Enhancing Sustainable Transparency: A Content Analysis of Sustainability Reporting in Financial vs. Non-financial Sectors

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Abstract

Sustainability reporting is becoming increasingly important for companies across various industries due to the growing awareness of sustainability issues and the stakeholders demand for sustainability performance information. However, sustainability reporting practices might differ throughout industries due to their specific characteristics. This study aims to compare sustainable reporting practices in financial and non-financial industries. A descriptive qualitative approach using secondary data is chosen in which the 2022 sustainability report was produced by the top ten financial and non-financial companies listed on the Indonesia Stock Exchange. This study uses content analysis with Landrum model categories and keyword frequency to evaluate the transparency levels of financial and non-financial industries' sustainability reporting. The findings reveal that financial industries disclose more about the environment or ecology than non-financial industries that are more business- centered. The results of this study contribute to companies improving sustainable reporting practices and helping stakeholders understand sustainability information reported by companies in different industries so that they can make better decisions.

Keywords: content analysis, financial industry, non-financial industry, sustainability reporting

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1. INTRODUCTION

Sustainability reporting is a report that discloses the environmental and social practices of a company globally. Sustainability reports include balanced quantitative and qualitative information about the company's financial, social, and environmental performance (Aggarwal and Singh, 2019). A new disclosure model, sustainability reporting, uncovers potential value that companies can apply to their policies (Mousa, 2015; Buallay, 2019). Sustainability reports can enhance stakeholder engagement by disclosing material information, improving legitimacy, and fostering relationships

by facilitating informed decision-making, building trust, and identifying risks and opportunities (Galeotti *et al.*, 2023; Rusu *et al.*, 2024).

Indonesia has actively participated in enhancing sustainability, starting with the issuance of OJK Regulation No. 51/POJK.03/2017 (Otoritas Jasa Keuangan, 2017), which aims to encourage sustainable financial practices for financial service institutions, issuers, and public companies. Presidential Regulation No. 111 of 2022 (Presiden RI, 2022) reinforces this by pressuring the industry to pay more attention to sustainability. Currently, Indonesia faces a dilemma where industrial activities can contribute to economic growth, but the waste generated can damage the environment around industrial areas. According to the report from the Ministry of Environment and Forestry (2023), in 2023, the production of hazardous and toxic waste (B3) in Indonesia reached 59.83 million tons. The existence of manufacturing waste emphasizes firms' duties to the environment and society. Sustainability reports have become a means for companies to communicate with the public in this regard.

The Global Reporting Initiative (GRI) Standards, the International Integrated Reporting Council (IR) Framework, and the Sustainability Accounting Standards Board (SASB) support the global implementation of sustainability reporting. Businesses adopt these standards as guidelines for their sustainability reporting practices. Each guideline emphasizes different material aspects, including stakeholder approaches, value creation, and investor focus. The purpose of sustainability reporting is to manage stakeholders, enhance reputation, legitimacy, and accountability, change attitudes, and create identity. Adopting ESG practices boosts a company's competitive advantage and, in turn, increases its value (Cakranegara and Sidjabat, 2021).

Sustainability reporting is becoming increasingly important for companies across various industries due to the growing awareness of sustainability issues and the demand for sustainability performance information from stakeholders. However, sustainability reporting practices might differ throughout industries due to their specific characteristics. Therefore, this study will analyze sustainability reporting standards in two distinct industries: financial and non-financial sectors. In sustainable reporting, the financial industry adopts green banking to implement its sustainability strategies. Green banking prioritizes environmental considerations in lending practices, encourages industries to invest in effective environmental management and technology, and promotes sustainable investments (Biswas, 2011). Promoting sustainable investments is important for financial institutions to develop appropriate technology, meet industry needs for environmental impact control, and enforce environmental laws and regulations (Mousa and Bouraoui, 2023). Sustainability reporting practices vary for non-financial industries, such as mining and forestry. These sectors have a stronger ecological relationship and greater environmental responsibilities, leading to an environmental focus (Landrum and Ohsowski, 2017). Globally, businesses tend to prioritize survival over environmental concerns. This is largely due to insufficient public understanding of environmental and sustainability issues despite government regulations supporting these practices.

Previous research has thoroughly investigated the influence of sustainability reporting on firm performance in Indonesia (Khusnah et al., 2021; Lisin et al., 2022; Rusu et al., 2024), but no particular study has been conducted on the transparency of sustainability reports in Indonesia. Furthermore, the characteristics of the financial and non-financial businesses differ significantly. On the one hand, the non-financial industry will be more open about its environmental responsibilities than non-financial industries. On the other hand, the financial industry has rules in place to ensure the availability of green goods, which enhances its competitiveness. This study aims to fill the knowledge gap regarding sustainable reporting practices in the financial and non-financial industries. This study can provide insights into how companies in different sectors report their sustainability performance and develop sustainability strategies that are more effective and industry-specific by comparing sustainable reporting practices in both industries.

