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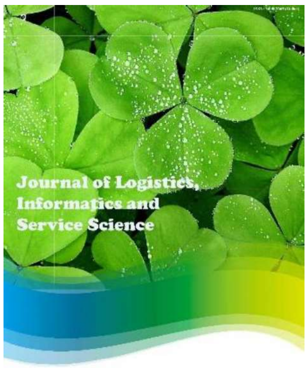

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(Jun-4-2024): No.4 of 2024 (Volume 11) has been published online.

(Apr-22-2024): No.3 of 2024 (Volume 11) has been published online.

(Feb-28-2024): No.2 of 2024 (Volume 11) has been published online.

(Dec-17-2023): No.1 of 2024 (Volume 11) has been published online.

(Dec-16-2023): Instructions of authors has been updated. Please check before your consider to submit.

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Sustainable Reporting: Integrating Environmental, Social And Governance Aspects In Corporate Report

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Abstract. This research investigates the implementation and benefits of sustainable reporting that integrates environmental, social and governance (ESG) aspects in corporate sustainability reports. This research will identify best practices and challenges faced by companies in creating holistic sustainability reports. This research uses a qualitative approach with descriptive methods. The research results show that integrating Environmental, Social, and Governance (ESG) aspects in corporate reports, primarily through sustainable initiatives and Corporate Social Responsibility (CSR) programs, not only fulfills the need for sustainable reporting but also creates a positive impact that is in line with the principles ESG sustainability. ESG integration steps involve identifying relevant ESG material, measuring and evaluating ESG performance, implementing sustainable policies, integrating ESG in decision-making processes, stakeholder involvement, continuous reporting, and continuous improvement. Despite progress, there are challenges such as measurement and standardization difficulties, supply chain complexity, difficulty communicating social impact, short-term financial pressures, regulatory uncertainty, and lack of resources and skills. Therefore, companies need to balance short-term financial needs and commitment to long-term sustainability and be ready to face regulatory changes and overcome resource constraints.

Keywords: Sustainable Reporting, Environment, Social and Governance (ESG), Corporate Reporting.

1. Introduction

Environmental, Social and Governance (ESG) aspects have emerged as a central point for companies and investors, receiving increasing attention recently (Wulandari et al., 2023). There is a significant trend in which many companies are starting to prioritize understanding the social and environmental impacts of their operations. On the other hand, investors are increasingly realizing the importance of integrating ESG factors in their investment decision-making process (Fadhlillah & Marsono, 2023). Understanding related to the concept of Environmental, Social and Governance (ESG) integration of sustainability reports is something that companies must do, so based on the results of the explanation related to Environmental, Social and Governance (ESG), research was carried out to find out how the Company's commitment to integrating Environmental, Social and Governance (ESG) reports into sustainability reports, where these reports include reports on corporate responsibility, corporate governance and corporate performance reports.

Companies that successfully manage ESG aspects effectively demonstrate social and environmental responsibility and tend to achieve better long-term performance (Inawatri & Rahmawati, 2023). Success in integrating ESG creates added financial value and contributes to building strong relationships with various stakeholders, including employees, customers and society (Susanto & Sirnawati, 2023). Thus, focusing on ESG aspects is a sustainable strategy and the key to achieving holistic, long-term sustainability for modern companies (Sunday et al., 2023).

The Indonesian government has taken proactive steps to encourage adopting Environmental, Social and Governance (ESG) practices among companies by involving specific initiatives and guidelines. One concrete step is applying the Principles of Good Corporate Governance (GCG) (Vivianita & Nafasati, 2018). These principles encourage companies to implement reasonable and transparent governance practices, covering fairness, accountability and social responsibility. Through active involvement in implementing GCG principles, companies are expected to strengthen the foundations of their internal governance and increase their competitiveness in the market (Pertiwi & Hersugondo, 2023).

The Indonesian government is also trying to integrate ESG into business regulations and economic policies (Coganuli & Adhariani, 2023). This step creates a solid legal foundation to ensure that companies comply with good governance standards and pay attention to their environmental and societal impact (Anisah, 2020). Through this approach, the government hopes to create a sustainable business environment, support inclusive economic growth, and balance economic profits and social responsibility (Xaviera & Rahman, 2023).

