

# *Environmental Accounting: Guide to Corporate Social Responsibility Report*

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**Abstract:** Environmental reporting plays a crucial role in corporate social responsibility (CSR) reporting. Furthermore, transparency and effective reporting can enhance the quality of environmental disclosures. The European Union (EU) acknowledges the importance of Environmental, Social, and Governance (ESG) reporting and requires member states to disclose their national policies on reporting and transparency. This study aims to explore the role of environmental accounting in the CSR reporting. This report will use the report of Plan A from 2007 to 2014, which is a report of corporate social responsibility in the Marks and Spencer group. The qualitative content analysis will be adopted in this study. Following the analysis, the relationship between the environmental accounting and CSR will be demonstrated. Lastly, some recommendation will be provided for future research.

## **1. Introduction**

The concept of social accounting is broad, which involves the social investment, social performance and environmental accounting. Environmental accounting, as a practice of social accounting, represents a new development in the traditional accounting system. Corporate environmental accounting can be categorized into two main areas: environmental management accounting and environmental reporting. Compared to the private sector, there is a limited amount of literature available on Environmental Accounting in the public sector, which prompts the need for more research in this area (Rahmawati et. al., 2024)<sup>[1]</sup>.

Environmental accounting plays an important role in addressing environmental issues. There is a growing need to understand how business operations contribute to environmental issues. Countries such as Australia, the EU and other non-EU European countries recognize greenhouse gases as a significant environmental threat, alongside typical pollutants like water and land pollution. These countries have committed to reducing greenhouse gas emissions under the Kyoto Protocol (Larrinaga, 2014)<sup>[2]</sup>. From a political standpoint, addressing environmental issues is a critical step toward finding solutions. Additionally, countries that promise to reduce emissions in the Kyoto Protocol are acknowledging the link between business operations and environmental concerns. As an audit firm, the KPMG conducts research on corporate responsibility. According to the International Survey of Corporate Responsibility Reporting (KPMG, 2013)<sup>[3]</sup>, there are 4100 firms, and 72 percent of which will publish the forms of Corporate Responsibility reporting in the research. Additionally, this

research reveals that the social or environmental reporting is becoming more and more important in the current business. Information on topics such as food, factory operations, and pollution is becoming more prominent, reflecting the growing demand for environmental and social issue reporting.

## 2. Literature Review

The presence of climate change and resource depletion are key factors influencing an organization's adoption and implementation of environmental accounting. As a vital tool, environmental accounting allows for the systematic measurement and transparent reporting of the environmental impact of business operations (Thanasas, 2024)<sup>[4]</sup>.

Initially, environmental accounting focused mainly on meeting regulatory requirements, such as reporting pollution levels and assessing environmental impacts (Bebbington & Larrinaga, 2014)<sup>[5]</sup>. In contrast to traditional financial accounting, environmental accounting integrates environmental data and metrics into decision-making processes. It offers organizations the opportunity to identify areas for improvement, set new goals, and continuously track progress to gain a better understanding of their environmental performance (Hsiao et al., 2022)<sup>[6]</sup>.

As environmental challenges become more severe worldwide, environmental accounting has gained increasing attention. As a branch of social accounting, environmental accounting positively impacts the resolution of environmental issues. It holds companies accountable for their environmental performance. In other words, firms are expected to take social responsibility by disclosing their environmental activities, as rising pressures from stakeholders push managers to focus on environmental transparency (Schaltegger & Burritt, 2000)<sup>[7]</sup>. Therefore, companies must be accountable to their stakeholders, not just themselves.

The environmental accounting system reflects the impact of environmental activities, including calculating the cost of environmental measures and measuring physical units such as waste output. Without environmental accounting, there is no real transparency in corporate activities (Schaltegger & Burritt, 2000)<sup>[7]</sup>. Moreover, the development of environmental accounting facilitates the development of closer links between firms and society (ibid.)<sup>[7]</sup>. Environmental reporting is a key form of environmental accounting, as it discloses information about environmental issues and outlines efforts to reduce local environmental pollution within companies. Environmental reporting largely depends on actual activities and the information related to these activities, which is shared with internal stakeholders, including managers and shareholders.

## 3. Research Method

The aim of this study is to examine whether the content of Plan A is linked to CSR and environmental reporting. To explore this connection, the research will adopt a qualitative approach to analyze the relationship between CSR and environmental reporting. Qualitative analysis, which includes methods of interpretation and reasoning, is valuable for understanding complex contexts and detailed information (Mason, 2002)<sup>[8]</sup>. The qualitative data will be collected by conducting the content analysis of reporting, which is composed of both textual and tabular information. The most effective way to describe the data collected in this study is through qualitative content analysis. As an appropriate research method, content analysis will be employed to conduct this research.

### 3.1 Content Analysis Methods

Qualitative content analysis is central to my study, as it focuses on organizing the environmental and corporate social responsibility issues in Plan A. A qualitative description offers a concise summary, clear interpretation, and structured presentation of textual information. According to

Berelson (1952)<sup>[9]</sup>, non-numerical content analysis emphasizes insight and interest. The numerical messages, such as category frequency, provide visual or intuitive information (Berelson, 1952)<sup>[9]</sup>. In contrast, non-numerical messages rely on the content itself, such as understanding the significance of a category, which provides deeper insight into the meaning of the content.

