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A Website Content Analysis on Corporate Social Responsibility Disclosures in Baltic Sea Shipping

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Abstract:

In the past decades, there has been a significant increase in the emphasis on sustainability across industries. Correspondingly, the shipping industry is increasingly focusing on sustainability and corporate social responsibility (CSR), by integrating environmental, social, and economic concerns into their strategies and operations. Shipping companies actively pursue responsible practices to align with stakeholder expectations. By doing so, they can strengthen stakeholder trust, enhance their corporate reputation and ensure operational legitimacy. Clear and consistent communication with stakeholders is integral to the success of CSR initiatives, as it not only raises awareness of the company's efforts but also invites valuable feedback. Without effective stakeholder communication, companies may miss out on the full benefits of CSR. An increasing number of shipping companies are providing stakeholders with CSR disclosures. This paper investigates how shipping companies located in the Baltic Sea region communicate their CSR disclosures on their websites. This study consists of a website content analysis of the ten largest shipping companies by fleet size in each Baltic Sea country, focusing on how prominently they present CSR-related content. The findings reveal that shipping companies do provide CSR disclosures on their websites, but the scope and content of the disclosures varies, with environmental aspects most often at the core. The differences between larger shipping companies and other companies examined were not significant as even some of the largest companies did not address sustainability on their websites.

Keywords: Corporate Social Responsibility; Shipping; Stakeholder Communication; Sustainability Disclosure.

1. Introduction

Maritime transport contributes approximately 2.5% of global greenhouse gas (GHG) emissions (Wu et al., 2022). Without intervention, these emissions are expected to rise due to increasing traffic volumes. Legislative frameworks, such as the IMO's MARPOL Annex VI and the EU's Fit for 55 package, provide the legal foundation for sustainable operations and often act as external drivers for voluntary CSR activities (European Commission, 2021). Regulations, combined with sustainable development strategies, have compelled more shipping companies to undertake CSR for reducing emissions. Yet, as regulatory frameworks that can often lack strong enforcement, intensify the pressures of global trade, globalization, and competition within the shipping industry, companies committed to sustainability and ethical practices must compete with others that prioritize short-term profits (Parviainen et al. 2018).

Despite the challenges, the shipping industry is contributing to sustainability by adopting CSR practices (Lund-Thomsen, 2004; Yuen et al., 2017; Vejvar et al., 2016). CSR in shipping is shaped not only by stakeholder expectations and ethical considerations, but also by evolving regulatory frameworks that demand greater accountability and transparency (Hart, 2010; Pawlik et al., 2012; Kunnaala et al., 2013b). Maritime regulations promote responsible practices, highlighting crucial CSR-related issues such as safety, environmental concerns, and health as priorities for the industry.

Despite the regulatory push, CSR in shipping remains largely voluntary. It encompasses a wide range of practices from environmental stewardship and occupational safety to human rights and stakeholder engagement. However, the effectiveness of CSR depends on the actions taken and on how these actions are communicated. Transparent and consistent stakeholder communication is essential for building trust, enhancing reputation, and maximizing the business value of CSR efforts (Du et al., 2010; Lim and Greenwood, 2017).

Despite growing interest in CSR within the maritime sector, gaps remain in both practice and research. As CSR practices in shipping remain largely voluntary, they lack standardization and comparable data (e.g. Fan et al. 2024; Tran, 2021), which leads to companies adopting diverse approaches to sustainability communication. Moreover, stakeholder engagement is insufficiently integrated into CSR strategies and stakeholder communication is not widely recognized as a core component of CSR in maritime contexts, despite its potential to enhance legitimacy and responsiveness (e.g. Osobajo et al. 2021; Parviainen et al. 2018). This study fills that gap by providing a cross-national, empirical analysis of website-based CSR disclosures in the Baltic Sea region, resulting insights into current practices on stakeholder communication.

2. Methodology and structure

This paper analyses the practices and development of CSR within the shipping industry operating in the Baltic Sea region. At the core of CSR are stakeholder engagement and effective communication. To demonstrate their commitment to responsible practices, shipping companies must share credible CSR disclosures with a wider audience. As a result, shipping companies provide highly relevant information on their websites, including sustainability reports, statements, policies, and other initiatives.

Methodologically, this paper uses a website content analysis on how shipping companies in the Baltic Sea region provide CSR disclosure to stakeholders on their websites. In this study, CSR disclosures are defined and operationalized as organization-initiated, public communications that convey a company's environmental, social and governance principles, policies, targets and performance to its stakeholders. These disclosures can range from brief one-sentence mentions to dedicated, detailed pages within the website.

The Baltic Sea region was selected as the geographical focus of this study due to its unique environmental and regulatory characteristics. Baltic Sea is a heavily regulated marine area with strict environmental standards

encouraging shipping companies to act responsibly. It is also ecologically sensitive area, which increases the interest of the public and stakeholders when it comes to maritime traffic, highlighting the need of effective stakeholder communication. The region comprises of diverse set of countries with varying CSR maturity. Another key reason for choosing this region is the opportunity to compare current findings with those of a previous study conducted by Kunnaala et al. (2013a). This continuity strengthens the analytical depth of the research and provides valuable insights into trends, progress, and persistent challenges in maritime CSR.

As digital communication has become central to public engagement, websites offer a rich source of data for understanding how entities present themselves to external audiences. They are in many cases the public window and information source of the company values and operation descriptions. Website content analysis is a well-established qualitative research method that can be used to examine how organizations communicate through digital platforms. It enables researchers to systematically analyse publicly available information, including textual, visual, and structural elements, to uncover patterns, themes, and strategic messaging (e.g. Krippendorff, 2018). In CSR, it is especially valuable when formal sustainability reporting is inconsistent or absent, as it captures the public-facing narrative that companies choose to present. By focusing on permanent website pages the study captures the core messaging that companies intentionally present to the public. This approach reflects the experience of an average user seeking CSR information.

Website content analysis allows for a systematic and replicable examination of how shipping companies disclose CSR-related information to external stakeholders. Moreover, the method enables cross-comparison across companies and countries, revealing patterns in CSR visibility, thematic focus (e.g., environmental, safety, social), and the use of standards or frameworks. The analysis focused on permanent website content rather than other materials like newsletters or social media posts. This approach mirrors the experience of an average stakeholder seeking

information and allows for systematic comparisons. It also captures the intentional messaging companies choose to present, offering insights into their strategic priorities and transparency practices.

While sustainability reports were acknowledged as a potential data source, they were not the primary focus of this study for several reasons. First, formal sustainability reporting remains relatively uncommon among smaller shipping companies in the region. Second, the presence of a sustainability report does not necessarily equate to greater transparency or stakeholder engagement and can lack standardization. Finally, the decision to focus on website content aligns with the study's aim to evaluate CSR communication from the perspective of public accessibility and visibility.

The sample for this study consists of the ten largest shipping companies by fleet size from each country bordering the Baltic Sea, resulting in a total of 90 companies regardless of their field of operations. Fleet size was chosen as the primary inclusion criterion because it reflects the scale of operations and potential stakeholder impact, making these companies more likely to engage in formal CSR communication. Larger companies are typically subject to greater public and regulatory scrutiny and are more likely to have formal CSR strategies and CSR disclosures. This approach ensured cross-national representation while focusing on those companies with the biggest environmental and social impact.

The data collection was done between January and May 2025. It provides indications on the level of commitment to CSR across the industry. The study provides a snapshot of current CSR disclosure practices and offers insights into the broader CSR landscape within Baltic Sea shipping.

The research questions (RQs) of this paper are as follows:

RQ1: Have shipping companies in the Baltic Sea region provided CSR disclosure on their company websites?

RQ2: What specific aspects of sustainability are prioritized?

RQ3: Have the shipping companies published sustainability reports online?

