2015d, p. 3).

Under the Transparency and General View section, Hapag-Lloyd has good reliability within the environmental section with available data and information on the method of measuring them. Furthermore, DNV has assured the measurements of carbon and sulfur giving them increased reliability. However, this is the only form of assurance available for Hapag-Lloyd and therefore they only get one point in the assurance category. On the other hand, comparing and finding information from Hapag-Lloyd is not as easy as it should be. With little to no performance indicators, it is hard to compare it to other companies. However, the report and the brochure

is structured well and they are available in both English and German. Lastly, with no performance indicators or information on social aspect the reliability score here is zero.

Overall, Hapag-Lloyd provides at best narrative information with little to no hard data to support their statements. With both an annual report and an environmental brochure, they have the means to provide information that is more concrete to their stakeholders, even though they do not mention stakeholders at all. Furthermore, by not issuing an environmental *report* but a *brochure* gives it a feel of being more greenwashing than actual sustainability reporting.

4.7 China Shipping Container Lines Company Limited (CSCL)

China Shipping Container Lines (CSCL) has its headquarters in Shanghai and is part of the larger China Shipping (Group) Company. With over 130 vessels and a capacity of over 750 000 TEU it is the seventh largest container shipping company in the world (UNCTAD, 2014). Furthermore, CSCL is publicly traded on both the Hong Kong and Shanghai Stock Exchange where China Shipping (Group) Company owns around 47 % while the rest is publicly traded (CSCL, 2014). However, China Shipping Group is a state-owned company under the control of the Chinese government.

CSCL issues a social liability report, but that is only available in Chinese. Furthermore, their website has some information but much of it is only in Chinese. In addition, the parent company China Shipping (Group) Company has a very limited website. However, CSCL does issue an annual report in English, and the latest one available is for 2013. Furthermore, China Shipping (Group) Company issues a CSR report that includes their subsidiaries such as CSCL (China Shipping (Group) Company, 2014). These two documents are the basis for the analysis, with some supplements from CSCL's website.

Based on the information available CSCL scores just above average with 31 points:

China Shipping Container Lines Company Limited (CSCL)				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	9	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	2	3
A2	Materiality	Identified Material Aspects and Boundaries	1	3
A3	Stakeholder Engagement	Stakeholder Engagement	2	3
A4	Governance	Governance	3	3
A5	Ethics and Integrity	Ethics and Integrity	1	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	11	21
B1	Economic	Economic Performance, Indirect Economic Impacts	3	3
B2	Environmental		4	9
B2.1	- Water and Biodiversity	Water, Biodiversity	1	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	2	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	1	3
B3	Social		4	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	2	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	1	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	1	3
C	Transparency and General View	General Standard Disclosure G4	11	18
C1	Reliability and Transparency (General View)		2	3
C2	Reliability specifically in the Environmental aspects		3	3
C3	Reliability specifically in the Social aspects		2	3
C4	Accessibility and Comparability	Report Profile	2	3
C5	Structure, Layout and Language	Report Profile	2	3
C6	Assurance	Report Profile	0	3
Total			31	54

Fig. 9: Scoring for China Shipping Container Lines Company Limited (CSCL).

Source: The author, China Shipping Group's CSR report and CSCL's website and annual report.

CSCL provides good information on their corporate profile, but has no clear statement on the risk and opportunities regarding sustainability. In addition, with stakeholder engagement they do a good job informing about their stakeholders, grouping them and informing on how they engages each of them. However, there is no information on how they have chosen their stakeholders, which loses them one point here. Furthermore, materiality is not discussed in the CSR report and can only be determined by the focus areas in the report and from their philosophy on their website. In addition, Ethics and Integrity lacks information. There is only information about it in the philosophy on their website and some loose mentions in the reports. However, governance is very well addressed in the annual report combined with the sustainability governance information from the CSR report scoring CSCL three points.

There is full information on economic aspects in the annual report, but there is little use of performance indicators in the environmental and social aspects in the CSR report. Water and biodiversity is barely mention with no information on ballast water management. The same goes for compliance and cost with just brief comments and no quantifiable data. However, regarding emissions and energy use there are quantitative data that is comparable over time and across companies. On the other hand, there is little focus on waste and therefore CSCL only scores two points here.

The social aspect is also addressed poorly, with only brief mentions of issues and little quantifiable data. Only within health and safety can there be found data on accidents from each subsidiaries over time. Human rights is barely mention at all, other than the statement: “The Group strictly abides by international human rights convention...” (China Shipping (Group) Company, 2014, p. 58). However, some of the aspects under human rights are mention as well, giving them a score of one point. The same goes for social aspects such as corruption and anti-competitive behavior.

The report provides transparent and reliable information. However, there is no materiality discussing which decreases the overall transparency. On the other hand, there is detailed explanation on how environmental aspects are managed, effects of implementing technology etc. Furthermore, they provide data that shows that not all measures have had the intended effect, such as increases in emissions some years. The most detailed information on reliability comes from the environmental aspects, while they are weaker within the social aspects. However, both aspects provide good reliable information. In addition, the information that is available is accessible and comparable, but with no clear links from their webpage to English versions of the documents reduces the accessibility some. Furthermore, with some information and some small parts of the reports only in Chinese CSCL does not get full score in the structure, layout and language aspect. Lastly, the report, nor the data within, is assured giving CSCL zero points here.

Even though CSCL refers to the GRI Guidelines in their CSR report, they only scores barely above average. There is no clear materiality discussion that might explain why some aspects are ignored. However, that does not explain why there is so little quantifiable data available.

Furthermore, CSCL provides much narrative information and little hard data even though they have a separate CSR report.

4.8 Hanjin Shipping Company Limited

Established in 1949 as Hanjin Shipping Holdings it was spun off in 2009 as Hanjin Shipping Company, and listed on the Korean Stock Exchange. However, Hanjin Shipping Holding is still a major owner with around 35 % of the shares (Hanjin Shipping, 2013). Today Hanjin shipping has over 115 container ships with a total capacity of over 650 000 TEU making them the eighth largest container shipping company and Korea's largest shipping company (Hanjin Shipping, 2015a) (UNCTAD, 2014). Furthermore, it operates within dry bulk, tankers, etc. in addition to container ships.

Hanjin Shipping Company issues an annual report that they call a Business Report (Hanjin Shipping, 2015b). In addition, they issue a biannual sustainability report. The last one was issued in 2013 covering the years 2011 and 2012, with some data included from 2013 (Hanjin Shipping, 2013). The author has deemed this to be within the parameters of the thesis and included it in the analysis. Furthermore, they provide some information on their website that have been used to supplement the information from the two reports.

Based on these sources Hanjin Shipping scores very well with 49 of 54 points:

Hanjin Shipping Company Limited				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	12	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	3	3
A2	Materiality	Identified Material Aspects and Boundaries	3	3
A3	Stakeholder Engagement	Stakeholder Engagement	2	3
A4	Governance	Governance	2	3
A5	Ethics and Integrity	Ethics and Integrity	2	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	20	21
B1	Economic	Economic Performance, Indirect Economic Impacts	3	3
B2	Environmental		8	9
B2.1	- Water and Biodiversity	Water, Biodiversity	2	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	3	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	3	3
B3	Social		9	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	3	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	3	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	3	3
C	Transparency and General View	General Standard Disclosure G4	17	18
C1	Reliability and Transparency (General View)		3	3
C2	Reliability specifically in the Environmental aspects		3	3
C3	Reliability specifically in the Social aspects		3	3
C4	Accessibility and Comparability	Report Profile	2	3
C5	Structure, Layout and Language	Report Profile	3	3
C6	Assurance	Report Profile	3	3
Total			49	54

Fig. 10: Scoring for Hanjin Shipping Company Limited.