Further, ESG is defined as a firm's obligation to improve social welfare; and equitable and sustainable long-term wealth for stakeholders (Jamali et al., 2017; Turban and Greening, 1997). ESG compliant firms are found to have better governance, care more for the environment and sustainable development, have less earnings volatility and have access to lower cost funds (Kumar, 2020). The United Nations recommends that firms disclose their ESG practice by year 2030 (SSE, 2015). It is crucial that governments support the implementation of ESG via numerous tax incentives for firms to be actively engaged in ESG disclosures that benefit their business value-chain as well as their shareholders (Jallai, 2020). In Malaysia, as part of the initiative, Malaysian Code of Corporate Governance (MCCG, 2012) recommends directors to fully disclose the firm's policies and implementation of ESG in its annual report.

The sustainable investment trend is increasingly gaining attention and accommodation among investors in Indonesia (Stiadi, 2023). More and more investors are considering Environmental, Social and Governance (ESG) factors in their investment decisions (Ahmadin et al., 2023). Increased awareness of ESG issues and concern for social and environmental impacts encourages investors to look for investment opportunities that align with sustainability values (Durlista & Wahyudi, 2023).

Sustainable investment has become an attractive option for investors who wish to provide financial support to companies that achieve financial returns and positively impact the environment and society

(Nugroho et al., 2023). These investors see sustainable investment as a way to encourage positive changes in business practices and encourage companies to be socially and environmentally responsible (Husnah et al., 2023). This trend reflects a paradigm shift among investors. It incentivizes companies to strengthen their sustainable practices to meet the expectations of investors increasingly focused on ESG values (Daniri, 2008).

Many companies increasingly understand the urgency of reporting their Environmental, Social and Governance (ESG) performance openly and transparently (Cakranegara, 2021). This awareness was triggered by increasing demand from various stakeholders, including investors, consumers, and the general public, who are increasingly concerned about the social and environmental impacts of business activities of business activities. Sustainability reports have become a vital tool in company communication with stakeholders, helping them convey concrete efforts made in managing ESG issues (Kurniawan, 2023).

Sustainability reports also become essential capital for companies, especially in attracting investor attention and meeting government regulatory standards (Purwanto, 2011). By presenting detailed information about the sustainable practices adopted, companies can increase their credibility in the eyes of the market and prove their involvement in corporate social responsibility (Setiawati, 2018). In addition, the Indonesian government is also increasingly encouraging companies to adopt ESG practices through regulations that support sustainability reporting. Therefore, this report is a strategic communication tool and an essential means to comply with government regulations, which are crucial in encouraging business sustainability at the national level (Pranesti et al., 2022).

By adopting sustainable practices and reporting ESG performance transparently, companies in Indonesia can build trust with stakeholders, increase competitiveness in the market, and play an active role in sustainable economic development (Hendro & Pranogyo, 2023). Thus, sustainability reporting is an obligation and an opportunity for companies to form a positive image and contribute to sustainable development (Hatane et al, 2021).

This research aims to understand how companies in Indonesia integrate Environmental, Social and Governance (ESG) aspects in their sustainability reports. Research objectives include analyzing best practices, identifying challenges, and exploring their impact on long-term performance. The benefits of this research involve companies being able to use the findings as a guide to improving their sustainability reporting, investors being able to gain insights for sustainable investment decision-making, governments being able to support more supportive regulations, and citizens being able to make more informed consumption choices. Thus, this research has the potential to make a positive contribution to encouraging sustainable practices and corporate social responsibility in Indonesia.

2. Method

The author uses a qualitative descriptive research approach which according to Moleong (2014) has characteristics such as being rooted in a scientific background, relying on humans as research tools, using inductive qualitative analysis methods, focusing more on the process rather than results and considering the validity of the data with a set of criteria. Meanwhile, Noor (2011) uses qualitative research methods to study the condition of natural objects with researchers as vital instruments. The author also uses a literature review approach in collecting relevant research data related to Environmental, Social and Governance (ESG) and sustainability reports for companies. Using a literature review is very important to develop theoretical aspects and practical benefits in research. The author also uses a literature review approach in collecting relevant research data related to Environmental, Social and Governance (ESG) and sustainability reports for companies. Using a literature review is very important to develop theoretical aspects and practical benefits in research.

To address the research aims, which is to map and analyze the literature on the impacts on corporate sustainability performance provided by the integration of ESG criteria, this study relied on two procedures. The first procedure was a consistent and robust SLR materialized according to the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) methodology, which blends reference analysis, network analysis, and content analysis. The second method was a critical in-depth analysis of a specific sample of articles collected through the PRISMA structured procedure, which integrated and supported the initial technique, as already used in the sustainability literature (Bolis et al., 2014). With this approach, the author can effectively solve the problem he wants to research by deeply understanding the concepts and findings that already exist in the literature.