The results include both quantitative data and qualitative interpretations. In order to assess the three main RQs, the following specific and practical questions were specified:

1. Does the company have English websites?
2. Do the websites contain CSR related information? Is the information on the front page?
3. Is it established on the websites that the shipping company uses CSR related systems or standards?
4. Are the UN Sustainable Development Goals (UN SDGs) mentioned in relation to the shipping company's sustainability activities?
5. Has the shipping company published a sustainability report on their websites?
6. Based on website visibility, does the company focus on a specific aspect of CSR?
7. Is safety considered a part of company CSR or is it handled separately?

The structure of this paper is as follows: Chapter 1 sets the background of the paper. Chapter 2 provides the methodology and structure. Chapter 3 discusses CSR and related theories, CSR in shipping, the significance of stakeholder communication within the realm of CSR and outlines the practices of CSR disclosure in the shipping sector. Chapter 4 provides the empirical setting and overview of study design. It also presents the results and findings of the content analysis. Finally, chapters 5 and 6 provide interpretations of the key findings and implications of the research with concluding remarks.

3. Stakeholder Communications and CSR disclosures in Shipping

3.1. CSR, legitimacy and stakeholder theory

CSR has undergone a significant transformation over the past decades, evolving from philanthropic practices into a strategic component of corporate governance. Over time, CSR has expanded to encompass environmental stewardship, stakeholder engagement, and transparent reporting, particularly in sectors with high environmental and social impact, such as maritime transport (e.g. Carroll, 1999). The definition of CSR often varies depending on the industry and context in which it is applied, and there is no universally accepted definition of its core attributes (Carroll, 1991; Clarkson, 1995; Thomsen & Conyon, 2012). Despite these variations, most definitions converge on the idea that CSR represents a voluntary, self-regulatory approach through which organizations aim to enhance sustainability while engaging with their stakeholders. Because CSR is not mandated by law, it typically involves actions that exceed legal compliance (e.g., Fjørtoft et al., 2020).

Stakeholder theory offers a framework for recognizing various internal and external parties connected to a shipping company and examining how each stakeholder group affects the organization. Stakeholders are any group or individual who can affect or is affected by a company's actions, and organizations must engage with these groups to maintain trust and relevance (Freeman, 1984). Stakeholders have legitimate claims on the firm, and responsiveness to these claims is essential for organizational legitimacy (Donaldson & Preston, 1995). Fundamentally, stakeholders are involved in balancing economic and social priorities. Companies are therefore required to interact with a wide spectrum of stakeholders, such as customers, employees, regulatory bodies, society at large, and non-governmental organizations (NGOs) (Fan et al. 2024; Parviainen et al. 2018; Dahlsrud, 2008).

Recently, companies have started to see that they need to invite their publics into their CSR initiatives and engage them better in their CSR efforts (Devin & Lane, 2014; O'Riordan & Fairbrass, 2014). Also, according to stakeholder theory, a company cannot fully satisfy its shareholders or achieve its best financial results unless it also addresses the needs of other

key stakeholders, including customers, employees, suppliers, and the public (e.g. Sen & Cowley, 2013; Galbreath & Shum, 2012; Yuen et al. 2018b). Organizations that actively pursue CSR and maintain meaningful stakeholder engagement may experience a range of positive outcomes. These include a more balanced consideration of economic, environmental, and social dimensions in decision-making. Over time, CSR can yield long-term advantages, including cost savings, enhanced reputation, and improved stakeholder relationships (Elkington, 1997).

CSR stakeholder engagement means involving stakeholders in ongoing communication, open discussions, and business operations, and ensuring that their approval is obtained (O'Riordan & Fairbrass, 2014). This approach is also reflected in global sustainability standards, such as ISO 26000 as an assessment criterion, that encourage companies to share control for engagement processes with their stakeholders. (Lim & Greenwood, 2017) CSR efforts have varied impact on satisfaction depending on the stakeholder group. Thus, CSR efforts need to be tailored to respond to stakeholder needs before implementation. Therefore, it is important that the activities are analysed and tailored to the needs of the stakeholders prior to their implementation (Bhattacharya et al., 2009; Peloza & Shang, 2011).

Communicating CSR has a high potential to improve stakeholder relationships and company reputation. Organisations disclose CSR information to legitimise their role in society and strengthen the relationships with stakeholders (Vitellaro et al. 2022; Michelon et al., 2019). Legitimacy theory justifies that companies choose their CSR disclosures to match socio-environmental values, address stakeholders' needs and expectations, and gain legitimation from the wider community (Arrigo et al. 2022). Thus, sustainability reporting and CSR disclosure are becoming a part of the strategic decision-making of organizations (Santos et al., 2016; Puig et al., 2020; Rodrigues et al., 2021).

In the maritime sector, where direct consumer interaction is limited, external stakeholders such as regulators, NGOs, and the public play a

critical role in shaping CSR priorities. Hence, shipping companies should prioritise CSR initiatives that best address the specific interests and concerns of these stakeholders, ensuring that CSR activities genuinely reflect their priorities (Yuen et al. 2018b).

3.2. CSR in Shipping

CSR in the shipping industry is voluntary actions integrated into a company's strategy and operations, aimed at addressing the social and environmental impacts of its activities while also responding to stakeholder expectations. These initiatives reflect a commitment to self-regulation that goes beyond the mandatory requirements set by regulation and the International Maritime Organization (IMO). (Hart, 2010; Pawlik et al., 2012; Kunnaala et al., 2013b). However, there is currently no standardized approach to CSR or easily comparable uniform data to assess CSR practices within the shipping industry (Fan et al. 2024; Nguyen et al., 2019; Tran, 2021).

Earlier studies show that many shipping companies have integrated CSR elements into their strategies and operations to some degree (e.g. Drobetz et al., 2014; Zhou & Yuen, 2024). Typically, CSR efforts in shipping address a broad spectrum of issues, including environmental sustainability, occupational safety, human and labour rights, as well as overall welfare (Tang & Gekara, 2020). CSR can strengthen financial performance and shipping companies can gain benefits from engaging in CSR, but they also aim to answer to the needs and expectations of their stakeholders in incorporating CSR into their operations (Lu et al., 2009, Yuen et al., 2016; Yuen et al. 2017; Yuen et al., 2018a; Chua et al. 2023; Poulouvassilis & Meidanis, 2013). Responsibility should not only support business success but simultaneously contribute to broader societal well-being and improved living standards (Hopkins, 2004).

There are several characteristics in shipping that make engaging in CSR different to other industry sectors (Hoang et al. 2020). Aspects from the changing geographical position and varying ports (Tran, 2021) to operating on a business-to-business level with the main goals being service

quality, speed and price instead of sustainability (Karagiannis et al. 2022; Fafaliou et al., 2006; Skovgaard, 2014) support the view that shipping has traditionally merely answered to transportation needs (Yuen et al. 2017; Progoulaki & Roe, 2011; Pawlik et al., 2012).

3.3. Stakeholder Communications as a Part of CSR

CSR involves the voluntary incorporation of environmental and social considerations into business strategies and operations, with the aim of achieving sustainability across financial, ecological, and social dimensions, while engaging with stakeholders and considering their needs and demands. Within the organizational context, various stakeholders wield influence and may hold legitimate claims regarding the company's activities. (Golob & Bartlett, 2007) Responding to and balancing the various stakeholder demands and expectations is a core aspect of CSR (Lai et al., 2010; Ditlev-Simonsen & Wenstøp, 2013). Companies internal and external stakeholders can include e.g. shareholders, employees, customers, suppliers, communities, governments, and NGOs. These stakeholders have a significant role and can also be the drivers behind a company's CSR engagement.