2. LITERATURE REVIEW

2.1. Legitimacy Theory

The legitimacy theory is a theory that describes the relationship between a company and its environment (Mousa et al., 2015). The legitimacy theory originates from the concept of organizational legitimacy, which is defined as a condition or status that occurs when a company's value system aligns with the value system of the larger social system of which the entity is a part. Companies can achieve legitimacy by demonstrating that their activities align with social values. The legitimacy theory states that companies strive to gain and maintain support from stakeholders by showing that they operate responsibly and in accordance with social norms. To minimize the environmental impact of their production, some companies issue sustainability reports and collaborate with environmental organizations. This approach helps them maintain stakeholder support by demonstrating social responsibility and environmentally friendly operations. A company must be able to generate maximum profit in accordance with its primary goal in conducting business, but the company must also be responsible for providing welfare to the surrounding community and maintaining environmental sustainability (Agustia et al., 2018). Sustainability reports help organizations meet stakeholder expectations and regulatory requirements, thereby enhancing their legitimacy in the market (Amos, 2023).

2.2. Stakeholder Theory

The second theory underlying this research is the stakeholder theory. Stakeholders are groups or persons who can affect or be influenced by an organization's goal fulfillment (Freeman and David, 1983). Stakeholder theory asserts that companies must consider the interests of all stakeholders. Some companies prioritize not only shareholders but also employees, customers, society, and the environment in their decisions. They strive to protect and benefit employees through health and wellness programs, fair wages, and improved working conditions. Additionally, these companies take steps to minimize their environmental impact through efficient waste and energy management and engage in social activities that benefit surrounding communities. Sustainability reports enhance stakeholder engagement by providing transparent, relevant information, fostering trust, and

addressing stakeholder concerns (Omotilewa et al., 2024). In business, stakeholders prefer companies known for their strong reputation, solid financial performance, and high levels of transparency. Therefore, companies with strong financial performance or solid fundamentals attract investors due to their promising prospects. These companies often enjoy high stock prices and a stellar reputation. This is because well-performing companies tend to publicize their achievements and enhance their reputation through sustainability reports (Khusnah et al., 2021). Companies with strong financial performance maintain their competitive advantage by producing products and services that uniquely benefit customers in a cost-effective manner, thereby generating superior financial results amid intense competition and consistently outperforming rivals and industry averages (Parniangtong, 2017).

2.3. Sustainability Reporting Practices in Indonesia

The key drivers of sustainability reporting practices can vary between the financial and non-financial sectors, influenced by various factors such as corporate governance, regulatory frameworks, and stakeholder expectations. The financial industry focuses on business continuity and its obligation to provide excellent services to the community, but the non-financial industry has a larger responsibility to the natural environment, given the possibility of contamination from its production. In other words, the financial sector focuses more on corporate governance and regulatory compliance, while non-financial companies focus on stakeholder expectations and comprehensive reporting frameworks (Patel et al., 2024; Yavuz et al., 2024). Therefore, there may be a difference in orientation between companies in the financial and non-financial industries. Previous research shows that companies in the financial industry are more business-oriented, while companies in the nonfinancial industry are more environmentally or ecologically oriented (Landrum and Ohsowski, 2017). Understanding the focus and orientation of the financial and nonfinancial industries is crucial for developing more effective sustainability strategies tailored to the needs of each industry. Therefore, the orientation of companies in both industries is analyzed through more in-depth content analysis.

3. METHODOLOGY

This study employs a descriptive method with a qualitative approach. Data are collected by analyzing the 2022 sustainability reports from companies in both the financial and non-financial sectors.

Table 1. Population

Criteria	Sample
Companies listed in Indonesian Stock Exchange in 2022	770
Financial companies listed in IDX-IC	139
Non-financial companies listed in IDX-IC	631

Source: Author (2024).