3. Results and Discussion

3.1. Integrating Environment, Social, and Governance (ESG) in Corporate Report

The sustainability reporting initiatives that several companies in Indonesia have taken focus on environmental and social issues and are directly related to Environmental, Social and Governance (ESG) aspects. The implemented Corporate Social Responsibility (CSR) program reflects the company's commitment to ESG principles, which include responsibility for environmental impacts, social empowerment and good corporate governance practices (Ariyani, 2023). Reducing carbon emissions and adopting renewable energy is integral to the environmental aspect, while community empowerment programs reflect the company's social commitment, which is integrated into ESG principles (Putri, 20220). Thus, these steps fulfill the need for sustainable reporting and create a positive impact that aligns with ESG sustainability principles. Through the integration of ESG in these sustainability initiatives, companies can strengthen their image, increase long-term value, and make a more significant contribution to sustainable development at regional and national levels (Kirani & Wijayanti, 2023). The following is how ESG aspects can be integrated into corporate reporting.

3.1.1. Identify Relevant ESG Material

Identifying ESG aspects relevant to a company's business and industry is a critical step in understanding a company's holistic impact on the environment, society and governance. The Environmental aspect includes the company's impact on the ecosystem, use of natural resources, and environmental policies. That may involve evaluating the carbon footprint, waste management, and availability of renewable resources used in the company's operations.

The Social aspect focuses on the company's interaction with the community and stakeholders. That includes diversity and inclusion within the company, employee welfare, human rights, and positive contributions to the surrounding community. The company's social impact evaluation includes Corporate Social Responsibility (CSR) practices, community empowerment, and company efforts to build positive relationships with surrounding communities.

The third aspect of corporate governance practices includes organizational structure, transparency and ethics in company decision-making. That involves monitoring management, ensuring company policy sustainability, and ensuring the decision-making process is conducted ethically and transparently. By identifying and understanding these aspects, companies can holistically integrate ESG into their strategy and operations, creating value for stakeholders and supporting long-term sustainability goals.

3.1.2. ESG Performance Measurement and Evaluation

In measuring Environmental, Social, and Governance (ESG) performance, companies must use performance indicators appropriate to their business goals and context. For example, for the environmental aspect, companies can measure carbon emissions as an important indicator to evaluate their environmental impact. Measuring supply chain sustainability is also relevant, as it can monitor and improve resource efficiency from the beginning to the end of the production process. Social aspects can be measured through indicators such as employee diversity, which reflects the company's commitment to inclusivity and fairness in the work environment. Employee empowerment and training and development initiatives can be another indicator that shows a company's commitment to its staff's well-being and professional development.

Corporate Governance practices can be measured through transparency and accountability. Indicators such as the level of transparency of financial reports, the structure of the board of directors, and compliance with business ethics standards provide an idea of how a company carries out good governance. Companies can measure, track and improve their performance continuously by selecting ESG performance indicators that suit their business goals and context. In addition, selecting relevant indicators also allows companies to convey significant information in their sustainability reports to stakeholders.

3.1.3. Sustainable Policy Implementation

Implementing sustainable policies and strategies by Environmental, Social and Governance (ESG) principles is essential in ensuring companies contribute positively to sustainability. In the environmental aspect, companies can formulate environmental protection policies that include waste management, the use of renewable energy, and efforts to reduce carbon emissions. By implementing this strategy, companies can balance business growth and ecological impact, ensuring environmentally friendly operations. Apart from that, community engagement initiatives also need to be the main focus of sustainable strategies. Companies can design policies encouraging active involvement with surrounding communities, involving local stakeholders, and supporting community empowerment programs. These initiatives may include training programs, local job creation, and support for sustainable community development projects.

The importance of improving corporate governance should be addressed. Companies can adopt policies that promote transparency, accountability, and ethics in decision-making. It can include strengthening governance structures, improving financial reporting, and implementing effective internal control mechanisms. By implementing these sustainable strategies, companies can build a strong governance foundation, minimize risks, and create a trustworthy and responsible business environment. By accommodating policies and strategies that align with ESG principles, companies can achieve long-term sustainability that benefits the company itself and has a positive impact on the environment and surrounding communities.