As outlined in ISO 26000 principles, stakeholder engagement involves efforts to facilitate dialogue between organizations and their stakeholders to support informed decision-making (ISO, 2010). The successful implementation of CSR depends on building strong relationships with key stakeholders, which not only generate financial and social value but also strengthen existing relationships. Previous studies have found a positive relationship between CSR disclosure and the financial performance of shipping companies (e.g. Zhou et al., 2023; Simionescu & Dumitrescu, 2016; Peloza & Shang, 2011; Barnett, 2007). For companies aiming to build trust in their operations, good stakeholder relations are essential (Vilsted, 2004; Brown & Forster, 2013; Kunnaala-Hyrkki, 2022), which underscores the link between CSR and stakeholder management (Donaldson & Preston, 1995).

CSR places strong emphasis on the role of corporate communication in conveying responsible practices to a diverse range of stakeholders and in fostering continuous, open dialogue with them (Golob & Bartlett, 2007; Lim & Greenwood, 2017). The ways to provide CSR disclosure and communicate CSR activities are manifold, such as advertisements, product labels, sustainability reports, social media posts or company website communications (Türkel & Akan, 2015; O'Riordan & Fairbrass, 2014).

Yuen et al. (2020) presented four key arguments why stakeholder engagement enhances the integration of sustainability within organizations. First, involving stakeholders enables companies to identify emerging and future sustainability needs, allowing for proactive strategic responses. Second, engagement fosters transparency and trust by raising awareness and strengthening the organization's reputation. Third, aligning sustainability efforts with stakeholder values helps optimize resource allocation. Finally, stakeholder involvement serves as a collaborative platform that encourages the exchange of ideas, thereby promoting innovation in sustainability practices. (Yuen et al. 2020)

There is a lack of research on how stakeholders from outside the industry, such as NGOs, consumers and the public, can incentivize the incorporation of CSR in shipping companies or even pressure for the adoption of CSR practices. An exception on this might be the cruising industry sector as there is a tighter link between the consumers and the business, and pressure tactics such as consumer boycotts can be effective in incentivizing companies to engage in CSR (Parviainen et al. 2018). Nevertheless, the shipping industry has traditionally been considered a business-to-business sector, where non-financial stakeholders have had minimal impact on industry practices. External pressure has rarely been seen as a significant driver for companies to adopt CSR initiatives (Poulsen et al. 2016; Kunnaala et al. 2013a).

CSR initiatives can lead to tangible benefits such as increased customer base, improved talent acquisition, increased investor interest, and a stronger corporate reputation. However, these advantages are contingent

upon effectively communicating CSR efforts to relevant stakeholders as employees and suppliers are drawn to socially responsible companies, and customers tend to favour those that prioritize their interests. (Freeman & Velamuri, 2006) Conversely, inadequate communication of CSR activities may limit the realization of these potential benefits (Du et al., 2010).

Through stakeholder dialogue, companies gain valuable insights into the diverse needs, values, and expectations of their stakeholders, recognizing that each group may have different priorities and motivations (Poulovassilis & Meidanis, 2013; Vilsted, 2004). If a company fails to effectively communicate its CSR efforts, it may not fully realize the potential business advantages. The benefits of CSR largely depend on stakeholders' awareness of and understanding the company's CSR initiatives.

3.4. CSR disclosures and Sustainability Reporting

Over the past twenty years, there's been growing interest in how companies transition toward sustainability by adopting and integrating environmental, social, and governance (ESG) factors into their strategies. The value of accountability tools, such as sustainability reporting are becoming more common and companies are increasingly committed to using non-financial disclosure to tackle sustainability challenges (Di Vaio et al. 2025; Bartolacci et al. 2022; Boiral and Heras-Saizarbitoria, 2020). Additionally, engaging stakeholders helps make non-financial disclosures more responsive and enhances corporate accountability (Fusco et al. 2024).

Sustainability reporting standards provide structured frameworks for organizations to disclose their ESG performance. Their adoption is also being accelerated by regulatory developments, such as the European Union's Corporate Sustainability Reporting Directive (CSRD), which mandates standardized and detailed CSR disclosures for large companies operating in the EU.

Various frameworks have been designed to help companies share non-financial disclosures. Yet, due to evolving regulations, sustainability reporting has not fully achieved its goal of making CSR easily understood by broader audiences. In addition, there are concerns related to the reliability, comparability and content of sustainability reports (Di Vaio et al. 2024; Vogel, 2011; Manetti & Becatti, 2009).

At present, shipping companies choose to share details about their ESG performance voluntarily. While new global regulations and initiatives are beginning to connect ESG standards with access to funding in the shipping industry, there's still no single reporting approach that everyone uses. This means ESG reports in shipping vary widely, often relying on recommendations from major international groups or tailored private frameworks like the UN SDGs, Sustainability Accounting Standards Board (SASB), or Global Reporting Initiative (GRI). However, these frameworks are usually broad, overlapping, and do not consistently address the specific features unique to the shipping sector. In addition, the variety of reporting approaches makes it difficult to effectively compare companies and, as a result, to assess the overall sustainability performance of the shipping industry (Andrikopoulos, 2025; Tsatsaronis et al. 2024; Di Vaio et al. 2020).

GRI includes metrics that apply to but are not specifically developed for shipping. SASB has metric specific to shipping, but their adoption by companies is discretionary and partial. Other policy initiatives that shape sustainability reporting in shipping include for example, Clean Cargo, Sustainable Shipping and the Poseidon Principles. Signatories of these initiatives agree to sustainability performance and reporting according to the requirements of the initiative. A part of sustainability reporting is regulated and mandatory. For example, shipping firms listed on European stock exchanges have already been reporting their environmental activities by following the EU's Taxonomy Regulation and first sustainability reports drafted according to the EU's CSRD will be issued in 2025 (Andrikopoulos, 2025; Tsatsaronis et al. 2024; Di Vaio et al. 2020).

3.5. CSR disclosures and General Public

Because stakeholders can significantly impact a company's outcomes, companies have adopted a stakeholder engagement approach that involves open dialogue with stakeholders to understand their social, environmental, and economic concerns, ultimately enhancing decision-making and accountability (Schaltegger & Burritt, 2000; Lim & Greenwood, 2017). Companies are increasingly focused on meeting stakeholder expectations regarding responsibility, highlighting the critical need for effective communication of their CSR disclosures (Türkel & Akan, 2015; O'Riordan & Fairbrass, 2014). Although CSR communication often emphasizes societal benefits, maintaining the credibility and quality of the information shared is vital for earning stakeholder trust. Transparency about both the positive and negative impacts of a company's operations is essential for fostering genuine stakeholder confidence.

As stakeholders and the public are increasingly interested in sustainability, CSR disclosures are becoming an integral part of stakeholder communications and management. Yet, CSR disclosures tend to be quite generic and are not necessarily suitable for companies operating on a business-to-business level such as shipping companies (Zhou et al. 2021). In addition, it has been established that companies that perform well in the field of sustainability tend to adopt high-quality CSR disclosure to expose their superior results. Correspondingly, companies that do not excel in sustainability do not report as excessively and tend to prefer vague CSR disclosure or use their reports as tools for shaping public perception and maintaining legitimacy, rather than genuinely promoting accountability (Cho & Patten, 2007; Hummel & Schlick, 2016). Thus, CSR disclosure may be a mere strategic tool with the goal of ensuring that organizations have good reputation and doubts have been expressed about their content, reliability and comparability (Di Vaio et al. 2023).