Source: The author, Hanjin Shipping's website, annual report and sustainability report.

Combining information from their website, annual report and the sustainability report Hanjin Shipping scores the maximum of 3 points in the category corporate profile. Furthermore, in the sustainability report there is detailed explanation on how the company defines what is material for them and not. They also includes stakeholders in this process and have in place good stakeholder engagement channels for each of their stakeholders. However, there is no information on why these stakeholders has been defined as stakeholders and why some are not. Therefore, they only score two points here. Governance and Ethics and Integrity are also well addressed but lacking some aspects. Within governance, there is little information on how the board is connected to sustainability issues, whiles in ethics and integrity Hanjin Shipping lacks external grievance mechanisms.

Economic aspects are well addressed in the sustainability report, but needs to be complemented from the annual report to score the maximum. There are breakdowns on revenues for each shipping lane, region etc. Furthermore, environmental aspects are a key focus in the sustainability report with clear goals and key performance indicators on almost all aspects. However, water usage and ballast water management lacks key performance indicators and clear goals. Therefore, Hanjin Shipping only gets 2 points here. On the other hand, they provided detailed information on compliance with no fines issued and breakdowns over investments in environmental actions over the last two years. On social aspects, Hanjin Shipping scores the maximum in all categories. There are key performance indicators within all categories and there is detailed information on all aspects. However, the grievance mechanisms needed to be found on the website and were not clearly addressed in the sustainability report.

The information that is provided is transparent and reliable across the board. Hanjin Shipping's sustainability report is balanced with setbacks mention and not hidden. Through their sustainability management, system indicators are explained and reliably measured. Furthermore, an external provider verifies some of the data as well (Hanjin Shipping, 2015c). The only negative aspect is that their sustainability report is not freely available on their website. You need to contact them to get a copy of it. However, it is available freely in GRI's database and on www.corporateregister.com. In addition, Hanjin Shipping's sustainability report is assured using the AA1000AS standards that looks at what is reported, their reliability and even suggests improvements on the report. Therefore, they score three points in this category.

Overall, Hanjin Shipping provides a very good picture of their sustainability actions and impacts through their sustainability report supplemented with their website and annual report. The information is both quantitative and qualitative giving transparent and reliable communication to their stakeholders. With only minor improvements, Hanjin Shipping would have had the best sustainability report among container shipping companies.

4.9 APL Limited

APL, formerly known as American President Lines, merged with Neptune Orient Lines (NOL) in 1997. NOL became the holding company that is listed on the Singapore Stock exchange, while APL is the container shipping brand that is wholly owned by the NOL Group (APL, 2015) (NOL, 2015a). After this merger APL has over 115 ships and capacity of over 625 000 TEU (UNCTAD, 2014).

Most of the reporting for APL is done by the holding company Neptune Orient Lines. There is some information on APL's website, but most sustainability related issues are either linked or referred to NOL's website. In addition, both the annual report and their separate sustainability report are issued under Neptune Orient Lines (NOL, 2014a) (NOL, 2015b). However, seeing that APL is the commercial brand the reports are more about APL, and not the holding company. Furthermore, they have a separate Corporate Code of Conduct (NOL, 2014b). These three documents are the primary source for the analysis and the scoring.

APL scores above average with 36 out of 54 points:

APL Limited				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	11	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	3	3
A2	Materiality	Identified Material Aspects and Boundaries	1	3
A3	Stakeholder Engagement	Stakeholder Engagement	1	3
A4	Governance	Governance	3	3
A5	Ethics and Integrity	Ethics and Integrity	3	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	14	21
B1	Economic	Economic Performance, Indirect Economic Impacts	3	3
B2	Environmental		7	9
B2.1	- Water and Biodiversity	Water, Biodiversity	3	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	3	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	1	3
B3	Social		4	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	3	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	0	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	1	3
C	Transparency and General View	General Standard Disclosure G4	11	18
C1	Reliability and Transparency (General View)		2	3
C2	Reliability specifically in the Environmental aspects		3	3
C3	Reliability specifically in the Social aspects		2	3
C4	Accessibility and Comparability	Report Profile	2	3
C5	Structure, Layout and Language	Report Profile	2	3
C6	Assurance	Report Profile	0	3
Total			36	54

Fig. 11: Scoring for APL Limited.

Source: The author, NOL's website, annual report, sustainability report and code of conduct.

APL provides good information on its corporate profile with a clear statement on sustainability and good breakdowns of employees in the sustainability report. Furthermore, they provide excellent information on their corporate governance and their relationship to sustainability issues in the annual report, even though it is not mentioned with one word in the sustainability report. In addition, Ethics and Integrity is well addressed in all three documents and they provide external grievance mechanisms for ethical aspects. On the other hand, there is no discussion of materiality just some short statements on focus areas. Furthermore, stakeholder engagement is mentioned as a title on one of the pages in the sustainability report but there is little information on how stakeholders actually are engaged, and no information on who the key stakeholders are or how they have been chosen.

Economic aspects are covered with information from the annual and the sustainability report. There are detailed breakdowns of value created in different regions and trade lanes. Furthermore, environmental aspects are very well addressed in the sustainability report with key performance indicators on most of the aspects. However, there is little information on compliance aspects or on cost regarding their environmental practices. The social aspect is covered unevenly, with labor practices being well addressed. Especial focus has been given to health, safety and training, and there are goals and performance indicators on many of them. On the other hand, human rights are disturbingly not mentioned at all, anywhere. Neither are any of the sub-aspects such as child labor, collective bargaining, discrimination, etc. Furthermore, the only aspects of society are briefly mention in their Code of Conduct with no performance indicators related to them.

APL provides a decent transparency and general view in their reporting. However, there is little transparency on the materiality principle and stakeholder engagement. There is a lot of information on management processes regarding reporting and collection of data. Furthermore, they provide information on setbacks as well as achievements. This is especially true within the environmental aspects, while there is less information on data collection in the social aspects. In addition, the report is accessible, but you need to be aware of the ownership to actually find the sustainability report. In addition, the report is very dense with text and little information in graphs, etc. that would make it more reader friendly. Lastly, with no assurance available they score zero points in this category.

Overall, APL provides an above average report, but the quality varies widely between the categories. There is good information on governance, ethics and corporate profile, while little information is presented on stakeholders and materiality. Furthermore, while economic and environmental aspects are well addressed, social aspects lags behind. Human rights are not even mention at all throughout all their communications. In general, the report is transparent and reliable, but needs a better layout and should be assured to score full points here.

4.10 United Arab Shipping Company (UASC)

United Arab Shipping Company (UASC) was established by the Arab states Iraq, Bahrain, Kuwait, Qatar, Saudi Arabia and United Arab Emirates in 1976, and today its headquarters are in Dubai (Alam, 2012). Furthermore, they have over 3 200 employees, over 70 ships and a capacity of over 610 000 TEU (UASC, 2015a) (UNCTAD, 2014).

There is little information available on their website. The only sustainability information is found on one single webpage under environmental initiatives (UASC, 2015b). Even worse, there is no annual or sustainability report publicly available either. Furthermore, there is not even a code of conduct or similar documents to be found. Therefore, the scoring is done with the little information available from the website.