3.1.4. ESG Integration in the Decision-Making Process

Integrating Environmental, Social, and Governance (ESG) factors into a company's decision-making process signals a deep commitment to sustainability and corporate responsibility. First, in the environmental context, companies can incorporate ESG considerations into strategic plans by identifying business opportunities that align with sustainability principles, such as using renewable resources or reducing the carbon footprint. Daily operational decisions, such as waste management policies or energy choices, must also reflect the company's commitment to environmental protection.

As is the case with research by Lee and Isa (2022), they find a positive relationship between the implementation of ESG criteria and financial performance, suggesting that ESG criteria can increase company value. In addition, the authors also find evidence that the disclosure of ESG criteria can improve the relationship with corporate sustainability performance. Already in the study by Xu et al. (2022), the heterogeneity analysis demonstrates that the negative relationship between ESG disclosure and the risk of falling stock prices is more significant in state-owned companies, companies with higher agency costs and in companies in the development phase.

Studies on ESG in emerging markets are mixed. There is evidence to suggest that ESG disclosures reduce information asymmetry and improve investor's perception and recognition of the firm's investment strategies (Fatemi et al., 2018). Park's (2017) investigation of 175 emerging Korean firms from 2010 to 2012 shows that CSR has positive effects on long-term firm performance and provides direct and indirect value to firms through positive feedback on its reputation. In an emerging market such as Malaysia, value creation through the integration of ESG in a firm's long-term strategy with the right vision will attract the best talent, build authentic customers via effective governance structure and increase shareholder value. ESG or CSR disclosure in Malaysia is poor as disclosure is merely voluntary (Said et al., 2003). Poor disclosure of ESG activities may lead to inconsistencies in the findings on ESG disclosures as researchers rely on very limited information (Atan et al., 2018)

In the social aspect, ESG integration can involve considering social impacts in strategic decisions, such as diversity and inclusiveness policies in human resource management decisions or local community empowerment. The development of products or services that contribute positively to the welfare of society can also be an integral part of the decision-making process, creating added value and meeting the needs of consumers who are increasingly aware of social issues.

Governance aspects are the primary basis for ensuring integrity and transparency in company decision-making. Companies must integrate sound governance principles into their decision structures, including developing ethics policies, transparent financial reporting, and effective oversight processes. That will create a strong foundation for maintaining business integrity and stakeholder trust. By integrating ESG factors throughout the decision-making process, companies ensure long-term business sustainability and create a broader positive impact on the environment, society and overall corporate governance.

3.1.5. Stakeholder Involvement

Involving stakeholders in the Environmental, Social, and Governance (ESG) development and reporting process is the key to creating sustainability that is more inclusive and has a positive impact. First, engaging stakeholders involves active dialogue with customers, employees, investors, government, and the general public. Understanding their needs and expectations regarding ESG issues is an essential first step in shaping strategies and policies that align with stakeholder values and expectations. Stakeholders can also provide valuable insight to identify the ESG issues that are most relevant and significant for a company. That includes understanding community perceptions of a company's impact on the environment, social engagement efforts, and good governance. This engagement process may involve surveys, open forums, or formal consultations with various stakeholder groups.

Furthermore, companies must consider stakeholder feedback and input in their ESG reporting. Ensuring that reports include relevant and meaningful information to stakeholders can increase a company's transparency and build trust. Additionally, involving stakeholders in the ESG reporting process can create open communication channels and build ongoing relationships. By engaging stakeholders, companies meet the demands of ESG compliance and reporting standards and establish more effective and sustainable policies. Stakeholders become strategic partners in a company's journey towards sustainability, providing diverse perspectives and ensuring that the solutions adopted reflect the diverse values and interests within and around the company.

3.1.6. Continuous Reporting

Presenting Environmental, Social, and Governance (ESG) information openly and transparently in a company's sustainability report is a critical step in demonstrating a company's commitment to sustainable business practices. To achieve an optimal level of transparency, companies can adopt globally recognized reporting standards, such as the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB). Using such standards helps create consistency and ensures stakeholders can understand the ESG data presented well. In sustainability reports, ESG information must be presented clearly and structured, including the company's goals, achievements and future plans regarding ESG issues. Using graphs, tables and clear narratives facilitates understanding and interpretation of data. This information should also be updated regularly to reflect changes in business strategy and recent developments.

It is essential to highlight sustainability in the context of a company's values and how it positively impacts stakeholders. Along with this, providing a convincing and in-depth narrative regarding the progress, challenges and opportunities companies face in implementing ESG practices is crucial in establishing strong communication with stakeholders. Through this approach, companies can build a transparent image, convince stakeholders of their responsibility for ESG issues, and support the company's long-term sustainability policies. Being open and transparent in ESG reporting can also increase stakeholder trust and satisfaction, leading to more positive and sustainable relationships with them.