The conventional strategy to disclose company's sustainability data is to publish sustainability reports on company websites and, also in the

shipping sector, this is seen as an appropriate approach (Zhou et al. 2021). In addition to sustainability reports, sustainability related posts on social media are becoming a part of shipping companies' CSR disclosure. Social media posts are easier to access as stakeholders have to access the shipping companies' websites to review the sustainability reports, which can be somewhat inconvenient. Social media posts also provide an avenue for stakeholder feedback, which is difficult to gather, if stakeholder communications occur only on websites. However, businesses have not yet made full use of social media when sharing information about their CSR initiatives (Arrigo et al. 2022; Zhou et al. 2022). Companies should strategically use online platforms to communicate sustainability efforts more transparently, while ensuring that these digital CSR disclosures include clear evidence of actions and outcomes, not just abstract statements (Saglam et al. 2023)

Shipping companies should also aim to maintain continual communication with their stakeholders to gain commercial success, comply with regulations, manage CSR activities, handle emergencies, and increase the overall reputation of the organization. (e.g. Wang et al. 2021; Surucu-Balci et al. 2020) Especially social media communications provide a way of stakeholder engagement that can bring forth many benefits even in the shipping industry as social media approach to CSR disclosure facilitates online interaction (Surucu-Balci et al. 2020).

As an industry operating on a business-to-business level, shipping remains somewhat unknown to the general public except for the occasional incidents that make headlines. If the public's knowledge of the industry relies on headlines, the provided information can lead to an assumption that shipping industry is merely a polluting and dangerous field (Wang et al. 2021). This kind of stereotype can be harmful for the industry as it can have commercial impacts, reduce the number of skilled workers willing to operate in the field and it can also trigger public demand for stricter environmental and social standards. Although industry professionals understand the importance of sustainable values and practices, effectively

conveying these to the public remains a continuous challenge. Due to the potential consequences related to prevailing misconceptions on the industry, it is vital to that shipping companies aim to improve their sustainability efforts but also clearly communicate these efforts to consumers and the broader public. (Wang et al. 2021)

4. Empirics and Content Analysis

4.1. Framework

The content analysis of CSR disclosures on shipping companies included 90 websites in total. The chosen shipping companies were the largest shipping companies based on fleet size in each Baltic Sea Region country i.e. Denmark, Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Poland, and Germany. The fleet sizes varied from less than ten to over 650 vessels. The analysis was conducted from the perspective of an average user from the public, aiming to assess the accessibility and visibility of CSR-related content through a general browsing approach. For example, the news pages on the website, newsletters, or separate brochures were not reviewed during the study; only the permanent pages of the website and published sustainability reports were reviewed (see website content analysis categories, Table 1).

Table 1. Website Content Analysis Categories.

Website Content Analysis Categories	
Shipping Company	Name
Fleet size	Number of vessels
Country	Name
Size within the country	Order from one to ten based on fleet size
Is there an English website?	yes/no

Is there CSR disclosure on the website?	Yes/no, all found references to sustainability, environment, safety and social responsibility were included, no matter how short, as long as the reference to responsibility was evident.
Is CSR disclosure on the front page?	yes/no. Yes -option included separate sections or mentions related to CSR but also links from the front page.
Are there set goals and indicators or rather statements or principles?	Goals/statements. CSR disclosures were considered as goals, if there was a clear target as an objective, no matter how vague, e.g. zero emissions, zero accidents, or a specific activity, e.g. support to local youth football. CSR disclosures were considered as statements, if they were more unspecified, e.g. environmental protection, wellbeing.
Is there a system or a standard in use?	Yes/no, list of found standards and systems. Standards that were mentioned in text or were established in a logo form on the website were included.
Are UN SDGs mentioned?	Yes/no. All mentions were included, even if the shipping company had not specified any distinct goals that apply to their operations.
Is there a sustainability report published?	Yes/no. In addition to separate reports, sustainability reports that were incorporated into annual reports were included, but they were mentioned separately. Not all annual reports were reviewed to find, if they included CSR disclosures, only if it was mentioned on the website that the annual report includes also sustainability reporting aspects.
Is there a main sustainability aspect?	No/environment/social/safety/economic. Several aspects were analysed to define the main aspect, such as the location and amount of text and references, the order in which different CSR aspects were listed, and potential visual implications on the importance of the matter, such as highlighting or pictures.
Is safety mentioned separately?	Yes/no. Safety was considered a part of sustainability, if safety related issues were mentioned on the same page as other sustainability aspect, safety information was found under the same topic, or safety information was found in a subpage of a sustainability related webpage.

The results of the Table 1 website content analysis were compared to the previous study done by Kunnaala et al. (2013a) that assessed the views of Baltic Sea shipping companies on corporate social responsibility. The earlier study was a part of the project "*Competitive Advantage by Safety-*

CAFÉ" (<https://merikotka.fi/en/projects/cafe/>). During the study, shipping companies operating in the Baltic Sea region were assessed according to their CSR commitment and initiative via a questionnaire in order to establish whether shipping companies are engaged in CSR. Here, the comparison to current findings from the website content analysis with previously collected data enables identification of trends taken place in CSR practices within the Baltic Sea shipping industry. It also helps to assess how the role of CSR has evolved over the past decade. This also indicates about the future trends of CSR in shipping and helps maritime policymakers in understanding the extent to which shipping companies are willing to voluntarily self-regulate and engage in CSR.

According to the previous study (Kunnaala et al., 2013a), approximately two-thirds had adopted CSR into their operations, with 70% doing so after the year 2000. Respondents indicated that their engagement with CSR had grown over time, and most expressed a commitment to continuing their involvement in such initiatives moving forward. However, 33% of the companies that had not yet engaged in CSR said that they did not plan to do so even in the future. The majority (94%) of the respondents felt that stakeholder pressure related to sustainability and CSR had increased during the recent years. Yet, external pressure from stakeholders was not often cited as an incentive for CSR as CSR was mainly viewed as an internal matter of the company. Correspondingly, stakeholder communication was not seen as a core part of CSR. In the study, the methods for CSR disclosure were most often environmental reports and annual reports. Close to 80% of the respondents said that they monitor or measure the impact of their CSR initiatives.

4.2. Content Results

Of the 90 shipping company websites, ten (11%) did not have an English version and thus, their websites CSR disclosures were not analysed further. In some cases, if the shipping companies were a part of a larger

corporate group or a parent company, CSR disclosures were done at the group level rather than at the shipping company level.