The industry sector is based on the IDX-IC index. There are 11 sectors, including energy, raw materials, industries, primary consumer goods, non-primary consumer goods, healthcare, property and real estate, technology, infrastructure, transportation and logistics, and finance. The study sample includes 110 companies:

10 from the financial industry and 100 from the non-financial industry. Companies with strong financial fundamentals, high liquidity ratios, that have been listed on the Indonesia Stock Exchange for over two years and that published sustainability reports in 2022 are chosen. Then, their sustainability report are analyzed using content analysis based on Landrum's model (Landrum and Ohsowski, 2017). The Landrum model is utilized in this study because it may divide the content of sustainability reports into categories that are relevant to the firm's aims, exposing the transparency of sustainability report disclosures for each organization. This approach relies on content analysis and keyword frequency counts. Content analysis is a qualitative technique for systematically interpreting and drawing conclusions from text by evaluating it against predefined criteria (Krippendorff, 2004; Aggarwal and Singh, 2019). The Landrum model categorizes industries as either business-oriented or ecology-oriented, determined by the frequency of keywords in the sustainability reports. The model divides sustainability reporting into five stages, each with specific keywords:

- **1. Stage 1:** Compliance (very weak sustainability), where the company is involved in externally applied activities. The keywords used are compliance, legal, law, legality, regulate, and regulation.
- 2. Stage 2: Business-Centric (weak sustainability), where the company is involved in self-centered activities that bring benefits to the company. The keywords are biotechnology, biodiversity, biodiversity, biodigester, biopori, biometric, biogas, business as usual, business model, competitive advantage, competitiveness, cost, costs, expense, benefit, customers, demand, efficiency growth, market, marketing, value of money, money, profitable, profitability, community.
- 3. Stage 3: Systemic (mid-level sustainability), where companies work with others to integrate all realms of sustainability activities (environmental, economic, and social) to address systemic change. The keywords consist of collaborate, collaborative, cooperate, cooperative, coordination, eco-efficient, game changer, game- changing, citizens, global, human, humanity, industry, industrialization, integrate, integration, integrative, transformed, transformational.
- **4. Stage 4:** Regenerative (strong sustainability), where companies understand the science of sustainability and strive to repair the damage caused by the consumer society of the industrial era. Keywords are carrying capacity, consumption, holistic, interdependence, depending, natural system, planet, planetary, boundaries, preservation, redistribution, repair, restore, restoration, restorative, science, scientific, steady growth, zero growth, technology.
- **5. Stage 5:** Coevolutionary (very strong sustainability), where the company understands the place of humans, the company, and society in partnership with nature, giving as much as receiving. The keywords are circular, ecosystem, ethics, environment, ecology, flourish, regenerated, regeneration, regenerative, resilient, and resilience.

This model categorizes the disclosure of the sustainability reports at stages 1, 2, and 3 as business-oriented industries, while stages 4 and 5 are classified as ecology-oriented industries. This approach provides insights into the company's

understanding of sustainability and demonstrates the company's maturity stage in corporate sustainability, which will ultimately determine the actions taken by the company to mitigate existing risks and capture future opportunities.

This study will enrich the literature on sustainability reporting and provide valuable insights for companies to improve their practices. Additionally, companies in both financial and non-financial sectors can use these findings to refine their sustainability strategies, including adopting more environmentally conscious operational practices in the future.

4. RESULT AND DISCUSSION

4.1. Descriptive Statistics

The analysis of the sustainability reports from 10 financial companies and 110 non-financial companies listed on the Indonesia Stock Exchange in 2022 indicates that all companies (100%) in both sectors exhibit a weak sustainability level and are business- oriented. The following Table 2 presents the descriptive statistics for the total sustainability scores of financial and non-financial companies.

 Table 2. Descriptive Statistics of Total Scores for All Industries

	N	Minimum	Maximum	Mean	Std. Deviation
Total Score for 1-3 stages	110	22	2723	692.25	512.522
Total Score for 4-5 stages	110	1	336	59.40	56.023
Valid N (listwise)	110				

Source: Data Processed (2024).

The results show that the maximum total sustainability score for stages 1-3 (very weak to weak sustainability) for all industries is 2,723 (PT Bank Jago Tbk), and the minimum total score is 22 (PT Steady Safe Tbk). The sustainability ratings vary from 336 (PT Merck Tbk) to 1 (PT Steady Safe Tbk) for stages 4 to 5. This result suggests that all industries, whether financial or non-financial, are business-oriented and have low sustainability levels.

Descriptive statistics are used to distinguish the total sustainability scores between the financial and non-financial industries. The results indicate that while all industries are business-oriented, financial companies disclose more business-oriented information than non-financial companies. This is evident from the mean total sustainability scores for stages 1-3, with the financial industry scoring 1,093 and the non-financial industry scoring 653. Tables 3 and 4 below present the descriptive statistics for both industries, allowing for a comparison.

Table 3. Descriptive Statistics of Total Scores for Financial Industries

	N	Minimum	Maximum	Mean	Std. Deviation
Total Score for 1-3 stages	10	39	2723	1092.80	859.553
Total Score for 4-5 stages	10	6	178	90.50	53.409
Valid N (listwise)	10				

Source: Data Processed (2024).