3.1.7. Continuous Improvement

Regular evaluation and updating of Environmental, Social, and Governance (ESG) policies and practices is essential in ensuring companies remain responsive to the dynamics of the business environment and stakeholder needs. By conducting regular reviews, companies can evaluate the effectiveness and suitability of ESG policies with developments in social, environmental and corporate governance trends. The review covers aspects of compliance with current standards and regulations and changes in stakeholder expectations. Companies can identify new trends, emerging issues, and opportunities that can be optimized to improve sustainable performance. This routine evaluation also allows companies to update and refine ESG goals and performance indicators by developments in the company's understanding and aspirations.

Additionally, regular reviews can be an opportunity to hear stakeholders' input and measure the impact of ESG policies and practices. By involving stakeholders in the evaluation process, companies can ensure that the policies implemented reflect the values and expectations relevant to all stakeholders. Companies can also take advantage of regular evaluations to review and update their long-term strategies and targets regarding sustainability. That includes evaluating the implementation of specific initiatives, such as carbon emission reduction programs, community empowerment, and sustainable innovation in products or services. By regularly evaluating and updating ESG policies and practices, companies can build a foundation that is dynamic and responsive to change, maintain consistency with corporate values, and maintain relevance in facing ongoing challenges and opportunities.

3.2. Challenges of Integrating ESP in Corporate Reporting

Despite progress in integrating ESG with corporate reporting, challenges still need to be addressed, including gaps in awareness and implementation between large and small companies and limited access to ESG-related data and information. Some of the main challenges include:

3.2.1. Difficulties of Measurement and Standardization

Measuring environmental, social, and corporate governance (ESG) aspects is often challenging due to these topics' complex and multidimensional nature. In an environmental context, for example, measuring the impact of carbon, waste management, or natural resource use often involves variables that are diverse and difficult to measure precisely. Likewise, social aspects such as employee diversity or positive impact on society can involve qualitative dimensions that are difficult to express in quantitative metrics.

A further challenge lies in the need for uniform standards in ESG measurement among different companies and industry sectors. This diversity creates difficulties in comparing ESG performance between business entities. Non-uniform standards make it difficult for stakeholders to assess and compare ESG reporting, complicating efforts to measure impact and sustainability consistently and trustworthy. Therefore, initiatives are needed to create a more uniform and comprehensive standard framework in ESG measurements so that comparisons between companies and industrial sectors can be carried out more effectively and meaningfully.

3.2.2. Supply Chain Complexity

Managing Environmental, Social, and Governance (ESG) impacts in supply chains is a significant challenge, especially for companies with extended supply chains involving global suppliers. These complex supply chains create various risks related to environmental issues, working conditions and business governance. For example, measuring the carbon footprint across a supply chain requires effective coordination and access to detailed data from multiple business partners across multiple geographic locations.

Sustainability throughout the supply chain also requires good collaboration and communication with business partners and suppliers. Companies must ensure that sustainability values are applied consistently at all supply chain levels, which requires open and ongoing dialogue with suppliers. That involves setting sustainability standards, related training, and incentives to encourage suppliers to adhere to sustainable practices. The importance of collaboration and communication in managing ESG impacts in supply chains helps identify and mitigate risks and creates new opportunities for sustainable innovation. Effective collaboration can build sustainable relationships with business partners, improve sustainability across the supply chain, and generate broader positive impacts for all relevant stakeholders.

3.2.3. Difficulty Delivering Social Impact

Measuring and communicating a company's social impact is a complex task because the intrinsic nature of that impact, such as contributions to local communities or employee empowerment, is often challenging to measure directly in numbers or quantitative metrics. For example, positive contributions to a community may include support for education, health, or local economic development, which cannot always be directly measured in numbers. Therefore, measuring a company's social impact often requires a more holistic qualitative approach, involving the creation of a narrative and in-depth analysis of the resulting positive changes.

Qualitative approaches include collecting success stories, testimonials, or case studies to illustrate the social impact felt by individuals or communities. It allows companies to capture social impact's emotional and qualitative dimensions, such as improving quality of life or employee skills and well-being. Additionally, by engaging stakeholders directly, companies can gather more profound views and understanding of their social impact. Although complex, qualitatively measuring a company's social impact can be an effective means of conveying a company's positive values and contributions to society. Augmenting this approach with relevant quantitative data can provide a complete picture of a company's social impact, ensuring that the information presented reflects it accurately and holistically.