Based on this UASC scores very poorly with only 7 out of 54 points:

United Arab Shipping Company (UASC)				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	1	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	1	3
A2	Materiality	Identified Material Aspects and Boundaries	0	3
A3	Stakeholder Engagement	Stakeholder Engagement	0	3
A4	Governance	Governance	0	3
A5	Ethics and Integrity	Ethics and Integrity	0	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	5	21
B1	Economic	Economic Performance, Indirect Economic Impacts	0	3
B2	Environmental		3	9
B2.1	- Water and Biodiversity	Water, Biodiversity	1	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	1	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	1	3
B3	Social		2	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	1	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	0	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	1	3
C	Transparency and General View	General Standard Disclosure G4	1	18
C1	Reliability and Transparency (General View)		0	3
C2	Reliability specifically in the Environmental aspects		0	3
C3	Reliability specifically in the Social aspects		0	3
C4	Accessibility and Comparability	Report Profile	0	3
C5	Structure, Layout and Language	Report Profile	1	3
C6	Assurance	Report Profile	0	3
Total			7	54

Fig. 12: Scoring for United Arab Shipping Company (UASC).

Source: The author and UASC's website.

The only point UASC gets in the context, management and stakeholders category is under corporate profile. There is some information on their website on the company profile, but even that is very limited. All the other categories are not even mention at all. In addition, there is not even a clear statement on the environmental focus of UASC.

Furthermore, there are no information on the economic aspects of their operations. Environmental aspects are just briefly mention on their single webpage addressing environmental and social aspects. The information focuses on compliance with regulations and on building of new environmental friendly ships that reduces waste, energy and emissions. In addition, there are some mention of biodiversity and water usage. On the other hand, social aspects are addressed even worse with only stated focus on compliance with regulation on health, safety and training.

The worst category is the transparency and general view with only one point given for the fast navigation from their homepage to their environmental section of the webpage. Other than that, the information is not transparent, reliable, accessible, comparable nor assured at all.

Overall, UASC provides almost no information on their sustainability performance, nor on any aspects of their performance. In addition, UASC is based in Dubai with little focus on corporate reporting and transparency therefore the author believes that it is unlikely to see an increase of reporting from UASC any time soon.

4.11 Aggregated scoring

Results from the scoring process shows that the overall score varies significantly from company to company. COSCO Container Lines Limited scores the maximum of 54 points, while on the other end of the scale we have United Arab Shipping Company that scores only 7 points. The average score among all the companies is 31.3 points, which is over the absolute average of 27 points. However, with this scoring system it is almost impossible to get zero points seeing that as long as you have some information on your company you will get points in the category

corporate profile at least. Therefore, 31.3 points can also be seen as close to the absolute average. Below you can see a table that sums up the results:

Scoring for the ten largest container shipping companies					
Rank	Company	Score			
		Total	Category A	Category B	Category C
1	COSCO Container Lines Limited	54	15	21	18
2	Hanjin Shipping Company Limited	49	12	20	17
3	Maersk Line	47	12	18	17
4	APL Limited	36	11	14	11
5	China Shipping Container Lines Company Limited	31	9	11	11
6	Evergreen Line	29	5	14	10
7	Hapag-Lloyd Aktiengesellschaft	27	9	10	8
8	CMA CGM S.A	23	6	10	7
9	Mediterranean Shipping Company S.A.	10	4	5	1
10	United Arab Shipping Company	7	1	5	1
	Average	31,3	8,4	12,8	10,1
	<i>Maximum</i>	54	15	21	18

Fig. 13: Overall score for the ten largest container shipping companies. Source: The author.

Furthermore, it also varies within the different categories. The best category is actually category B – Economic, Social and Environmental Aspects, followed by category C – Transparency and General view and category A – Context, Management and Stakeholders. You cannot look at the average score by itself, but compare to the maximum score within each category. Then in category A the average score is 56 % of the maximum, 61 % in category B and 56.1 % in category C. In addition, there are certain subcategories that companies score well in, while others they score almost zero on average.

Below you can see the scores in all categories in two formats. The first is a strict average result from all the companies, while the other one is the most common score in each category:

Overall (10 largest container shipping companies) - Average				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	8,4	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	2,3	3
A2	Materiality	Identified Material Aspects and Boundaries	1,5	3
A3	Stakeholder Engagement	Stakeholder Engagement	1	3
A4	Governance	Governance	1,7	3
A5	Ethics and Integrity	Ethics and Integrity	1,9	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	12,8	21
B1	Economic	Economic Performance, Indirect Economic Impacts	2,2	3
B2	Environmental		5,6	9
B2.1	- Water and Biodiversity	Water, Biodiversity	1,7	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	2,3	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	1,6	3
B3	Social		5	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	2	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	1,4	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	1,6	3
C	Transparency and General View	General Standard Disclosure G4	10,1	18
C1	Reliability and Transparency (General View)		1,8	3
C2	Reliability specifically in the Environmental aspects		2,1	3
C3	Reliability specifically in the Social aspects		1,5	3
C4	Accessibility and Comparability	Report Profile	1,7	3
C5	Structure, Layout and Language	Report Profile	2,1	3
C6	Assurance	Report Profile	0,9	3
Total			31,3	54

Fig. 14: Overall score for the ten largest container shipping companies - Average.

Source: The author.

Overall (10 largest container shipping companies) - Most common score				
Category	Themes	Aspects from GRI	Score	Max
A	Context, Management and Stakeholders	General Standard Disclosure G4	8	15
A1	Corporate Profile	Strategy and Analysis, Organizational Profile	3	3
A2	Materiality	Identified Material Aspects and Boundaries	1	3
A3	Stakeholder Engagement	Stakeholder Engagement	0	3
A4	Governance	Governance	2	3
A5	Ethics and Integrity	Ethics and Integrity	2	3
B	Economic, Environmental and Social aspects	Specific Standard Disclosure G4	11	21
B1	Economic	Economic Performance, Indirect Economic Impacts	3	3
B2	Environmental		5	9
B2.1	- Water and Biodiversity	Water, Biodiversity	1	3
B2.3	- Energy and emissions/waste	Energy, Emissions, Effluents and Waste	3	3
B2.4	- Compliance and cost	Compliance, Overall, Environmental Grievance Mechanisms	1	3
B3	Social		3	9
B3.1	- Labor Practices	Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Equal Remuneration for Women and Men, Labor Practices Grievance Mechanisms	1	3
B3.2	- Human Rights	Investment, Non-Discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Human Rights Grievance Mechanisms	1	3
B3.3	- Society	Anti-corruption, Public Policy, Anti-Competitive Behavior, Compliance, Grievance Mechanisms for Impacts on Society	1	3
C	Transparency and General View	General Standard Disclosure G4	9	18
C1	Reliability and Transparency (General View)		2	3
C2	Reliability specifically in the Environmental aspects		3	3
C3	Reliability specifically in the Social aspects		0	3
C4	Accessibility and Comparability	Report Profile	2	3
C5	Structure, Layout and Language	Report Profile	2	3
C6	Assurance	Report Profile	0	3
Total			28	54

Fig. 15: Overall score for the ten largest container shipping companies – Most common score.

Source: The author.

In the next chapter, the author looks at each of the categories and see what we can learn from them. Furthermore, we can see some tendencies on what information is available through the different communication methods; websites, annual reports, separate sustainability reports, etc.