Table 4. Descriptive Statistics of Total Scores for Non-Financial Industries

	N	Minimum	Maximum	Mean	Std. Deviation
Total Score for 1-3 stages	100	22	1965	652.20	451.906
Total Score for 4-5 stages	100	1	336	56.29	55.578
Valid N (listwise)	100				

Source: Data Processed (2024).

The initial hypothesis of this study suggests that non-financial companies would have a greater responsibility regarding the environment and thus make more environmental disclosures than the financial companies. However, the findings reveal the opposite: financial companies disclose more about the environment or ecology than non-financial companies. The mean score of the total sustainability stages 4-5 (ecological orientation) shows that financial companies scored 90, while non-financial companies scored only 56. Notably, PT Merck Tbk, a non-financial company in the health sector, has superior environmental disclosures compared to other companies, even surpassing the highest score of 178 from PT Bank Mandiri (Persero) Tbk in the financial sector.

Descriptive statistics are used to show findings related to the sustainability stages, both collectively and partially, for all industries. The following Table 5 presents the results of the descriptive statistics for the sustainability stages across all industries.

Table 5. Descriptive Statistics of Sustainability Stages in All Industries

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N	Minimum	Maximum	Mean	Std. Deviation
110	6	751	190.71	167.771
110	10	1326	335.05	252.203
110	2	1040	166.50	155.025
110	1	276	38.33	35.520
110	0	261	21.07	30.678
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	110 110 110 110 110 110	110 6 110 10 110 2 110 1 110 0	110 6 751 110 10 1326 110 2 1040 110 1 276 110 0 261 110 1 2	110 6 751 190.71 110 10 1326 335.05 110 2 1040 166.50 110 1 276 38.33 110 0 261 21.07

Source: Data Processed (2024).

The table shows that both financial and non-financial companies (population 110 and mean score 335.05) are at stage 2 of sustainability, which is business-

centered. This result indicates that the overall sustainability of companies in all industries is weak. PT Bank Jago Tbk, a banking sector company in the financial industry, has the highest business-centered disclosure. When ranking the next stages, the average disclosure positions in sustainability reports across all industries are compliance (mean score 190.71), systemic (mean score 166.50), regenerative (mean score 38.33), and coevolutionary (mean score 21.07).

Tables 6 and 7 provide descriptive statistics of sustainability stages in financial and non-financial industries.

Table 6. Descriptive Statistics of Sustainability Stages in Financial Industries

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	6	728	326.00	260.782
Business centered	10	26	1326	497.40	379.470
Systemic	10	7	710	269.40	238.397
Regenerative	10	3	101	50.60	28.810
Coevolutionary	10	3	102	39.90	33.982
Valid N (listwise)	10				

Source: Data Processed (2024).

Table 7. Descriptive Statistics of Sustainability Stages in Non-Financial Industries

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	100	10	751	177.18	150.910
Business Centered	100	10	1160	318.81	232.404
Systemic	100	2	1040	156.21	141.835
Regenerative	100	1	276	37.10	36.012
Coevolutionary	100	0	261	19.19	29.864
Valid N (listwise)	100				

Source: Data Processed (2024).

The partial descriptive statistical test results align with the combined test results, showing that companies in both the financial and non-financial industries are at the second stage, which is business-oriented. This is indicated by the highest mean scores at stage 2 for both financial (497.40) and non-financial (318.81) industries. The ranking of disclosures frequently made by companies in both industries follows the same order as the combined results: compliance, systemic, regenerative, and coevolutionary.

The financial industry provides more environmental disclosures than the non-financial industry for several reasons (Mousa and Bouraoui, 2023). Firstly, the financial industry is often subject to strict regulations regarding sustainability and social responsibility. In Indonesia, for example, banks and financial institutions must comply with ESG standards enforced by the Financial Services Authority (OJK) to promote environmentally friendly business practices. Secondly, investing in environmentally harmful projects can increase financial risks and damage their reputation, so they are more likely to support sustainable projects to mitigate these risks. Thirdly, the growing demand from investors and consumers for sustainable

products and services has led the financial industry to offer green investment products and support environmentally friendly projects. Finally, the financial industry recognizes that environmental sustainability has a substantial long-term influence on economic stability; thus, by promoting sustainable practices, they assist in securing future economic stability.

Additionally, descriptive statistics for the sustainability stages of companies in each sector are discussed. Table 8 presents the descriptive statistics for the sustainability stages in the energy sector.

Table 8. Descriptive Statistics of Sustainability Stages in the Energy Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	100	57	729	319.70	203.767
Business Centered	100	117	688	348.10	176.867
Systemic	100	69	414	226.60	114.148
Regenerative	100	17	134	55.30	42.649
Coevolutionary	100	6	42	22.00	11.005
Valid N (listwise)	100				

Source: Data Processed (2024).