3.2.4. Short-Term vs. Short-Term Financial Stress Long-Term Sustainability

Some companies need help with short-term financial pressures and commitment to long-term sustainability. In a competitive business environment and often focused on immediate financial results, companies often feel pressure to deliver positive quarterly financial results to meet the expectations of investors and other stakeholders. When stakeholders, especially investors, prioritize short-term financial results, companies may feel pressured to pursue sustainability as an initiative that requires investment and time to see results.

To overcome this dilemma, companies must find the right balance between short-term financial needs and long-term sustainability goals. Effective communication with stakeholders, especially investors, can help convey the long-term value of sustainability initiatives. Highlighting the positive relationship between sustainable practices and long-term financial performance can help build an understanding that investments in sustainability can bring significant long-term added value. As awareness of the urgency of environmental and social issues increases, companies that can address this dilemma by creating a balance between sustainability and short-term financial pressures can achieve stronger business sustainability and build sustainable relationships with their stakeholders.

3.2.5 Regulatory Uncertainty

Uncertainty regarding Environmental, Social, and Governance (ESG) regulations can be a significant obstacle for companies. Changes in the ESG regulatory framework can occur at the local, national, or even international level, creating challenges and the need for flexibility in business management. Companies must be ready to face these dynamics and adapt quickly to remain compliant with new norms and standards that governments or regulatory agencies may impose.

ESG regulatory uncertainty may include changes in reporting requirements, sustainability obligations, or sanctions for ethical and governance violations. Therefore, companies must pay attention to developments in ESG regulations related to their industry and build the capacity to adapt business strategies proactively. Engaging a qualified team and building effective networks with interested parties and regulatory agencies can help companies gain insight and better prepare for regulatory changes.

While challenging, the uncertainty of ESG regulations also brings opportunities for companies that can adapt intelligently. Companies that understand and respond quickly to changes in the regulatory environment can build a more substantial sustainability reputation, gain stakeholder trust, and leverage regulatory changes as an impetus for innovation and improved business sustainability.

3.2.6. Lack of Resources and Skills

Some companies, especially those operating on a small or medium scale, may need help in terms of resources and skills to manage Environmental, Social, and Governance (ESG) initiatives effectively. Implementing and managing sustainable business practices requires significant financial, technological and human resources investment. Small and medium-sized companies often have limited budgets and human resource capacity, making adopting and maintaining comprehensive ESG initiatives challenging.

Companies need to be able to manage ESG initiatives effectively to meet the demands and expectations of stakeholders regarding sustainability. Companies may need help to engage expert consultants or build internal teams that deeply understand ESG issues and how to implement them in their business context. Companies can also need help adopting the technology and reporting systems necessary to track and measure ESG impact accurately.

Overcoming these obstacles requires creativity and efficient strategies. Companies may consider collaborating with external partners, joining joint initiatives in the industry, or leveraging available educational resources and programs to increase internal understanding and skills. While managing ESG initiatives on a small or medium scale may be challenging, the efforts undertaken can bring significant benefits in the long term, strengthening a company's image and meeting society's and stakeholders' increasing demands for social and environmental responsibility.

Government support in the form of standards setting, facilities and resources is imperative to the development of ESG disclosures in Malaysia given the effect these have, both directly and indirectly, on firm's long-term performance and competitive advantage. The recognition by the government and financial institutions will boost investor confidence and improve firm's competitive advantage in the form of lower weighted average cost of capital (Wu et al., 2014). In addition, initiatives taken by the stakeholders to create greater awareness and recognition of ESG disclosures motivate firms to engage in ESG. In fact, firms that engage in ESG disclosures are recognized as being the leading and most admired firms in the market (Jeffrey et al., 2019). In Taiwan, Wu et al. (2014) find high CSR disclosure to be associated with lower cost of capital as a result of financial institutions recognizing the efforts made by the firms to improve sustainability. However, studies in Malaysia find a positive association between the weighted average cost of capital and ESG disclosure (Atan et al., 2018). The findings reflect the lack of recognition by the financial institutions in recognizing firm's engagement in ESG disclosures or to some extent may reflect firm's ineffectiveness in allocating its resources to improve future sustainability.