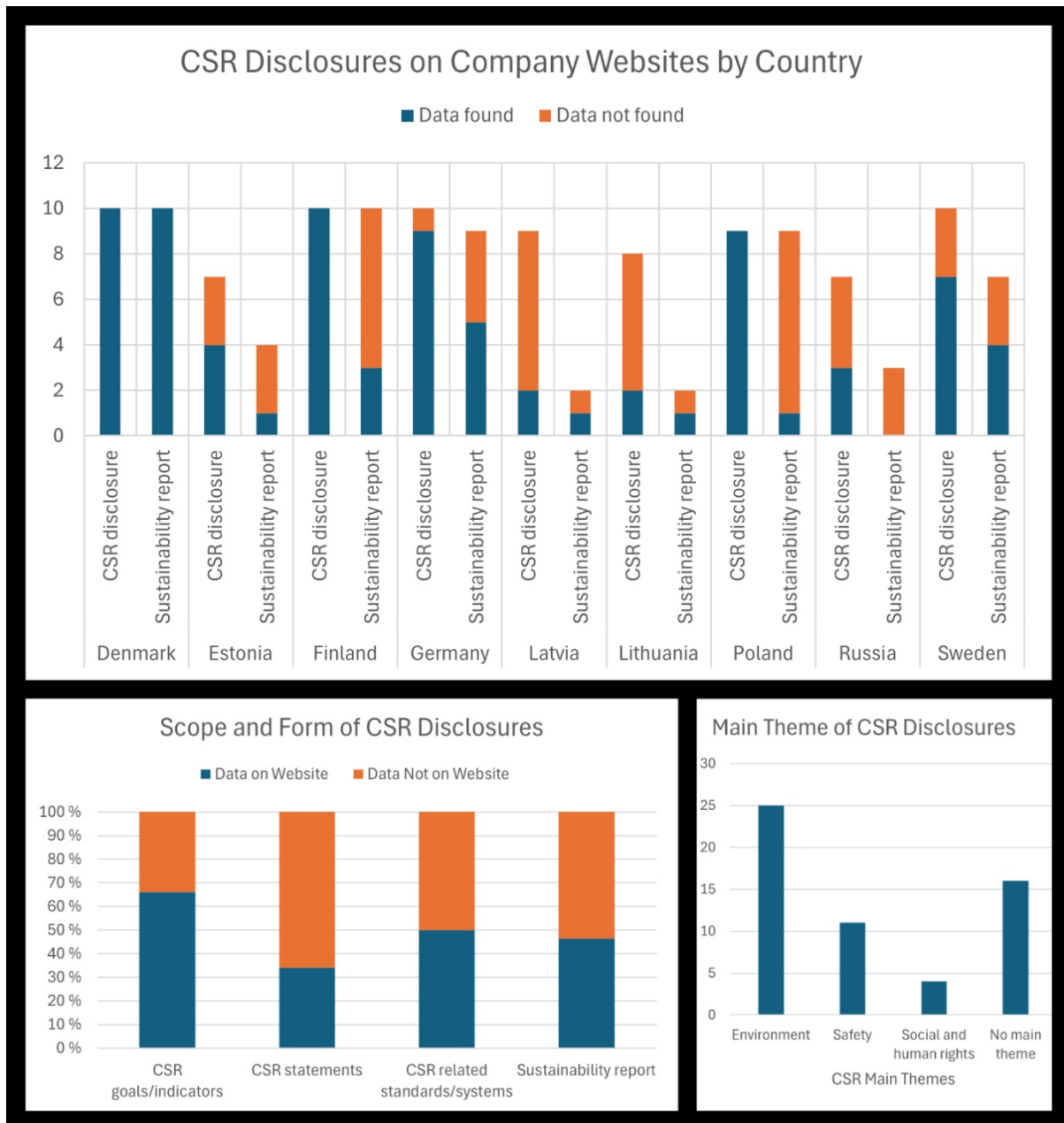


Figure 1. The top bar chart establishes the type of CSR disclosures by country. Bottom left bar chart describes the form, scope and content. Bottom right bar chart establishes the main themes of shipping companies' CSR disclosures.

Based on the results, the extent in which shipping companies disclose their CSR information on their websites varies greatly. Of the reviewed shipping companies, 56 companies (70%) provide CSR disclosure on their websites while 24 companies (30%) do not provide any CSR information (Figure 1). Of the analysed shipping companies, one company provided CSR

disclosure solely related to safety. Thus, it can be surmised that CSR and CSR disclosures are common on shipping company websites, but not yet a universal practice across the industry. As CSR in shipping remains largely voluntary, it was to be expected that there is variation in disclosure practices that reflects different levels of commitment to CSR.

Denmark based shipping companies stand out with 100% of companies providing CSR disclosures and publishing sustainability reports on company websites. They also provide information on different standards applied. This indicates a strong national commitment to transparency and sustainability. Germany based shipping companies have the largest average fleet size as well as a high CSR presence (90%). In addition, all German shipping companies had provided information on standards in use, but only 50% had published sustainability reports on their website, with one sustainability report as a part of the annual report.

In the case of Nordics, all Finnish (100%) and the majority of Swedish (70%) shipping companies have provided varying types of CSR disclosures, but majority lack in publishing sustainability reporting. Merely 30% of Finnish shipping companies had published sustainability reports and the published sustainability reports were mostly incorporated into annual reports. In the case of Swedish shipping companies, approximately 40% had published sustainability reports. The relationship between the existence of more general CSR disclosures on the websites and lack of sustainability reports indicates a gap between CSR related stakeholder communication and formal reporting.

Shipping companies located in the Baltic states i.e. Estonia, Latvia and Lithuania generally have smaller fleets, less CSR disclosure on websites (Estonia 40%, Latvia 20% and Lithuania 20%) and lack in sustainability reporting as only one shipping company out of the ten analysed shipping companies in each country had published a sustainability report. Finally, Russian shipping companies have a relatively large average fleet size, but lack in CSR disclosures (30%) and none of the analysed websites had

published sustainability reports. This suggests limited transparency or lack of overall stakeholder communication.

Out of the shipping companies that had CSR disclosures on their website 71% had some CSR information on the front page. This suggests a goal to highlight the importance on sustainability efforts and CSR initiatives within the company.

CSR disclosures on the websites varied in scope, detail and form. Some shipping companies (34%) provided CSR disclosures in a vaguer way with more general statements or principles. Yet, the majority of shipping companies (66%) had defined specific goals or measurable indicators that provide much more information for stakeholders on the company initiatives and objectives as indicated in Figure 1. Danish and Swedish shipping companies all had some CSR related goals on their websites. The shipping companies with mere statements were of different sizes and from different countries with Finland and Poland having the biggest percentages with 50% each. Vague disclosures may reflect minimal compliance, lack of strategic CSR integration, or limited CSR resources. Specific goals and indicators suggest a more strategic and transparent approach, likely aimed at building stakeholder trust and demonstrating accountability. Companies with more general statements risk being perceived as engaging in greenwashing or superficial CSR. It should be noted that, in this study, CSR disclosures were defined quite broadly, expanding from one sentence statements to several pages. This broad categorization may lead to an overestimation of the prevalence and depth of CSR communication, as even minimal or vague statements are counted alongside more substantive disclosures.

In total, almost half (46%) of the shipping companies that had CSR disclosure on their website had published a sustainability report. Yet, three of those published sustainability reports were integrated into the annual report. Thus, even though CSR disclosures are more common, publishing formal reports is lacking. This suggests that many companies may not yet see the value or necessity of standardized sustainability reporting. This

could be related to resource constraints, lack of regulatory pressure, or limited stakeholder demand for detailed reporting, but also stem from the fact that the sustainability reporting standards and frameworks used in shipping vary as there is no jointly accepted framework in use.

Exactly half (50%) of the shipping companies provided information on different standards or systems related to responsible business conduct on their websites. (see Figure 1) The most common standards in use were ISO9001 (71%), ISO14001 (75%) and ISO 45001 (43%), and they were most often mentioned together. In addition to these, the Maritime Anti-Corruption Network (MACN) was mentioned several times (14%).

Environmental themes (45%) continue to dominate the maritime sector's sustainability discourse, although safety (20%) also emerged as a primary focus for several shipping companies. The strong emphasis on environmental themes is consistent with the maritime sector's regulatory environment, where increasingly stringent environmental legislation drives companies to proactively address ecological concerns. Safety is frequently integrated into the broader concept of responsible business conduct rather than treated as a separate issue (71%) which indicates that safety is understood as a part of CSR in shipping. On a couple of websites, safety was the central theme, with minimal or no references to other dimensions of sustainable development. In some cases, both environmental and safety concerns were emphasized, while aspects of social responsibility received comparatively less attention. A few shipping companies addressed social responsibility comprehensively, including topics such as diversity, gender equality, health, and well-being as well as human rights. However, only three companies (7%) had social responsibility as the principal theme on their website. (see Figure 1)