The energy sector achieves a maximum score of 729 in compliance disclosure and a minimum score of 6 in coevolutionary disclosure. This finding suggests that companies in this sector prioritize compliance with ESG regulations but fall short of providing information about collaboration and adaptation to environmental and social changes. Energy is crucial for production, and as emerging economies grow faster than expected, their energy consumption increases, which is essential for improving living standards (Islam et al., 2013). Therefore, energy sector companies tend to prioritize compliance over social and governance aspects (ESG). This is because, first, the main focus of energy companies is short-term profitability, and compliance with regulations and industry standards is considered important to ensure smooth operations and minimize financial risks. Second, the energy sector has significant environmental and social impacts, making compliance crucial to avoid legal actions and strict regulations. Third, a lack of incentives alongside adequate regulations to encourage ESG, along with a conservative business culture focused on compliance, makes it more difficult to adopt improved ESG practices.

Table 9 below presents the results of descriptive statistics for the sustainability stages in the raw materials sector.

Table 9. Descriptive Statistics of Sustainability Stages in the Raw Material Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	61	615	232.90	179.066
Business Centered	10	138	644	346.10	179.375
Systemic	10	54	1040	274.50	299.738
Regenerative	10	15	76	47.00	21.150
Coevolutionary	10	4	261	47.40	76.552
Valid N (listwise)	10				

Source: Data Processed (2024).

The descriptive test results for the raw materials sector show that the highest value, 1,040, is in the third stage of disclosure, known as systemic. This stage emphasizes the importance of cooperation between companies to integrate all sustainability activities (environmental, social, and governance) to address systemic changes. In the raw materials sector, there are often significant environmental and social impacts, such as pollution, habitat destruction, and conflicts with local communities, which require collaboration between companies, governments, and civil society. The maximum value at the third stage indicates that companies in the raw materials sector recognize the importance of collaboration between companies, governments, and society. This collaboration helps them manage risks, enhance their reputation, and contribute to sustainable development. However, the minimum value of the fifth stage, coevolutionary disclosure, suggests that these companies still do not fully grasp the concept of equality and mutual benefit in the relationship between humans, companies, and nature. This concept emphasizes the interconnectedness and interdependence of humans, companies, and nature. Nature provides the resources needed by humans and companies, and humans and companies have the responsibility to preserve nature and use its resources sustainably.

Table 10 below presents the results of the descriptive statistics for the sustainability stages in the industrial sector.

Table 10. Descriptive Statistics of Sustainability Stages in the Industrial Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	26	240	122.30	74.056
Business Centered	10	62	506	225.50	170.446
Systemic	10	33	249	110.90	81.691
Regenerative	10	4	47	20.50	14.010
Coevolutionary	10	0	81	18.80	24.769
Valid N (listwise)	10				

Source: Data Processed (2024).

A maximum score of 506 in the business-centered aspect suggests that companies in the industrial sector are likely already involved in internal sustainability efforts. However, this score does not necessarily imply that they have reached Stage 3, which requires a more comprehensive and structural approach to sustainability emphasizing on broader, systemic consequences. Characteristics of the industrial sector, such as profitability pressures, environmental regulations, and long-term investments, also influence existing ESG disclosure patterns. Some companies in the industrial sector have not disclosed any information related to collaboration and adaptation to environmental and social changes, as indicated by the minimum value of 0 in the coevolutionary aspect. This result indicates that there is still no full understanding of the concept of equality and mutual benefit in the relationship between humans, companies, and nature.

Table 11 presents the results of descriptive statistics for the sustainable stages in the primary consumer goods sector.

Table 11. Descriptive Statistics of Sustainability Stages in the Primary Consumer Goods Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	10	284	110.50	94.559
Business centered	10	11	424	191.10	136.701
Systemic	10	7	408	151.70	146.319
Regenerative	10	1	87	34.90	27.998
Coevolutionary	10	0	76	26.00	29.303
Valid N (listwise)	10				

Source: Data Processed (2024).

The highest score in the business-centered aspect indicates that companies in the primary consumer goods sector are actively engaged in internal sustainability efforts. This engagement is likely driven by the short product life cycle in this sector, which complicates the focus on long-term sustainability. Companies need to continuously innovate and launch new products to stay competitive. However, more and more consumers are starting to pay attention to the environmental and social impacts of the products they buy, prompting companies in the primary consumer goods industry to adapt and demonstrate their commitment to sustainability. A score of 0 in the coevolutionary aspect shows that some industrial sector companies have not provided any information about their efforts in collaboration and adaptation to environmental and social changes. This suggests that the idea of equality and mutual benefit among humans, companies, and nature is still not fully grasped.