5 Discussion

In this chapter, we will discuss the overall score and look at the different scoring categories. First we look at each category separately, and then we will attempt to group together similar companies based on their reporting performance. Furthermore, we will take a broader look at what we can take away from the literature review and these findings. In addition, we will look at the limitations in this study and lastly we will try to summarize the key findings and learning points from this research.

5.1 Category A – Context, Management and Stakeholders

This category is the weakest among all the container shipping companies, with category C at a close second. However, within this category the score varies widely with corporate profile on the top and stakeholder engagement on the bottom. The category corporate profile is a category that should be quite easy to get a top score. All it requires is information about the company and statements on sustainability issues. However, from the findings we can see that not all companies find this so easy. The two issues that are commonly missing are breakdowns of employees on age, sex, etc. and a clear statement from their CEO, or equivalent, on their sustainability actions and impacts. Here we tend to see a distinction between those who issue separate sustainability reports and those who do not. With separate sustainability reports, there are statements from CEOs etc. addressing stakeholders on sustainability issues whiles in annual reports, that do have some sustainability information in them, the statement is addressed to shareholders and focuses more on the business aspect of the company. Furthermore, breakdowns of employees are more likely to take place in separate sustainability reports than in annual reports, and even less frequently on company websites.

On the other hand, a materiality discussion is very often missing when reporting on sustainability issues. As we discussed in the literature review, materiality helps a company focus their attention on sustainability issues that matters for their company. However, this is something that companies struggle with, or more correctly, they struggle with explaining their materiality process. Many companies just stated that their focus areas are environment, greenhouse gas emissions, health and safety, etc. without further explanation of why they

have been chosen. This is especially true when there is no separate sustainability report, but it is also the case with separate reports as well. Website information tends to be shorter and therefore, detailed explanations are rarely seen there. Furthermore, companies with a good materiality process involves stakeholders so that the focus areas covers all interested parties. This is something the top scores Maersk, COSCON and Hanjin Shipping does very well. Without a materiality discussion the overall transparency of the reporting falls, seeing that a company can then just focus on things that they are good at or what is easy to fix, ignoring the hard issues.

Stakeholder engagement is one of the weakest part of the reporting, while it should be the strongest. Seeing that sustainability actions affects stakeholders and therefore they should be included in the process, as we discussed in the literature review. However, there are clear limitations on stakeholder engagement within the companies. Some goes as far as not mentioning stakeholders with a word; while others have stakeholder advisory boards that helps the decision makers on sustainability issues. However, what even the best reporting companies struggles with is informing on the process of determining stakeholders. Why are some groups stakeholders, and some are not? Again, with no transparency on this issue companies can pick the easy stakeholders to please and not focus on the ones that matter.

Governance structures are better addressed by most of the companies seeing that it is common practice, and legal many places, to issue information on your corporate governance. This information is normally provided in the annual report, but then information on how sustainability issues are governed tends to be missing. However, APL provided a detailed corporate governance report in their annual report that addressed all relevant issues, such as sustainability, training and evaluation of the board, remuneration, etc. Showing that the format is not the limiting factor for communicating your actions. Furthermore, websites rarely provides detailed accounts on governance other than just presenting the board.

Ethics and Integrity is most commonly addressed through a separate code of conduct, ethics etc. This is the second best scoring aspect in category A, behind corporate profile. Mostly because, the majority of companies issues such a code of conduct, either separately, on their website or in one of their reports. Furthermore, they often include internal grievance

mechanisms on how misconduct should be reported to their superior, HR representative, etc. However, very few provided external grievance mechanisms through independent providers such as law firms, unions, etc. By providing external grievance mechanisms employees, and others, may feel safer reporting misconduct without being afraid of the consequences for their own job security. Therefore, without such external grievance mechanisms the major of the companies scores only two points in this category. The only three that scores the maximum are COSCON, Hapaq-Lloyd and APL. Furthermore, Ethics and Integrity seems to be more separate from sustainability reporting in that companies that scores fairly low on other aspects still score at least 2 points in this category by having a code of conduct, and the information is often outside separate sustainability reports and sustainability sections of the webpage and annual report.

5.2 Category B – Economic, Environmental and Social Aspects

This category has the highest average score among all the companies, indicating that reporting on economic, environmental and social aspects are being prioritized; all though in different degrees. From the best scorer COSCON with full score of 21 points to MSC and UASC with only 5 points.

Economic aspects are among the best categories with an average score of 2.2 and the most common score being three. However, that is not surprising seeing that most of the aspects under economic can be found in annual reports and financial statements. However, CMA CGM that only provided a consolidated financial statement, and not an annual report, only scored one point here. Therefore, narrative information to supplement the quantitative economic data is necessary to give a complete picture of the economic aspect. Furthermore, while companies tend to provide good information on their pension liabilities etc., the aspect that often was missing was addressing financial implications regarding sustainability issues. However, all companies that issued an annual report managed to address it well enough to score three points in this category. Therefore, this category may not be useful to evaluate a company's sustainability reporting, as it is well covered in all annual reports (with supplements from other non-financial reports in some cases) and can be seen as a standard reporting measure that almost all companies adhere to. However, to get the complete picture of a

company's sustainability reporting you still need the present of economic aspects. Therefore, the correct thing might be to weight this aspect less than other aspects, as we have done in this thesis with only one economic aspect and three aspects within the environmental and social categories.

Furthermore, environmental aspects scores a decedent average of 5.6 points out of a maximum of 9 points. However, we see big variations within the subcategories where energy and emissions/waste is the best with an average of 2.3 points (the same as the best category corporate profile), while water and biodiversity and compliance and cost are weaker with an average of 1.7 and 1.6 points respectively.

Based on the literature review, water and biodiversity was an important aspect for the shipping industry, especially concerning ballast water management. However, from the few companies that have a materiality discussion we get another picture. Maersk places this issue with low importance for them and their stakeholders, while COSCON places it with little importance to their stakeholders but with high impact on sustainability. It looks like no distinct stakeholder group has this as a key issue, but as we have seen from the literature review and COSCON's materiality discussion, ballast water management has a high impact on sustainability. Therefore, it should be mention in a sustainability report. Maersk, among others, does not address this issue well enough and this leads the author to believe that stakeholder theory may be the dominant motivation theory within that organization. Further emphasized by the materiality discussion that focuses on importance for the company and the stakeholders while COSCON, on the other hand, focuses on the importance for stakeholders and the importance for sustainability. Furthermore, water usage, biodiversity and ballast water management is mention by almost all the companies giving the issue credibility and importance overall. However, the general flaw here is the lack of key performance indicators and quantitative data available in the reporting.

On the other hand, energy and emissions/waste is the category that most frequently includes key performance indicators and quantitative data. Furthermore, the focus seems to be on air emission, CO₂, NO_x, SO_x, etc. These are what most of the companies report on, while waste/garbage is most often neglected. In addition, Evergreen Line shows us that you can

report well on your sustainability issues just through your website. They provided quantitative data over time on their emissions and waste, and describes the measurement process in detail. This data is not available in their annual report, and they do not issue a separate sustainability report, so without including websites in the analysis the research would have missed Evergreen Line's good environmental reporting on their website. However, emissions (like economic aspects) is a given aspect to be covered by any company especially within transportation. This is also something we see among the container shipping companies with the most common score being the maximum three points in this category. Furthermore, the most commonly used method to address emissions is to focus on new technology and alternative fuels. For example, UASC gives all their focus on new ships and alternative fuels, and does not provide any more information at all. In addition, the best reports also addresses the process of shipbreaking and the impacts on the environment.