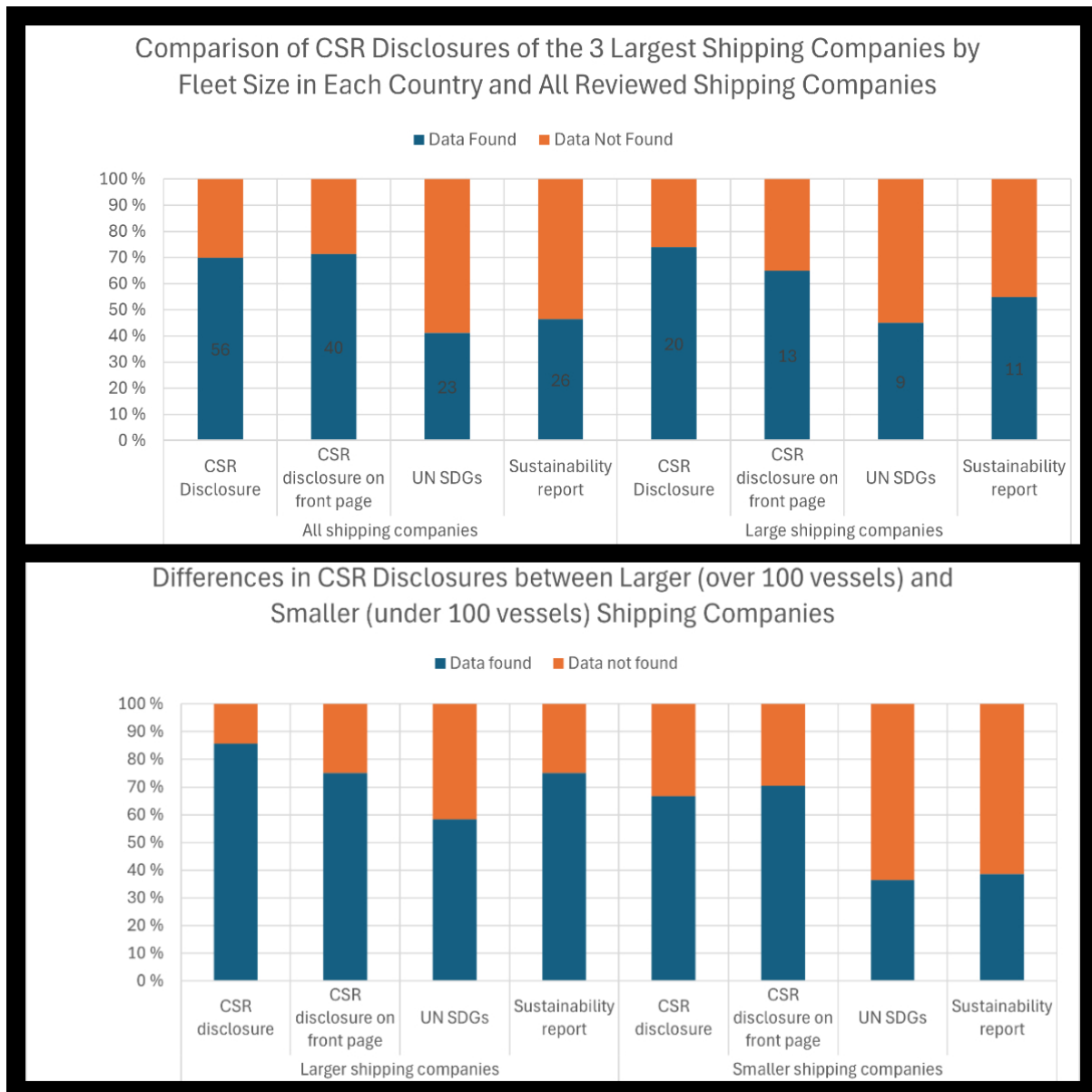


Figure 2. The top bar chart compares the CSR disclosures of three largest shipping companies in each country to all reviewed shipping companies' websites' CSR disclosures. The bottom bar chart compares larger, defined as shipping companies with more than 100 vessels, and smaller shipping companies i.e. shipping companies with less than 100 vessels, against each other.

When comparing information from all analysed shipping companies' websites with the information from three largest shipping companies from each Baltic Sea country based on the number of vessels, it can be seen that bigger shipping companies are more active in providing CSR disclosure on their websites and are also more likely to publish sustainability reports. In addition, the three largest shipping companies per country were also more likely to have mentioned UN SDGs on their website. This might be due to

the fact that larger companies tend to have more resources, greater public visibility, and are subject to stricter scrutiny. Yet, compared to the results of all shipping companies analysed, larger companies were less likely to post their CSR disclosure on the front page (Figure 2). Overall, the differences between the largest companies from each country compared to all analysed companies was not that significant.

Figure 2 indicates that shipping companies with the largest fleet sizes of over 100 vessels (17.5% of all analysed shipping companies) approximately 14% did not have CSR related information on their website. Of those shipping larger companies, 75% had CSR disclosure on their front page, 75% had published a sustainability report either separately or as a part of the annual report, and 58% had mentioned UN SDGs. Shipping companies with a fleet size of less than 100 vessels (82.5% of the analysed shipping companies), 33% did not have CSR disclosures on their website. 70% of those that had CSR disclosures had them on their front page. Only 39% had published a sustainability report and 36% had mentioned UN SDGs on their website.

Less than half (41%) of the shipping company websites that had CSR disclosures mentioned UN SDGs on their website. Only among Danish shipping companies more than half (80%) of the shipping companies had information about their relationship with UN SDGs on their website. Sweden had the second higher mention with 50% and all others had less. Aligning business with UN SDGs provides a framework according to which it is possible to communicate sustainability progress, draft strategic goals and also gain business benefits. Omitting UN SDGs suggests a missed opportunity to align with globally recognized sustainability standards and to enhance transparency and comparability. Yet, shipping companies in the Baltic Sea region seem to have dismissed them as a CSR disclosure tool.

4.3. Limitations

This study is subject to several limitations inherent to the qualitative content analysis methodology. One key limitation concerns the subjectivity

of interpretation, which the authors sought to mitigate by conducting data collection and analysis collaboratively. This team-based approach aimed to reduce individual researcher bias and enhance the reliability of the findings. Another limitation relates to the categorization and analysis of errors. The predefined analysis categories may not fully capture the complexity of the data, particularly given the heterogeneity of the websites analysed.

Sampling limitations also affect the generalizability of the findings. The sample may not be fully representative and the diversity in company size introduces variability in organizational resources, which in turn influences external communication strategies, including website content. While the sample includes the largest companies by fleet size, it may not fully represent the diversity of CSR practices across smaller operators. Additionally, companies operating under larger corporate groups may centralize CSR disclosures, which could affect the visibility of CSR at the subsidiary level.

Excluding websites not available in English was done to ensure consistency and comparability in the analysis and to avoid potential misinterpretations or translation inconsistencies that could compromise analytical reliability. However, by limiting the analysis to English-language websites, the sample's diversity and overall representativeness may have been reduced. This study focused on permanent website content to ensure systematic and comparable analysis, but this approach may not capture all forms of company CSR communication. Immediate or informal disclosures, such as those shared via social media or temporary news on the website, can provide timely insights into company CSR activities and stakeholder engagement. However, these channels are more momentary, and may not reflect the core, intentional messaging that companies wish to present to the public. As such, focusing on permanent website content represents more permanent, strategic aspects of CSR communication.

Variations in website design, structure, and communicative emphasis posed challenges for direct comparison across cases. In addition, several

external factors may have impacted the results. These include issues of website availability, as some sites may have been temporarily inaccessible during data collection, and the dynamic nature of web content, which is frequently updated. Additionally, some website elements may be personalized based on user behaviour or geographic location, potentially affecting the content observed. Some websites may have been updated before or after the review period, thus the time of data collection may have impacted the results. Yet, effort was made to keep the review period as short as possible to reduce the challenges related to the time frame of the study. Despite these measures and the collaborative approach to mitigate potential biases and errors, it should be noted that not all risks and limitations related to subjectivity or sampling could be fully reduced.

5. Key Findings and Implications

5.1. Summary of Findings

Based on the website content analysis, we can provide answers to the research questions (RQs) of this paper. RQ1: Have shipping companies in the Baltic Sea region provided CSR disclosure on their company websites? can be answered as follows: shipping companies operating in the Baltic Sea region do provide CSR disclosures on their websites, but the scope and content of the disclosures varies. Some even publish formal sustainability reports as others settle for describing more vague statements or principles without precise measurable indicators.