The following Table 12 presents the results of descriptive statistics for the sustainable stages in the non-primary consumer goods sector.

Table 12. Descriptive Statistics of Sustainability Stages in the Non-Primary Consumer Goods Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	21	375	151.80	139.369
Business centered	10	113	1160	484.70	368.674
Systemic	10	12	320	125.10	98.942
Regenerative	10	7	75	19.30	20.205
Coevolutionary	10	0	31	8.40	10.564
Valid N (listwise)	10				

Source: Data Processed (2024).

The highest score in the non-primary raw materials sector is at the business-centered stage. Companies in this sector often focus on operational efficiency and productivity to reduce costs and increase profits. This can divert attention from environmental initiatives. Companies may prioritize business strategies that directly impact profitability over long-term investments in environmental sustainability. In Indonesia, although there are strong environmental regulations such as the Environmental Impact Assessment (AMDAL), their implementation is often

inconsistent. Various obstacles, including the lack of law enforcement and commitment from the relevant parties (Indonesia Environment & Energy Center, 2024), cause this issue. Stricter regulations often exist but are not effectively implemented in the field, leading to gaps. The gap between regulations and the implementation of environmental policies causes companies to be unmotivated to invest in sustainable practices.

Table 13 below presents the results of descriptive statistics for the continuous stages in the property and real estate sector.

Table 13. Descriptive Statistics of Sustainability Stages in the Property and Real Estate Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	38	144	87.00	35.075
Business Centered	10	96	660	230.90	173.937
Systemic	10	25	127	62.40	28.880
Regenerative	10	10	129	34.70	34.731
Coevolutionary	10	0	19	6.90	5.238
Valid N (listwise)	10				

Source: Data Processed (2024).

In the property and real estate sector, the maximum score of 660 is at stage 2, which is business-centered. This indicates the integration of ESG principles into business strategies in the property and real estate sector. The property and real estate industry requires significant capital investment in development projects. This can lead companies to prioritize short-term profitability over sustainability practices that offer long-term benefits. Additionally, a minimum score of 0 in the coevolutionary aspect shows that some industrial sector companies have not disclosed any information about their collaboration and adaptation to environmental and social changes. This suggests that the concept of equality and mutual benefit among humans, companies, and nature is still not fully understood.

The following Table 14 presents the results of descriptive statistics for the sustainability stages in the technology sector.

Table 14. Descriptive Statistics of Sustainability Stages in the Technology Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	12	363	77.50	107.162
Business Centered	10	32	379	139.40	107.995
Systemic	10	5	253	74.60	92.991
Regenerative	10	1	44	12.40	13.898
Coevolutionary	10	0	28	7.00	8.472
Valid N (listwise)	10				

Source: Data Processed (2024).

The technology sector shows a maximum score of 363 in compliance disclosure, indicating a high level of adherence to ESG regulations. However, the minimum score of 0 in coevolutionary disclosure suggests a lack of information on collaboration and adaptation to environmental and social changes. The nature of the technology industry, which involves handling personal data and the risk of cyberattacks, drives compliance with data privacy regulations (like GDPR) and cybersecurity standards (such as the NIST Cybersecurity Framework). This compliance is crucial for protecting data, building trust, and reducing risk.

The following Table 15 presents the results of descriptive statistics for the continuous stages in the infrastructure sector.

Table 15. Descriptive Statistics of Sustainability Stages in the Infrastructure Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	104	388	232.60	91.951
Business Centered	10	200	499	356.20	105.001
Systemic	10	112	270	184.30	56.677
Regenerative	10	9	64	37.70	15.159
Coevolutionary	10	4	55	19.50	14.939
Valid N (listwise)	10				

Source: Data Processed (2024).

The infrastructure sector shows a maximum score of 499 in business-centered disclosure, indicating strong engagement in internal sustainability activities. However, the minimum score of 4 in coevolutionary disclosure suggests that these companies still pay insufficient attention to disclosing information about their collaboration and adaptation to environmental and social changes. The nature of the industry drives a focus on long-term profitability and financial stability, making business-centered aspects a priority. The complexity of infrastructure projects and their long-life cycles can make adapting to changes more difficult, resulting in lower coevolutionary efforts.

The following Table 16 presents the results of descriptive statistics for the continuous stages in the healthcare sector.

Table 16. Descriptive Statistics of Sustainability Stages in the Healthcare Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	91	751	183.20	202.894
Business Centered	10	143	1028	389.90	282.725
Systemic	10	15	462	161.10	130.666
Regenerative	10	14	276	66.40	75.057
Coevolutionary	10	0	60	18.60	20.527
Valid N (listwise)	10				
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Source: Data Processed (2024).