However, compliance and cost is not as well covered. There is very little focus on the cost regarding sustainability actions with few companies providing hard data on their direct cost of implementing sustainability actions. However, the recent regulations in some European and North-American coastal waters regarding sulfur emissions are increasing cost for the companies. This is mention in many of the reports and the debate is on who should take the increased cost, consumers or the company. In addition, while there is narrative text on compliance with different laws and regulations in environmental areas there is little information on non-compliance. Especially on fines, etc. that the company might have been levied. However, the best reports includes this information and often states that they have not received any such fines for non-compliance. Therefore, that might also be true for the other companies, but if they do not report on it to the public, we cannot be certain of the level of compliance by the company. The report will also not be balanced if it was only mentioned when you were fined, and not when you were not. Therefore, in the name of transparency and balance, such information on compliance should be provided, as the top scoring companies such as COSCON and Hanjin Shipping does. Furthermore, this information was most commonly found in separate sustainability reports, with the exemption of Evergreen Line that covered it in their annual report.

On the other hand, social aspects are not as well addressed and varies more from company to company. Illustrated with the average score being 5 points in total for social aspects, with 2 points on labor practices, 1.4 points on human rights and 1.6 points on society. However, the most common score is actually one in all the three categories.

Labor practices is the best category under social aspects, but seeing that the most common score is one, the overall score is not that good. All companies provides some information on this subject, even the worst scores MSC and UASC. Most companies focuses on health and safety aspects with special focus on accidents at the work place. It is also here we see the use of key performance indicators measuring accidents, or worse, fatalities. Furthermore, the second best aspect is training and education of the employees. In addition, many of the aspects under labor practices are briefly mention in the code of conduct, ethics, etc. giving many companies the score of one for briefly mentioning them. However, fewer companies focuses on the worker hours and especially shore leaves. This is only mentioned in separate sustainability reports from APL, Hanjin Shipping and COSCON, which are the only ones to score the maximum of three points. Furthermore, diversity and equality among women and men is of little focus overall and again companies with separate sustainability reports addresses this best. We also see that social aspects are poorly addressed on websites and in annual reports, with the exception of CMA CGM that provides good narrative information on their website but are missing some key performance indicators to score the maximum.

On the other hand, human rights is the worst category under category B. With the worst example being APL that does not mention human rights at all, even though they issue a separate sustainability report. Often we only see mentions of respecting human rights in their philosophy or code of conduct. Furthermore, one of our focus areas, collective bargaining, is rarely mentioned except for some of the best reporting companies, and then only briefly. Giving the impression of not being a priority under sustainability, which is a bit weird seeing that employees are one of the most common stakeholders mentioned. However, it might be that companies view collective bargaining as a natural part of the business cycle and not a direct sustainability issue. This view is enhanced by the fact that information on collective bargaining is often found in the notes for the economic aspects in the annual report. On the other hand, the best companies due talk about collecting bargaining in their separate

sustainability reports. Furthermore, other aspects of human rights such as child labor and forced labor are also missing from the majority of the companies, and only mention by the top reporting companies in their separate sustainability reports.

Society is not addressed well either, and we see some of the same characteristics as with the other social aspects. Firstly, many of the aspects under society are just briefly mentioned in the code of conduct, etc. This is especially true with anti-corruption, anti-competitive behavior and the process of giving and receiving gifts. However, anti-corruption seems to be the focus area for most of the companies in the society category. Therefore, this category is best described while the other aspects often falls outside the report. Secondly, there are rarely any performance data available even if the aspect is covered well. In general, the social aspects seems to be second hand in respect to the environmental aspects. However, sustainability covers all the aspects, economic, environmental and social. Therefore, the reporting companies should address it as well as economic and environmental aspects. However, one aspect that seems to be mention often under society is local communities, which the author deemed not important for shipping companies. On the other hand, almost all the companies owns, operates or is affiliated with port operations and often includes them in their sustainability report. Furthermore, local communities around their headquarters or main base of operations is the focus of such community actions. However, the author looked at the main aspect of shipping and excluded this aspect from the scoring system. In retrospect, this might have been included. However, that would not have change the scoring significantly because if companies report well on the other aspects under society they also included local communities, and the companies the only provided narrative information on their society aspects did the same under local communities. Some of the lower scoring companies might have score two instead of one point if they had a focus on local communities with good detail information and only briefly mentioned all of the other aspects. Therefore, it is worth mentioning but it is not a major flaw with the research and it can still be argued for exclusion.

5.3 Category C – Transparency and General View

This category is the second best/worst and also here the different subcategories varies widely. From the best category being reliability within the environmental aspects with 2.1 average

and the most common score being 3, to assurance with an average of 0.9 and the most common score being zero.

In general, the reporting is fairly transparent and reliable for the companies that actually reports on sustainability issues. Furthermore, transparency on level 1 (on events and transactions) is most commonly seen. Companies report on what they have done and has happened during the reporting period. On the other hand, transparency on level 2 (on measurement methods) is the limiting factor, especially on materiality, stakeholders and social aspects. One of the best ways of showing this type of transparency comes from Maersk that issues a separate document on their non-financial accounting methods and how they have applied them in their report. The transparency on this level increases the reliability of the data presented by the company. Furthermore, reliability is increase with the general level of transparency and the level of balance presented in the report. Here is another weakness that has been spotted in the reporting. Companies tend to neglect to mention both sides of an aspect, both negative and positive aspects. For example, on compliance aspects companies neglect to mention if they have received no fines, etc. but they are quick to mention if that has happen. On the other hand, they provided details on how they have reduced emissions, but does not go into details on why some times emissions have increased. This balance fosters reliability in the data, and is something that is lacking overall in the reporting.

Furthermore, reliability on environmental aspects is higher than within the social aspects. Firstly, environmental aspects are better covered in the reports and there is more information on this aspect. Therefore, the reliability increases with more detailed information on the aspect, and companies tend to provide information on how emissions, wastes and energy usages are measured and quantified. Secondly, environmental aspects are easier to quantify by x amount of energy used, x level of CO₂ emitted, etc. while social aspects might be harder to quantify. Accidents, fatalities, etc. are easier to quantify, but measuring the level of freedom of association among the employees are harder to quantify. In addition, that might require some subjective way of quantifying it. Therefore, information on the measurement method is crucial to increase the reliability, especially on hard to quantify aspects such as social ones. Furthermore, while many companies just briefly mentions social aspects with short narrative statements either on their website or in their annual report, they score zero

points in the category reliability in social aspects. This can be seen with zero being the most common score in this category.

Accessibility and comparability scores average, but there are again major variations between the companies. Often the information is available from the companies' website with links to downloadable annual reports, separate sustainability reports and other relevant documents. However, there are some exemptions, CMA CGM does not post their annual report on their website or links to it in anyway. Furthermore, the author knows that one has been issued based on French Law and managed to find it in French court registries. However, it acquired a payment to access it and the report you would get access to was only in French. This decreases the availability of the reporting substantially and seeing that many other companies, also competitors, have their reports publicly available there are no good reasons to omit your own report, except for giving the impression that you have something to hide or that your report is poorly prepared. Another example is Hanjin Shipping that does not have a direct link to their report on the website, but asks you to contact them to get a copy. However, the reports is very well prepared and it is publicly available from other sources like GRI's website and www.corporateregisters.com. Therefore, there should be no reason for not having it publicly available on your website and the only thing you achieve by not having it there is a lower level of accessibility and maybe a more detailed overview of who wants access to it. Furthermore, for the sustainability information to be comparable it has to be on a commonly used metric and comparability is made easier by the amount of quantifiable data that is available. Most companies do use standard metrics and the main reasons for low scores are the general lacking of data to compare. Narrative information, which is the most common sort in the report, is harder to directly compare to other companies. However, while the reporting includes comparable data, very few companies actually compare their own performance against other companies, industry average, etc. This is also something that has been stated as an improvement aspect in some of the assurance statements.