RQ2: What specific aspects of sustainability are prioritized? can be answered as follows: based on the website content analysis it can be stated that, as has been the tradition in shipping, environmental aspects are most often at the core of shipping company CSR, even though sustainability should be addressed more comprehensively.

RQ3: Have the shipping companies published sustainability reports online? can be answered as follows: publishing sustainability reports is not that

common especially when it comes to smaller shipping companies. The practice also varies by country significantly.

The key findings are summarised in Figure 3 that indicates three main classes of interpretation. First, the disclosure summary that is connected to the sustainability focus. Together they form the visible practice of CSR communication.

Dominant Themes in Disclosures	Dominant Themes in CSR Focus	Reporting practices
<p>Prevalence of CSR Disclosures 70% of Baltic Sea shipping companies provide CSR information on their websites, showing growing adoption.</p> <p>Homepage CSR Visibility 71% of companies display CSR content on their homepage, emphasizing stakeholder engagement.</p> <p>Regional and Size Variation Disclosure rates vary by country, with Danish firms at 100% and Baltic states below 40%. Larger companies disclose more actively.</p> <p>Improvement Opportunities Despite progress, CSR disclosure consistency and depth need improvement across many shipping companies.</p>	<p>Environmental Focus in CSR 45% of Baltic Sea shipping companies prioritize ecological themes in their CSR reports, reflecting regulatory emphasis.</p> <p>Safety as a CSR Priority Safety is highlighted by 20% of companies, showing its significance in maritime corporate responsibility.</p> <p>Social Responsibility Gaps Only 7% of companies emphasize social themes such as diversity, health, and human rights in their CSR disclosures.</p> <p>Company Size and CSR Detail Larger firms address environmental and safety concerns more comprehensively than smaller companies with vague or more general disclosures.</p>	<p>Limited Sustainability Reporting Only 46% of Baltic Sea shipping companies publish sustainability reports, sometimes integrated within other annual reports.</p> <p>Company Size and Reporting Larger companies with over 100 vessels publish sustainability reports at a higher rate of 75%, compared to 39% for smaller firms.</p> <p>Lack of Standardization Absence of standardized reporting frameworks causes inconsistencies in content and format, hindering comparison.</p> <p>Minimal Stakeholder Engagement Most company websites lack interactive feedback mechanisms, limiting stakeholder involvement in sustainability disclosure.</p>

Figure 3. Compilation summary of the key findings.

Figure 3 indicates verifiable presence of sustainability management and CSR on the majority of the analysed company websites (70%), most of the times also displayed on the homepage (71%) thus, it can be stated that CSR disclosures are quite common, but not yet a widespread practice. As CSR in shipping is voluntary, variation in disclosure practices can be expected. However, formal sustainability reports were notably less common (46%), which suggests that more effort is given on the existence of the communication rather than extent and content. This suggests that the value of standardized reporting is not recognized, or the lack of a joint reporting standard impacts the company's decision making. The results are somewhat different than in previous studies that suggest that the conventional way to provide CSR disclosures in shipping is to publish

sustainability reports on company websites (Zhou et al. 2021; Türkel & Akan, 2015; O'Riordan & Fairbrass, 2014).

In some cases, references to sustainability were expressed as general statements or principles (34%) rather than as specific goals, but many shipping companies described some measurable objectives related to CSR (66%). Thus, while stakeholder communication does exist on company websites, and it sometimes describes specific goals and objectives within the organization, it can sometimes lack concreteness and does not provide the same level of transparency regarding challenges and areas for improvement as standardized reporting formats, in which companies must report also the negative impacts of their operations. General statements can imply lack of strategic CSR integration, but they can also be a tool for shaping public perception and maintaining legitimacy, rather than genuinely promoting accountability.

A comparison of information from all analysed shipping companies' websites with that of the three largest companies by fleet size in each Baltic Sea country reveals that larger shipping companies are active in disclosing CSR information on their websites and are more likely to publish sustainability reports. When comparing shipping companies with more than 100 vessels to shipping companies with less than that, the biggest difference was in the frequency in which larger shipping companies had published sustainability reports (75%) compared to smaller shipping companies (39%). This suggests that scale correlated with transparency and formalized practices, but the results might also be related to better resources and stricter public scrutiny towards larger, more known brands. Traditionally, larger companies tend to lead in sustainability efforts.

5.2. Considerations of CSR in Shipping for Stakeholder Communications

This supports the findings of previous studies that suggest that, due to stakeholder interest in CSR, CSR disclosures are becoming an integral

part of stakeholder communications even though they can sometimes be rather generic (Zhou et al. 2021). One aspect to consider is also that companies that perform well in the field of sustainability tend to adopt high-quality CSR disclosure and correspondingly companies that are lacking in sustainability provide more vague CSR disclosures (Hummel & Schlick, 2016). Nevertheless, to develop better CSR strategies, shipping companies should move from vague statements to more measurable goals and indicators. This could be done by aligning CSR efforts with known frameworks, such as GRI or UN SDGs.

CSR disclosures are seen as an element of stakeholder communications. Previous studies have established the importance of stakeholder communications and found a positive correlation between CSR disclosure and business performance (e.g. Zhou et al., 2023; Simionescu & Dumitrescu, 2016; Pelosa & Shang, 2011; Barnett, 2007) and evidently shipping companies have started to acknowledge that.

As an avenue for stakeholder interaction, website-based communication is not interactive and does not facilitate the collection of stakeholder feedback or expectations. The only available stakeholder-related data in website-based communication typically includes website traffic metrics, user behaviour patterns, and the popularity of specific pages. In contrast, social media platforms could offer more interactive engagement, allowing stakeholders to respond to the content (e.g. Surucu-Balci et al. 2020). The strategic role of social media in shaping stakeholder perceptions and enhancing organizational legitimacy deserves greater attention. Social media platforms enable real-time, two-way communication that can personalize corporate sustainability efforts and foster trust. In the context of legitimacy theory, such transparency and responsiveness are critical for aligning with societal expectations (e.g. Suchman, 1995).

Integrating social media into CSR strategies can complement website-based disclosures but also strengthen stakeholder relationships and enhances sustainability communication. However, social media is not well-suited for presenting detailed sustainability reporting outcomes, unless

the intent is to highlight selected findings from broader reports making website-based stakeholder communications somewhat necessary. Nevertheless, social media communication is something that shipping companies should consider as an avenue for CSR disclosure.

Environmental themes (45%) dominated the sustainability discourse, although safety (20%) also emerged as a primary focus on several shipping company websites. Safety was frequently integrated into the broader concept of responsible business (71%), which indicates that safety is understood as a part of CSR in shipping. Considering the study from 2013 (Kunnaala et al. 2013a) shipping companies defined safety as an important part of CSR and, arguably, safety as a key factor and goal for shipping has retained its important position.

The emphasis on environmental issues was also already evident in the 2013 study by Kunnaala et al. (2013a). In addition, number of other studies have established that environmental aspects of shipping have been highlighted in shipping sometimes at the cost of other sustainability aspects (e.g. Fjørtoft et al. 2020; Karakasnaki et al. 2023; Shin et al. 2017; Chua et al. 2023; Zhou et al. 2023) Environmental concerns were also deemed the most significant cause to engage in CSR.

The focus on environmental aspect is likely influenced by the maritime sector's regulatory environment, where increasingly stringent environmental legislation poses challenges to competitiveness. A proactive approach to environmental responsibility specifically may thus be viewed as a strategic business decision aimed at anticipating future regulatory developments. Despite the existence of many different aspects of CSR in shipping, it is likely that the sustainability initiatives of shipping companies continue to focus on environmental measures, reflecting its concentration a decade ago.