The healthcare sector shows a maximum score of 1028 in business-centered disclosure, indicating strong engagement in internal sustainability activities.

However, the minimum score of 0 in coevolutionary disclosure suggests that these companies pay insufficient attention to disclosing information about their collaboration and adaptation to environmental and social changes. Due to its emphasis on meeting consumer needs and its inherently social nature, the healthcare sector prioritizes healthcare services over environmental concerns, leading to a lower score in the coevolutionary aspect. World Health Organization (2020) issued the WHO Global Strategy on Health, Environment, and Climate Change. The member countries use this technique to address issues in health, the environment, and climate change, including governments, communities, and individuals. The health sector must transform and rethink its approaches to living, working, producing, consuming, and managing. Indirectly, this strategy emphasizes that the health sector should first address its internal needs before focusing on environmental transformations. The transformation referred to in this strategy requires actions focused on upstream health determinants, environmental factors, and climate change determinants through an integrated approach that becomes mainstream across all sectors, using a public health framework and supported by adequate governance mechanisms and high-level political will tailored to national circumstances. This suggests that in order for enterprises in the healthcare sector to achieve this transformation, they must first establish effective corporate governance, which is why the healthcare sector has not yet achieved coevolutionary status but is on its way.

Table 17 below presents the results of descriptive statistics for the continuous stages in the transportation and telecommunications sectors.

Table 17. Descriptive Statistics of Sustainability Stages in Transportation and Telecommunications Service Sector

	N	Minimum	Maximum	Mean	Std. Deviation
Compliance	10	10	397	254.30	124.837
Business Centered	10	10	901	476.20	273.748
Systemic	10	2	291	190.90	83.230
Regenerative	10	1	75	42.80	23.093
Coevolutionary	10	0	36	17.30	9.499
Valid N (listwise)	10				

Source: Data Processed (2024).

The transportation and telecommunications sectors show a maximum score of 901 in business-centered disclosure, indicating strong engagement in internal sustainability activities. However, the minimum score of 0 in coevolutionary disclosure suggests that these companies pay insufficient attention to disclosing information about their collaboration and adaptation to environmental and social changes. The transportation sector prioritizes service delivery, so this sector must be able to identify, respond to, and meet the services needed by its customers accurately, correctly, and well. This is in line with the results of the analysis, which show that the most frequent disclosures in the transportation sector are business-centered, focusing more on customer keywords. This also adds to the limited disclosure of coevolutionary elements. In the future, transportation services in Indonesia must evolve into a sustainable system that effectively connects urban and

rural areas. Improvements should include implementing environmentally friendly transportation, which will be cleaner in terms of exhaust emissions and quieter in terms of noise. This indicates that the main priority of transportation services currently remains at the business level, but in the future, it will shift towards the environment.

The same thing happens in the telecommunications service sector. The research results from the SDPPI Research Center Team indicate that the performance of the telecommunications service industry is highly dependent on the behavior of companies, which will determine the competitiveness of the market. The structure of the telecommunications service industry is heavily reliant on fundamental conditions, such as technology or product demand (Vidyantina *et al.*, 2018). This is why the telecommunications service sector tends to emphasize business-centered keywords more than those related to regenerative and coevolutionary environmental disclosures. For instance, PT Telekomunikasi Indonesia incorporates an ESG pillar in its sustainability strategy. In terms of the environment, management has implemented e-waste management, energy efficiency, greenhouse gas (GHG) emission reduction, water conservation, and the utilization of new and renewable energy (NRE). However, the form of commitment to the environment is not clearly depicted compared to the other two pillars, namely social and governance, which are detailed meticulously through various activities.

4.2. Discussion

Comparing the financial and non-financial sectors in sustainability reporting is critical for understanding the various approaches and implications each sector has on environmental sustainability. Financial sectors may prioritize sustainable investing methods, whereas non-financial sectors may prioritize lowering their direct environmental impact. This comparison highlights the levels of transparency and accountability in environmental reporting, identifying areas for development and promoting best practices across industries. The content analysis reveals that sustainability reports from financial and non-financial industries listed on the Indonesia Stock Exchange remain business-oriented. Descriptive statistics show high total scores in stages 1, 2, and 3 for both sectors, indicating a business-centered approach. The financial sector has the highest overall sustainability score. Although stage 4 and 5 scores are low for both industries, the non-financial sector scores higher in these stages. These results provide insights into the company's understanding of sustainability and demonstrate the company's maturity stage in corporate sustainability, which will ultimately determine the actions taken by the company to mitigate existing risks and capture future opportunities. This shows that non-financial companies are beginning to move towards becoming more ecologically conscious companies.