4. Conclusion

Environment, Social, and Governance (ESG) practices are increasingly becoming a primary focus for companies in various sectors. Awareness of ESG issues is increasing among companies, investors and the general public. To integrate ESG aspects, many companies in Indonesia have adopted good corporate governance practices, paying attention to social and environmental impacts and reporting sustainable performance. The Indonesian government also plays a role in encouraging the adoption of ESG practices through various initiatives and guidelines, including the implementation of the Principles of Good Corporate Governance (GCG). Investors in Indonesia are increasingly considering ESG factors in making investment decisions, and sustainable investing is becoming an attractive option for those who want to support companies with a positive impact on the environment and society. However, along with these positive developments, several challenges have emerged. Measuring and reporting on ESG can be complex, primarily due to the complexity of environmental, social and corporate governance aspects that are difficult to measure quantitatively. Managing ESG impacts in the supply chain, measuring social impacts, and adapting to changes in ESG regulations are some of the obstacles that need to be overcome. Companies, especially those operating on a small or mid-sized scale, may experience resource and skills constraints in managing ESG initiatives. Nonetheless, sustainability awareness is increasingly pressing, and companies are expected to adapt, overcome challenges and integrate ESG as an integral part of long-term business strategy. Thus, ESG practices are an obligation and an opportunity to create added value for all stakeholders and build a sustainable business foundation.

The implication of this research for investors (shareholders) is that it becomes a reference for the investment decision making process in the long term, so that substantial resources must be allocated to the ESG area. Especially in industrial sector companies, which in carrying out their business have a lot of impact on environmental and social aspects. Companies in the industrial sector can experience sustainable development if they are able to maintain the trust of stakeholders to consistently contribute to the environment and social life. Contributions in the environmental sector, social sector and corporate governance sector are considered capable of spurring companies to achieve financial performance that tends to increase and ensure that the company has high value in the market.

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References

Ahmadin, A., Pinem, D., Bahtiar, D., Hanika, I. M., Sofyan, H., & Jejen, A. (2023). Faktor-Faktor Yang Mempengaruhi Keputusan Investasi ESG (Environmental, Social, And Governance). *Innovative: Journal Of Social Science Research*, *3*(6), 9450-9463.

Anisah, B. R. (2020). Eksistensi Investasi Hijau dalam Poros Pembangungan Ekonomi sebagai Bentuk Manifestasi Perlindungan atas Lingkungan Hidup. *Padjadjaran Law Review*, *8*(1), 127-142.

Ariyani, L., Vadstena, B. A., & Elbert, B. (2023). LAPORAN ESG: PERAN BARU PERUSAHAAN DALAM PEMBANGUNAN BERKELANJUTAN. *Proceeding Accounting Skill Competition*, *2*(1), 88–119.

Cakranegara, P. A. (2021). Investasi hijau: mengintergrasikan faktor enviromental, social dan governance dalam keputusan investasi. *Jurnal Akuntansi, Keuangan, dan Manajemen*, *2*(2), 103-114.

Coganuli, H. T., & Adhariani, D. (2023). Perancangan Implementasi Green Budgeting Pada PT. ABC Menuju Green Company. *Owner: Riset dan Jurnal Akuntansi*, *7*(4), 3255-3266.

Daniri, M. A. (2008). Standarisasi tanggung jawab sosial perusahaan. *Indonesia: Kadin Indonesia*, *2*(1), 1-36.

Durlista, M. A., & Wahyudi, I. (2023). Pengaruh Pengungkapan Environmental, Social dan Governance (ESG) terhadap Kinerja Perusahaan pada Perusahaan Sub Sektor Pertambangan Batu Bara Periode 2017-2022. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *7*(3), 210-232.

Fadhillah, R. R., & Marsono, M. (2023). PENGARUH KINERJA KOMPONEN ENVIRONMENTAL, SOCIAL, DAN GOVERNANCE TERHADAP KINERJA KEUANGAN (Studi Empiris pada Perusahaan yang Terdaftar di Bursa Efek Indonesia pada Periode 2016-2019). *Diponegoro Journal of Accounting*, *12*(4).

Hatane, S. E., Jonathan, S. L., & Irianto, M. B. A. (2021). Pengaruh Tanggung Jawab Sosial Perusahaan Terhadap Biaya Modal Ekuitas di Indonesia. *Business Accounting Review*, *9*(1), 99-111.

Hendro, J., & Pranogyo, A. B. (2023). Inovasi Berkelanjutan: ESG Initiatives Untuk Masa Depan Yang Bertanggung Jawab. *Jurnal Ilmu Sosial, Manajemen, Akuntansi dan Bisnis*, *4*(4), 135-147.