A comparison of information from all analysed shipping companies' websites with that of the three largest companies by fleet size in each Baltic Sea country reveals that larger shipping companies are active in disclosing CSR information on their websites and are more likely to publish

sustainability reports. When comparing shipping companies with more than 100 vessels to shipping companies with less than that, the biggest difference was in the frequency in which larger shipping companies had published sustainability reports (75%) compared to smaller shipping companies (39%). This suggests that scale correlated with transparency and formalized practices, but the results might also be related to better resources and stricter public scrutiny towards larger, more known brands. Traditionally, larger companies tend to lead in sustainability efforts.

The differences between the largest shipping companies and the other companies examined were not significant. Even among the largest companies by fleet size in each country, some did not address sustainability on their websites. Several factors may explain this, such as operating primarily on a business-to-business level with an established client base, which may reduce the perceived need for enhanced stakeholder communication and related CSR disclosures. Additionally, the strategic importance of stakeholder communication as an element of responsible business conduct may not yet be fully recognized particularly in relation to non-commercial, external stakeholders.

Interestingly, stakeholder communication was not widely regarded as an integral part of responsible business practices (also 2013 study). In the earlier study, when it came to communicating CSR disclosure, several different avenues were mentioned, but most often the answers were environmental reports or annual reports. Thus, it can be surmised that, even though some sort of CSR disclosures are becoming a part of shipping company communications, the perception of the importance of stakeholder involvement in CSR is still not evident. The situation has not developed radically from what it was a decade ago, when shipping companies had recognized stakeholder pressure related to CSR but did not consider stakeholder interaction as a part of CSR. With the development of sustainability reporting and standards, both voluntary and mandatory, it is likely that attitude towards stakeholder engagement, as an integral part of a company's CSR, will become more widespread.

5.3. Implications for Industry Practitioners and Policymakers

There are three main implications for policy makers and practitioners. First, environmental issues are prioritised largely due to regulatory pressures, as outlined in the legislative-focused text, while social and human rights dimensions remain underrepresented in CSR disclosures, as demonstrated in the website content analysis. This discrepancy suggests that CSR strategies may be shaped more by compliance and reputational considerations than by a comprehensive understanding of stakeholder needs. For this reason, industry practitioners need to further focus on strengthening stakeholder relationships and fostering transparent communication as they are becoming increasingly essential components of CSR in maritime shipping. This requires emphasised CSR engagement leading to a more inclusive and accountable business-customer relations, enhancing trust, legitimacy, cooperation, and the long-term reputation of shipping companies. As a strategic shift, shipping companies should view stakeholder communications as a strategic tool to build legitimacy and not just a compliance task.

Second, without dismissing the ecological impacts of maritime activities, other aspects of sustainable development should be integrated into CSR activities of shipping companies. The omission of other aspects of sustainability indicates a strategic gap in how companies implement CSR. Companies should broaden their sustainability efforts to include aspects such as diversity, human rights and wellbeing. Yet, continuing emphasis on environmental measures reflects a long-term commitment to reducing the ecological impact of shipping and acknowledges the industry's responsibility to address its environmental footprint through proactive CSR strategies, which should not be omitted.

Third, the findings and their implications indicate the significant role of policy and policymakers in shaping CSR practices. By understanding CSR trends, maritime policymakers can design regulations and other incentives that promote responsible business conduct. For policymakers, this signals

a need to reassess whether current regulatory frameworks sufficiently incentivize holistic CSR practices. Stronger guidance or mandates could help ensure that social dimensions are not sidelined. The findings indicate the importance of aligning CSR communication with stakeholder expectations, not only to build legitimacy but also to foster trust and long-term resilience. This requires good governance-corporate relations that broaden the scope of CSR beyond environmental compliance to include social accountability. This would also serve both strategic and ethical priorities in maritime governance.

Considering critical aspect of the paper and based on the conducted content analysis, it is recognised here that the emphasis on environmental protection in maritime CSR disclosures does not fully represent the diverse needs of all stakeholders, particularly the general public. While environmental concerns are undeniably important and often driven by regulatory frameworks, the study reveals that social and human rights issues are significantly underrepresented in CSR communication. Only a small fraction of companies prioritised social responsibility as the main theme, and aspects such as diversity, wellbeing, and human rights were rarely central in disclosures.

This discrepancy can be attributed to several factors as environmental themes are more closely aligned with existing maritime regulations and international sustainability goals, making them a safer and more strategic focus for companies seeking legitimacy and compliance. Additionally, significant number of shipping companies operate on a business-to-business level, which may reduce perceived pressure to address broader societal concerns. Correspondingly, the lack of standardised reporting frameworks tailored to the maritime sector contributes to inconsistent and often vague disclosures, especially on social topics. This gap highlights the need to broaden CSR expectations and frameworks to ensure that social dimensions are not sidelined. Stakeholder engagement, particularly with non-commercial actors such as the general public, NGOs, and civil society, should be strengthened to ensure CSR strategies reflect a more holistic

understanding of sustainability. The voluntary adoption of CSR by shipping companies signals a promising path for collaborative efforts between industry stakeholders and regulators to achieve shared sustainability goals, which is crucial for the sector's future social legitimacy.

6. Conclusion

CSR continues playing a key role in shaping the future of the shipping industry. This is because strong reinteractions with stakeholders and encouragement of transparent communications are becoming more important in maintaining operational social acceptability. These practices are widely seen as essential for companies that thrive to stand out in a competitive market. As such, this moment represented a critical juncture for action, as in the future the Corporate Sustainability Reporting Directive (CSRD, (EU) 2022/2464) mandates sustainability reporting for large companies, particularly those of a sufficient size in terms of employees, turnover, or balance sheet. Even companies that do not fall within the scope of the directive are often required to consider its requirements in their operations, due to the influence of other actors within their supply chains. At this transitional stage, it remains possible to evaluate the extent to which shipping companies provide CSR disclosure on a voluntary basis. Following the full implementation of the directive, it will be important to reassess how companies comply with the new reporting requirements. Future studies could provide information on how CSRD implementation affects disclosure form and quality.

The data provided clear examples of ambition and companies such as Bernhard Schulte Shipmanagement in Germany, TORM in Denmark and ESL Shipping in Finland, had already begun to align their CSR disclosures with the directive by introducing double materiality assessments or by incorporating elements of the CSRD requirements into their existing sustainability reports. The CSRD-compliant reporting framework will likely compel stakeholders to engage with sustainability reports in greater depth, as these documents become essential for understanding the scope

of a company's sustainability practices as they will most likely become the main avenue for sustainability closure. CSRD-compliant reporting will also make it easier to compare companies operating in the same industry field with each other.

Combining previous data with insights collected from the website content analysis provided information on the trend of CSR in Baltic Sea shipping, enabling an assessment of how its role has evolved. This analysis provided not only a snapshot of the current situation, but also valuable information on the corporate social responsibility trajectory in the maritime sector. Such an understanding, combined with an examination of developments in the sector provides new views for the future CSR trends in shipping. These considerations are aligned in the discussion section stressing the crucial role of policymakers and industry practitioners and their respective collaborations.

This research serves as a resource for maritime policy makers and provides insights into the ship-owners tendency to self-regulate and commit to accountability on a voluntary basis. Ultimately, a holistic understanding of the trends and dynamics of CSR responsibility in the maritime sector is crucial for knowledge-based decision-making and the formulation of an effective maritime policy leading to sustainable practices. Future research should include smaller companies. Additionally, case studies from other regions and cultural contexts are needed to establish bases for comparison resulting better generalizability of the findings. Explorations into the variations in CSR engagement across the different segments in maritime sector are thus needed. Finally, stakeholder perception studies are in demand enabling better understanding how different stakeholder groups gather, interpret and value CSR disclosures.

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