For my research, the written documents will be based on the Plan A report. The Plan A report details the performances about how the M&S do the business, which can be classified as a CSR recording. The department of management provides the content of this report in the M&S (Plan A, 2007)<sup>[10]</sup>. The internal audit team oversees the activities related to Plan A (Plan A, 2008)<sup>[11]</sup>, and the report is subject to scrutiny by the Audit Committee (ibid.)<sup>[11]</sup>. A wide range of stakeholders can communicate with M&S through this report.

Compared to simply understanding the information or text, content analysis allows for a deeper examination of the content, the attitude of the message, and the source of information. It helps integrate large amounts of scattered information, enabling centralized management and analysis. The Plan A report contains a wealth of information, including sections such as the chief executive's message and the independent assurance statement (Plan A, 2007)<sup>[10]</sup>. Content analysis is useful for collating mass information. Therefore, using this research method helps clarify the key messages in the Plan A report.

In my research, the content analysis of the Plan A report from 2007 to 2014<sup>[10][11][12][13][14][15][16][17]</sup> is seen as a raw material or a raw data to examine the detailed information of content and text. Whilst the company of M&S have arranged the format of this report or edited their data. For my content analysis of Plan A, it is adopted as an unprocessed raw form in the system of content analysis. In the content analysis, a unit is the basis of the identification of information, which is used to analyze or interpret reports or other written materials (Neuendorf, 2002)<sup>[18]</sup>. When selecting the unit, it should adequately represent the categories defined by the researchers and highlight the central themes, such as environmental reporting and corporate social responsibility, in the content analysis of my study. For example, a theme within a paragraph can serve as a unit of analysis. Therefore, different themes are selected as units within categorized sections. The category itself serves as the conceptual framework for designing the research (Kassarjian, 1977)<sup>[19]</sup> and is essential for conducting content analysis. In addition, content analysis reflects the central idea and the aim of the research in the practices. Therefore, researchers should provide a clear division of the category in the process of analyzing content and make an appropriate decision when they choose unit in the content analysis.

### 3.2 Research Data

The approach of the content analysis can assume behavioral status of the corporation or attitude of the company through the symbolic content of messages. The research data comes from the Plan A report, produced by M&S, and will focus on word count analysis to represent M&S's performance. The data will be selected from the Plan A reports covering the period from 2007 to 2014<sup>[10][11][12][13][14][15][16][17]</sup>. These reports address various environmental and CSR issues. Eight of the reports, from 2007 to 2014, were sourced from the IGD website ([www.igd.com/Research/Sustainability/CSR/3143/Marks--Spencer-CSR-reports/](http://www.igd.com/Research/Sustainability/CSR/3143/Marks--Spencer-CSR-reports/)). As a business plan, Plan A is related to creating more resources to support the successful cooperation of business operations with environmental development (Plan A, 2007)<sup>[10]</sup>. Given the increasing resource constraints and social changes, such as the demand for a carbon budget, Plan A helps meet both environmental and economic requirements. It positively impacts environmental protection by promoting the use of recycled and sustainably sourced materials.

#### 4. Result and Discussion

In the results section, the findings from the Plan A report of M&S will be divided into two parts: word-based results (see Table 1 and Table 2) and percentage-based results (see Table 3 and Table 4), to illustrate the company's approach to environmental reporting and CSR. The focus will be on analyzing the textual content in the Plan A report. The inferences regarding the relationship between CSR and environmental reporting will be drawn from the textual evidence in Plan A. A conclusion will be provided after analyzing these inferences.

Table 1: The Plan A Results of Words from 2007 to 2013.

Category	Issues	Measurement	2007	2008	2009	2010	2011	2012	2013
Environmental Reporting	Climate Change	no.words	2836	4570	4457	2027	3888	4056	2420
	Waste	no.words	2465	3383	3249	1445	2855	2764	2014
	Sustainable Raw Materials/Natural Resources	no.words	2556	3080	2817	1354	3315	3376	2269
Total Words of Environmental Reporting		no.words	7857	11033	10523	4826	10058	10196	6703
Corporate social responsibility	Fair Partner	no.words	2750	3317	3066	1409	2488	2192	1639
	Health/Health and Wellbeing	no.words	1979	2093	1549	829	1897	2130	1152
	People	no.words	820	1031	825	0	0	0	0
	Workforce Diversity	no.words	52	0	119	0	0	0	0
Total Words of Corporate Social Responsibility		no.words	5601	6441	5559	2238	4385	4322	2791
Total words in the report		no.words	18910	23899	23015	13872	29090	29540	22048

Table 2: The Plan A Results of Words 2014.

Category	Issues	Measurement	2014
Environmental Reporting	Sustainable Raw Materials	no.words	909
	Zero-carbon Operations	no.words	1921
Total Words of Environmental Reporting		no.words	2830
Corporate social responsibility	Transparency and Traceability	no.words	382
	Effective Reporting	no.words	763
Total Words of Corporate Social Responsibility		no.words	1145
Total words in the report		no.words	24388

Table 3: The Plan A Results of Percent from 2007 to 2013.