On the other hand, the information provided on websites, in annual reports and separate sustainability reports is structured well and presented within a readable layout. Furthermore, even though the companies in this research are from all over the world the information is available in English across the board. However, there are two exceptions; the first has already

been mention in CMA CGM issuing their annual report in French, secondly you have CSCL that does not provide a clear link to their English version and with one document (their social liability report) only in Chinese. These two examples seems to be more the exceptions. On the other hand, COSCON provides a nice sustainability report that is simultaneous in Chinese and English side by side. However, that might be a bit confusing for some, it does give the reader options and also makes it easier to compare the two languages for discrepancies. Furthermore, there is little evidence to support that one way or another is the best way to present your information. Evergreen Line is an example that you can provide good and detailed information on your environmental aspects by just using your webpage. However, they provided little information on social aspects overall. In addition, there is an overall tendency that information provided on websites tend to be less detailed and often only narrative, compare to information in annual reports and separate sustainability reports. However, companies with separate sustainability reports achieve the best score but it is the information in the reports that is scored and not the format. Therefore, this information could easily be integrated into an annual report.

Assurance is the finally aspect under this category, but it is the weakest aspect of the entire scoring process with an average score of 0.9 points and the most common score being zero points. However, only five companies issues separate sustainability reports, and only three of them are assured. Sustainability information provided on websites and in annual reports are normally not assured. The exception being Hapag-Lloyd that have assured some of their emission data. However, annual reports do include an assurance, but only of the financial information and does not include sustainability information. That is a major weakness of providing your sustainability information in the annual report. However, the problem is not necessarily the format, but it is more likely that sustainability information is assured when provided in a separate report. Furthermore, the two assurance methods are both present with Maersk using the ISAE 3000 standard and Hanjin Shipping and COSCON uses the AA1000AS standard. However, both methods are used in limited form with ISAE 3000 being the weaker one, only focusing on correct measurement methods, while AA1000AS goes further to look at how and what is reporter, in addition to give recommendations on improvements. However, also AA1000AS is provided in a moderate form and not a

comprehensive form. Therefore, both methods have been underutilized but AA1000AS provides a more detailed assurance for the reader.

5.4 Groupings

Based on the findings there are some similarities between companies that we can use to group them together. Firstly, you have the top scores with over 40 points, Maersk, Hanjin Shipping and COSCON that we shall call *the assurers*. Secondly, you have the average ones from 20 points to 39 points, APL, CSCL, Evergreen Line, Hapag-Lloyd and CMA CGM that we can call *the compliers*. Lastly, you have the bottom two; MSC and UASC, with below 20 points, are *the non-reporters*.

5.4.1 The assurers – Top scores

These all issue separate sustainability reports and are among the leading reporting companies in this sector, from Maersk with 47 points, Hanjin Shipping with 49 points and COSCON with the maximum of 54 points. Furthermore, only these three companies provide external assurance of their sustainability report. In addition, they address economic, environmental and social aspects with good and detailed information, including key performance indicators. There are only minor flaws that strips Maersk and Hanjin Shipping from receiving the top score along with COSCON. One reason for their good score is that they all report according to the GRI Guidelines which is the most commonly used framework, and what much of the scoring is based on. Furthermore, Hanjin Shipping and COSCON are the only two that provides a GRI Index of where in the report each aspect from the guideline is addressed. Maersk used to have this, but move away from it in their latest report and only provided such an index for the UN Global Compact principles. In addition, Maersk has stopped using the specific standard disclosure aspects from the GRI Guidelines, but they still score well on these aspects in category B. Lastly, these companies have been issuing separate sustainability reports for many years giving them experience and practice with compiling such a report.

Furthermore, even though these three companies come from countries that have in place some mandatory reporting aspects, it does not explain their top score alone, because CSCL for example adheres to the same rules as COSCON but they score 23 points less. Therefore, while

mandatory reporting can raise the bar, it only raises the minimum requirement and does not affect the top scores in the same way.

5.4.2 The compliers – Average scores

This is the largest group with five companies ranging from CMA CGM with 23 points to APL with 36 points. However, there are many similarities within this group. Firstly, social aspects are the weak points for all these companies with rarely any more than short narrative information, and human rights being the weakest aspect under social aspects. Symbolized with APL not mentioning human rights at all, even though they issue a separate sustainability report. Secondly, they have a weak reporting of their materiality processes, with only stating their focus areas with little or no explanations for why areas have been chosen. Furthermore, they also have weak stakeholder engagements in place, with the exemption of CSCL that addresses it well in their separate sustainability report. Another outlier is Evergreen Line with their good scoring in category B and C by primarily reporting on their website. Furthermore, category A, which normally is covered better in separate reports, are among the weaker in this group. Lastly, you are left with a feeling that most of the reporting is done to fulfill some requirements or expectations from the firm.

Furthermore, the two best scorers in this group is APL and CSCL that both issues separate sustainability reports. Therefore, that might be the next step to increase the score for the other companies in this category. In addition, APL and CSCL needs to sharpen their reporting slightly and follow up with assurance, maybe via AA1000AS that gives them improvement advice as well, to take the step up to the top scores. Therefore, this group could be split into two subgroups: The first group from 30 to 39 points that have a separate sustainability report; APL and CSCL, and the second group from 20 to 29 points that does not have such a separate report; Evergreen Line, Hapag-Lloyd and CMA CGM.

5.4.3 The non-reporters – Bottom scores

The largest container shipping company MSC is found here with a score of only 10 points, together with UASC with only seven points. These companies do not really report on sustainability and only provides brief sections on their websites with some information related

to sustainability. UASC is worst with only one -1- webpage with brief narrative information, while MSC has a couple of pages and a code of conduct available on their website. However, neither of them provide transparent and reliable information on sustainability.

Furthermore, they both are based in countries that are not known for transparency and strict regulations, Switzerland and Dubai. Therefore, it does look like regulation might be needed to lift sustainability reporting, at least to get to a minimum level as we see in the average group. MSC is one of the largest companies in this sample so lack of resources cannot be a major deterrent for reporting. In addition, it is a closely run family business leading me to believe that Freedman & Stagliano's (1992) statement that motivation for sustainability reporting is determined by the management's perception of the world holds some truth.

5.5 Reflections on sustainability reporting

Even though KPMG's (2013) survey states that the question to report or not is past, the results from this study shows that this might not be true for all industries. Only half of the companies issued separate sustainability reports, and two companies does not even mention sustainability in any profound sense.

Especially worrying is the fact that one of the largest container shipping companies, MSC, receives one of the worst scores. How can such a large company prosper in a global world with more and more focus on sustainability? Maybe the stakeholders that really matter for the company are the ones with power, as defined by Mitchell et al. (1997), such as investors and regulators. However, this would mean that pressure groups such as NGOs are not influencing the decision-making and does not create that added cost for the company as Cormier & Magnan (1999) argued. This observation is leading the author to wonder if the focus from NGOs towards container shipping companies is limited and therefore neglectable. In addition, this might mean that some companies does not feel the need to explain their actions to the public and thereby supporting Freeman's (1984) view that companies only goal is to make profit. However, that is maybe too harsh a conclusion to draw but at least it does not appear that legitimacy theory is the main explanatory factor for reporting among these companies.