Husnah, H., Nurdin, D., & Kasim, M. (2023). Informativeness of environmental, social and governance (ESG) data on investment decisions: The mediating role purpose of investment. *International Journal of Data and Network Science*, *7*(4), 1991-2000.

Inawati, W. A., & Rahmawati, R. (2023). Dampak Environmental, Social, Dan Governance (ESG) Terhadap Kinerja Keuangan. *Jurnal Akademi Akuntansi*, *6*(2), 225-241.

Kirani, A. M., & Wijayanti, D. M. (2023, July). The Role of Environmental, Social, and Government (ESG) Reporting and Cost Efficiency in Increasing Firm Value. In *Annual International Conference on Islamic Economics and Business (AICIEB)* (Vol. 3, pp. 118-131).

Kurniawan, M. N. (2023). *Humas Strategis:: Menavigasi Tantangan Multidimensi Sustainability, Krisis, Gen Z Hingga Sepakbola*. PT. Rayyana Komunikasindo.

Minggu, A. M., Aboladaka, J., & Neonufa, G. F. (2023). Environmental, Social dan Governance (ESG) dan Kinerja Keuangan Perusahaan Publik di Indonesia. *Owner: Riset dan Jurnal Akuntansi*, *7*(2), 1186-1195.

Moleong, L. J. (2014). Metode penelitian kualitatif edisi revisi. *Bandung: PT Remaja Rosdakarya*.

Noor, J. (2011). Metodelogi penelitian. *Jakarta: Kencana Prenada Media Group*.

Nugroho, Y., Ermawati, N., & Suhardianto, N. (2023). Pelaporan Environment Social Governance (ESG) dari Sudut Pandang Filsafat Jawa Berdimensi" Hamemayu Hayuning Bawana". *Akuntansi: Jurnal Akuntansi Integratif*, *9*(1), 1-18.

Pertiwi, L. R. B., & Hersugondo, H. (2023). PENGARUH KINERJA ENVIRONMENTAL, SOCIAL, GOVERNANCE (ESG) TERHADAP KINERJA PERUSAHAAN DENGAN KENDALA KEUANGAN SEBAGAI VARIABEL MODERASI (Studi pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2016-2020). *Diponegoro Journal of Management*, *12*(1).

Pranesti, A., Larasati, K. S., & Widiyanti, A. (2022). Kinerja Keterlanjutan dan Nilai Perusahaan: Sebuah Kajian Teoritis. *Jurnal Ilmiah Universitas Batanghari Jambi*, *22*(3), 1624-1631.

Purwanto, A. (2011). Pengaruh tipe industri, ukuran perusahaan, profitabilitas, terhadap corporate social responsibility. *Jurnal Akuntansi dan Auditing*, *8*(1), 12-29.

Putri, B. A. I. (2022). Adopsi Integrated Reporting: Strategi Korporasi Berkelanjutan Menuju Pencapaian SDG 2030. *Accounting Global Journal*, *6*(1), 78-103.

Setiawati, L. W. (2018). Analisis pengaruh profitabilitas, ukuran perusahaan, leverage, dan pengungkapan sosial terhadap nilai perusahaan pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2011-2015. *Jurnal Akuntansi*, *12*(1), 29-57.

Stiadi, D. (2023, May). Moderating Environmental, Social, and Governance (ESG) risk in the relationship between investment decisions and firm value. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1177, No. 1, p. 012007). IOP Publishing.

Susanto, E., & Sirnawati, N. K. (2023). Perilaku Keuangan Berkelanjutan: Dampak Investasi Sosial dan Lingkungan. *Syntax Idea*, *5*(12), 2604-2619.

Vivianita, A., & Nafasati, F. (2018). Pengaruh environmental performance terhadap kinerja keuangan dengan corporate governance sebagai variabel pemoderasi. *Jurnal REP (Riset Ekonomi Pembangunan)*, *3*(1), 48-59.

Wulandari, R., Nofryanti, N., & Rosini, I. (2023). Pengaruh Kinerja Environmental, Social, Governance terhadap Kinerja Keuangan serta Implikasinya terhadap Nilai Perusahaan. *Accounting: Journal of Accounting and Finance*, *8*(02).

Xaviera, A., & Rahman, A. (2023). Pengaruh Kinerja ESG Terhadap Nilai Perusahaan Dengan Siklus Hidup Perusahaan Sebagai Moderasi: Bukti Dari Indonesia. *Jurnal Akuntansi Bisnis*, *16*(2), 226-247.