Category	Issues	Measurement	2007	2008	2009	2010	2011	2012	2013
Environmental Reporting	Climate Change	%	15.0	19.1	19.4	14.6	13.4	13.7	11.0
	Waste	%	13.0	14.2	14.1	10.4	9.8	9.4	9.1
	Sustainable Raw Materials/Natural Resources	%	13.5	12.9	12.2	9.8	11.4	11.4	10.3

Total Percent of Environmental Reporting		%	41.5	46.2	45.7	34.8	34.6	34.5	30.4
Corporate social responsibility	Fair Partner	%	14.5	13.9	13.3	10.2	8.6	7.4	7.4
	Health/Health and Wellbeing	%	10.5	8.8	6.7	6.0	6.5	7.2	5.2
	People	%	4.3	4.3	3.6	0	0	0	0
	Workforce Diversity	%	0.3	0	0.5	0	0	0	0
Total Percent of Corporate Social Responsibility		%	29.6	27.0	24.2	16.1	15.1	14.6	12.7

Table 4: The Plan A Results of Percent 2014.

Category	Issues	Measurement	2014
Environmental Reporting	Sustainable Raw Materials	%	3.7
	Zero-carbon Operations	%	7.9
Total Percent of Environmental Reporting		%	11.6
Corporate social responsibility	Transparency and Traceability	%	1.6
	Effective Reporting	%	3.1
Total Percent of Corporate Social Responsibility		%	4.7

As shown in Table 1, Table 2, Table 3 and Table 4, the results from the Plan A report provide clear evidence of the relationship between CSR and environmental reporting. The report of Plan A is divided into two sub-categories, including CSR and environmental reporting, with environmental reporting making up a larger proportion compared to CSR. Environmental reporting is further categorized into sustainable raw materials, climate change, waste, natural resources and zero-carbon operations. The CSR section covers topics like health and wellbeing, fair partner, people, transparency and traceability, workforce diversity and effective reporting.

The Marks and Spencer group focuses on the environmental behavior, including reducing the emission of carbon dioxide and addressing the climate change, as part of its CSR. It also shows that they are a responsible firm. O'Dwyer and Owen (2005)<sup>[20]</sup> describe that managers can determine the level of disclosure. In other words, the information disclosed is selectively chosen by managers. I argue that managers play an important role in disclosing environmental information. According to Owen et al. (2000)<sup>[21]</sup>, managers control the entire reporting process to enhance the corporate image rather than to promote transparency and accountability. In other words, the purpose of managers is not providing transparency and accountability to stakeholders. However, many researchers argue that the Managerialism should not come at the cost of accountability and transparency, as stakeholder's interests should be considered (Belal, 2002; Gray & Milne, 2002; Owen et al., 2000)<sup>[21][22][23]</sup>. Therefore, managers can use high-level disclosure to earn the trust of stakeholders in environmental reporting.

## 5. Discussion and Future Research

As a CSR reporting, the Plan A outlines the performance of CSR and how the Marks and Spencer group operates their business. Considering the report of Plan A from 2007 to 2014<sup>[10][11][12][13][14][15][16][17]</sup>, the total percent which is related to reporting environmental information is more than the total percent which is associated with recording the information of corporate social responsibility in the Marks and Spencer group. In other words, environmental reporting is the major section in the Plan A compared to CSR. The materials of environmental reporting support the commitments to CSR in the Marks and Spencer group. As environmental information is a part of the



CSR report. Thus, environmental reporting is related to CSR.

Managers grasp and control environmental reporting, and therefore can influence how the information is disclosed. Although the information is useful for stakeholders, it is not published in environmental reporting because it is contrary to the profits of managers. If most companies establish a connection between the negative effect and the disclosure of the information of their environmental activities, the performance of the company will depend on the profits of shareholders, not on stakeholders. As a result of this, the practice of environmental reporting fails to achieve widespread adoption. In addition, Dey (2007)<sup>[24]</sup> believes that the disclosing information will control the sentiments of stakeholders. In other words, the performance of the company induces the reaction of stakeholders in the environmental accounting. Therefore, the relationship between stakeholders' emotions and the disclosure of information about the corporate activities can be described as influence rather than control.

Advances in technology have also enhanced the development of environmental accounting and provided more possibilities through exploration of new technologies such as blockchain and artificial intelligence. These new technologies simplify the collection of environmental data, enable in-depth analysis of environmental reports, and can potentially transform traditional environmental management methods. Future research should focus more on applying artificial intelligence technology to handle diverse and complex environmental data, enhancing both the effectiveness and fairness of environmental monitoring (Olawade et al., 2024)<sup>[25]</sup>. This will greatly contribute to environmental protection, public health, and sustainable development (ibid.)<sup>[25]</sup>. Under the influence of new technologies such as digital platforms and artificial intelligence, the transparency of environmental reporting and the accuracy of tracking carbon footprint are enhanced, enabling stakeholders to take more CSR and contribute to future academic exploration by providing a cross-industry and cross-regional information disclosure framework.

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