However, there are companies in this study that report well. So, why this huge difference in reporting? Regulations does play a part here as we see that the companies issuing separate sustainability reports comes from countries with some form of legislation on the subject, and therefore KPMG (2013) may be right that regulation is driving reporting. However, as mention, it looks like they only create the basis for a minimum level of reporting, but without them, you might get non-reporting companies such as MSC and UASC. On the other hand, sustainability reporting is still changing and evolving. Therefore, we need experimentation that we do not get with regulations (UNEP et al., 2013). Such evolution can be led through the developing and improvement of reporting frameworks, and the use of them. However, the reporting frameworks, with the leading framework being GRI, are not perfect yet. Illustrated by the fact that Maersk has moved away from using the specific disclosures in the GRI reporting framework, and is still scoring well with their reporting. Therefore, the author supports the use of voluntary framework as a basis for mandatory reporting, but then it should also follow updated versions of the reporting framework to incorporate the evolving nature of sustainability reporting and the continued strive to do better.

On the other hand, sustainability reporting is just a mean towards an end. The goal is sustainability performance, and sustainability reporting is the main way of communicating such performance (GRI, 2013). In addition, according to Krippendorff (1980) the level of disclosure also indicates the level of importance of that subject. Therefore, we can assume that better reporting should indicate better performance. However, this is something this thesis cannot answer, but is a future research question that has been uncovered. Even with assurance, this is hard to conclude on since assurance focus on the reporting requirements and not on the actual performance (Renzo et al., 2014). On the other hand, based on the findings and the literature review the author believes that better performance *should* increase the willingness to report. Especially, if we can stipulate that NGO pressure is neglectable as we discussed with MSC. In addition, all the samples in this study have the resources to report seeing that they are the largest companies in this industry. The reasons for not reporting can be that the company does not perform well on sustainability issues and therefore is afraid to be compared to competitors. On the other hand, there might also be no demand for such information from stakeholders. Alternatively, it might be as simple as what Freedman & Stagliano (1992) stated; that motivation for sustainability reporting is determined by the

management's perception of the world, and thereby the companies responsibilities towards it.

In addition, by reporting the companies gets an overview of their actions that might affect sustainability. Therefore, the act of reporting is as important as the actual report. This is why the scoring system has focused on transparency and information on the measurement levels, transparency on level 2 (Mensah et al., 2006). A learning experience exist with reporting and therefore the best reports are from companies that have issued sustainability reports over several years. This is again an argument for mandatory reporting so that everyone can get an overview of their impact on sustainability and started to learn how to handle it. The author believes that mandatory requirements play a role in raising the bar, but it should still be on the form of "report or explain". Thereby, creating incentives to report, but still keep the voluntary aspect that is central to CSR.

Furthermore, as we can see from the findings and the discussions there is no clear definition of what should be material for container shipping companies, shipping companies or the wider term transportation. Therefore, the author feels that some study should be devoted to determining this. Furthermore, not just looking what matters, but also what *should* matter for these types of companies. In addition, maybe GRI should supplement this sector with a sector supplement as they have for Oil & Gas etc (GRI, 2015c). By creating a benchmark of what should be included, it will be easier for companies to understand what they should report on.

What the author is left with after looking at the findings is that mandatory requirements are needed to set the bar, but real sustainability reporting comes from each individual company's wish to create a more sustainable practice. Therefore, the author can relate strongly to Freedman & Stagliano (1992) and their statement that it is the top management's perception of the world that motivates sustainability reporting. To excel with your sustainability reporting and in extension your sustainability performance, the motivations has to be present at the top level of the organization (and not just outsourced to a CSR manager etc.) However, what creates and motivates the top management's perception of the world? This is another interesting research question worthy of further study.

5.6 Limitations

There are a few limitations with this study. Firstly, one shortcoming might be with the allocation of scores when doing the research. Even though the coding was created so that it is objective, systematic and reliable, the research has been done by a single researcher and due to the subjective nature of humans some scores could have been allocated differently from person to person. This might lead to minor discrepancies, but should not affect the overall result significantly.

Secondly, the scoring has been heavily based on the most common reporting framework; the GRI Guidelines G4. Therefore, companies that adheres to this framework would have an advantage in this scoring methodology. In addition, based on materiality discussions some aspects from GRI might be deliberately overlooked leading to a lower score for a company. However, the GRI guidelines are general and with the adaptations for the shipping industry, this limitation should be overcome. Furthermore, the GRI guidelines are the most comprehensive and commonly used framework and therefore creating a logical benchmark for how and what should be reported. In addition, if a company has a good materiality principle in place it would score well even if a few of the specific aspects from the GRI guideline were missing. Therefore, this limitation would only create some minor changes in the score.

Thirdly, the sample size is only ten companies and might not be representative for the entire industry. Therefore, the author is careful to draw absolute conclusions. However, this sample does account for 60 % of the capacity in the industry and with a trend of more consolidating, like we have seen with Hapag-Lloyd and CSAV, it should create a representative glance of the industry. Furthermore, sustainability reporting is something that is driven by the larger companies and therefore looking at the largest companies gives us a view of how sustainability reporting is today and how it might evolve over the years to come.

Overall, it is important to be aware of these limitations, and how they might affect the findings. However, they do not invalidate the research, and the findings can still be used to create an overview of the reporting in the industry. Furthermore, it does give similar scores to that of the KMPG (2013) survey with Maersk scoring well and the overall score being just

above average (comparing it to the transportation section in the survey), and thereby increasing the credibility of the result.

5.7 Summary

The findings show that all the companies in this study do inform on sustainability, in some form or not. However, only half of them issue separate sustainability or CSR reports and these companies score the highest. Furthermore, the information provided varies widely among the companies, from only one single page on a company's website to several hundred pages long sustainability and annual reports. The best companies issue separate sustainability reports that are assured by an external assurer, and the worst companies only inform through their website. Furthermore, even though some companies include sustainability information in their annual report none refers to integrated reporting, and companies with sustainability information in their annual report with no separate sustainability report scores fairly average. However, while the way a company chose to report can give you an indication for their quality it is not necessarily the limiting factor for reporting quality. In addition, regulations seem to lift the minimum standard of reporting but does not explain the exemplary reporting alone. Furthermore, the best aspect of reporting is information on energy and emissions. This aspect has significant impact on economic performance and is most likely to be regulated. On the other hand, social aspects are less prioritized with human rights being the worst aspect. In general, the reporting is transparent and reliable but there is just not enough information available, especially quantitative information. Lastly, even though there are limitations with this study, there are still conclusions that can be drawn and further research questions for sustainability reporting to be set up, in general and within the shipping industry.

6 Conclusion

Sustainability reporting has evolved over the last century from simple mentions of worker conditions in annual reports to companies issuing several hundred pages long separate sustainability reports. It has had an ad hoc evolution driven by the issue of the day, that being environmental disasters or the economic climate of the time. However, today we are beginning to see sustainability reporting as something to be expected by bigger corporations. The latest survey by KPMG (2013) showed that 71 % of the largest companies now report on sustainability, and the survey stated that the question whether to report or not was over.

Therefore, this thesis set out to study sustainability reporting within an industry overlooked by academic research, namely the shipping industry. Furthermore, due to the time scale and complexity of the shipping industry the thesis was narrowed down to one of the most recognizable segment of shipping, the container shipping industry. A sample size of the ten largest container shipping companies, accounting for around 60 % of the industry, was chosen to study.

The research questions this exploratory study set out to answer were:

1. What is the status of sustainability reporting in the container shipping industry?
2. What is the quality of the sustainability reporting in the container shipping industry?

Furthermore, by building on the findings in this thesis the author set out to identify further research topics and areas that requires further study by the academic community.

A scoring system was developed based on a content analysis of all types of publicly available communication on sustainability from the company. Based on the literature review, three main categories were chosen with subcategories based from the most common reporting framework, the GRI Guidelines: (A) Context, Management and Stakeholders, (B) Economic, Environmental and Social Aspects and (C) Transparency and General View. Furthermore, from the literature review the author identified some key quality aspects for sustainability reporting that was incorporated into the scoring system; transparency, materiality, stakeholder engagement, KPIs and assurance.

The findings from the ten largest container shipping companies shows that the level and quality of sustainability reporting varies significantly, from the best companies issuing separate sustainability reports with external assurance to companies that only have a single webpage with information on sustainability. Furthermore, the best companies are based in countries with regulations on sustainability reporting such as Denmark and China. However, regulations does not create outstanding reporting. This is exemplified by COSCON and CSCL, which are both under the same jurisdictions in China, but while COSCON has an outstanding sustainability reporting in place, CSCL provides just an average sustainability reporting. Therefore, mandatory reporting can raise the minimum reporting quality but it does not explain exemplary sustainability reporting fully.

Furthermore, based on the findings we can group the ten companies into three groups, the assurers (top scores), the compliers (average scores) and the non-reporters (bottom scores).

The non reporters		The compliers		The assurers	
Score:	0-19 points	Score:	20-39 points	Score:	40-54 points
UASC	7 points	CMA CGM	23 points	Maersk	47 points
MSC	10 points	Hapag-Lloyd	27 points	Hanjun Shipping	49 points
		Evergreen Line	29 points	COSCON	54 points
		CSCL	31 points		
		APL	36 points		

Fig. 16: Grouping based on the scoring of the ten largest container shipping companies

Sources: The author

The assures provided detailed information on almost all aspects, and they have some level of assurance. On the other hand, the largest group is the compliers that provided sufficient information on several aspects, but you get the impression that sustainability reporting is done because someone mandated it. Lastly, you have the non-reporters that does not really report on sustainability at all.

Furthermore, among the scoring categories the best one is category (B): Economic, Environmental and Social aspects. As expected economic aspects, which are commonly reported, scores on average very well. However, the aspect lacking most often was economic impacts of sustainability issues, showing that sustainability is not the focus when reporting

economic aspects for most companies. In addition, social aspects are most often omitted or addressed poorly, with human rights being the worst subcategory. On the other hand, environmental aspects have been given a higher priority and are therefore better addressed by the companies. In addition, it is easier to quantify KPIs etc. on environmental issues than with social aspects that has more qualitative aspects compared to quantitative aspects.

Category (A) Context, Management and Stakeholders, and category (C) Transparency and General view are addressed almost as well. Transparency on level 1, meaning on events and transactions, is most often seen while level 2 transparency, on the measurement methods, are less frequent. Therefore, it looks like the reporting is too shallow in the fact that it does not mention how results are measured. Furthermore, both materiality and stakeholder engagement are often missing explanations on how they are determined. Building under the fact that sustainability reporting lacks full transparency. This is one of the key takeaways; that even though sustainability reporting is becoming commonplace the level of transparency, and thereby the quality, still has some way to go.

On the other hand, even though all companies in this study mention sustainability in some form, only half of them issue separate sustainability reports and these are also the five top scoring companies. The remaining five mention sustainability just briefly in their annual report and/or on their website. Therefore, sustainability reporting might not be as commonplace in the container shipping industry. However, it is the larger companies that report on sustainability and with increasing consolidating in the industry; we might see sustainability reporting covering more and more of the industry.

Furthermore, there are some limitations to this study. Firstly, this is a small study of a limited part of the shipping industry so we have to be careful drawing deterministic conclusions. Secondly, a single person performed the study and therefore the scoring might be influenced by that. Thirdly, the scoring is heavily based on the GRI Guidelines and that might also affect the findings. However, all these limitations have been mitigated as much as possible, but it is important to be aware of them.

In summary, the quality of sustainability reporting within the container shipping industry varies widely and it is difficult to draw any definitive conclusion. However, some tendencies can be observed: Firstly, social aspects are most often lacking and poorly addressed with little to no quantifiable data available. Secondly, transparency on the measurement methods of all aspects are often not mentioned, but when they are mentioned, there are detailed descriptions available. Furthermore, true integrated reporting is not seen and the best way to report on sustainability is through separate sustainability reports. However, this study has found that it is not necessarily the format that is the limiting factor for reporting, but the quality is likely to be higher when there is a separate sustainability report. In addition, the most prominent guideline mentioned is the GRI Guideline and thereby validating it, in some aspect, as the chosen basis for the scoring system.

Lastly, based on the literature review and the findings from this thesis the author can strongly relate to this quote from Freedman & Stagliano (1992, p. 113):

“It is probable that there is no single motivation for making social disclosure. Social disclosure for the most part, is a function of the attitude of top management toward its stakeholders. Whether there is an economic motivation for the disclosure ... a reaction to user needs ... or a political motivation ... is probably a consequence of each management’s particular perception of the world it faces.”

6.1 Future research topics

During this study, the author has noted many interesting aspects of sustainability reporting that could need further research, both in general and specifically for the shipping industry. Firstly, a broader study needs to be performed to see if the results are transferable to the entire shipping sector, and maybe even the wider term transportation. In addition, an even more in-depth study of the quality aspects should be done to gain more detailed knowledge on what is reported and how they are reported.

Furthermore, there is no clear definition on what is material for sustainability within the shipping industry. Therefore, it is hard to benchmark sustainability reports when there is no

commonly agreed upon definition of key focus areas for the shipping industry. This is something that should be developed so that sustainability reporting can be enhanced and that important issues for sustainability are not overlooked. Maybe GRI should develop a sector guideline for the shipping industry, or the wider term transportation. This is something that needs further study, and maybe such a sector guideline is not needed after all.

In addition, the relationship between company ownership and sustainability reporting needs further study. Little information was found on this during the literature review, but it was not the focus of the search either. However, based on the findings the author noticed that MSC and CMA CGM are privately owned family companies and they provided little publicly available information on sustainability. Is this a trend, or just a curiosity in this study? In addition, companies based in countries with low transparency such as Switzerland and the Arabic countries seems to report less on sustainability. Again, a trend or just some outliers in this exploratory study?

The author can related to Freedman & Stagliano's (1992) quote based on the findings and the literature review. Therefore, some study should be performed on how the personal motivation and/or perception of sustainability among the top executives and/or owners affects a company's sustainability reporting. Is there a link here, or is it just an old quote with no substantial truth behind it? In addition, the link between the top executive/owners personal motivation and the company's motivation for reporting or not should also be looked at.

Lastly, the overall goal of sustainability reporting is actual sustainability performance. Therefore, there needs to be studies looking at what is reported against what is actually done. Does a good sustainability report mean that a company performs well on sustainability, or is there no clear link so that sustainability reporting can be just an elaborated way of greenwashing?

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