Several large companies in the industry, such as Gudang Garam and HM Sampoerna, have a significant environmental impact. Their activities generate greenhouse gas emissions, air pollution, and hazardous waste. Nevertheless, the environmental disclosures of these two companies are relatively low. This means they do not transparently report their environmental impact to the public and other stakeholders.

These findings suggest that sustainability report disclosures remain businessoriented rather than environmentally focused. This aligns with previous research (Landrum and Ohsowski, 2017), which highlights that the global perspective on corporate sustainability emphasizes the industry's need to adopt stronger sustainability practices to better address future challenges. Government regulation is crucial to align strong behavior with public and stakeholder interests. The study found that sustainability report disclosures, often combined with integrated reports, focus more on social and governance aspects than on environmental ones. This is likely because environmental disclosures are more costly compared to social and governance disclosures, which companies have been implementing for a longer time.

Higher scores in corporate social disclosure result in lower average returns, especially in environmental aspects (Brammer and Pavelin, 2004). Although social responsibility is often associated with financial gains for companies, the effect is not always positive. One industry may view a practice as best, while another may see it as wasteful. The financial sector, however, excels in environmental disclosures due to stringent regulations on information reporting, including environmental and sustainability data. Regulations such as Indonesia's POJK 51/2017, which mandates sustainable finance practices for financial institutions, issuers, and public companies, and the international Task Force on Climate-related Financial Disclosures (TCFD) require financial institutions to report their environmental and social impacts in a transparent manner. POJK 51/2017 has had a substantial influence on the financial industry by requiring high sustainability reporting standards supporting more accountability and transparency. This regulation has resulted in a more systematic approach to sustainability in the financial industry, whilst the non-financial sector is still catching up. Financial companies frequently focus on sustainable investing practices and indirect environmental implications, whereas non-financial enterprises, such as industrial corporations, address direct environmental impacts such as emissions and waste management.

The last suspicion points to the Global Reporting Initiative (GRI) standards used in Indonesia. These standards indeed focus more on the aspect of corporate social responsibility (CSR) than on the environmental aspect. Some parties are concerned that the GRI is insufficient to promote ecological sustainability and may reinforce business-as-usual practices (Milne, 2002). This research reveals that weak sustainability is common in Indonesia's corporate practices. While the GRI standards are applied globally, their impact can vary by region, with some countries, like Indonesia, potentially experiencing more pronounced challenges in achieving strong environmental sustainability. There can be a shift towards strong sustainability to accomplish the SDGs driven by environmental science and ecology. Companies can enhance their strategies to develop environmentally conscious industries that benefit both society and the environment, ensuring balanced sustainability across environmental, social, and governance aspects. Companies can strengthen their strategies to create environmentally conscious industries that positively impact society and the environment, ensuring balanced sustainability goals across the environment, people, and governance.

5. CONCLUSION

Sustainability reports from financial and non-financial industries listed on the Indonesia Stock Exchange remain business-oriented, focusing on financial indicators

like profitability, growth, and efficiency. They give less attention to environmental and social impacts, often providing minimal and superficial disclosures. Additionally, the varying formats and methodologies of these reports make it difficult to compare sustainability performances. As a result, these reports primarily emphasize profitability and company values while paying less comprehensive attention to environmental, social, and governance (ESG) aspects.

The financial and non-financial industries can enhance their sustainability reports by being more responsible regarding environmental, social, and governance (ESG) aspects, creating environmentally friendly businesses, and protecting the earth. Companies can achieve this by implementing corporate social responsibility (CSR) initiatives, improving operational practices, and participating in government and industry environmental programs. Internally, companies should provide training and education to employees, innovate environmentally friendly technologies and products, and evaluate their supply chains for environmental impacts. Adopting official standards and certifications, collaborating with non-profits and research institutions, and investing in clean energy and technologies can further support these efforts.

There are some limitations in this study. The content analysis does not provide a detailed examination of the company's environmental activities and responsibilities. Thus, it is recommended for future research to use interviews for supporting content analysis and confirming the results. Moreover, future research can conduct a more detailed comparison of the sustainability quality across different industries. To enhance the depth of the research, the sustainability scores of companies from various sectors provided by the Indonesia Stock Exchange should be analyzed. Adding the financial report quality scores will further clarify the differences in the quality of sustainability reporting in Indonesia.

REFERENCES

- Aggarwal, P. and Singh, A.K., 2019. CSR and sustainability reporting practices in India: An in-depth content analysis of top-listed companies. *Social Responsibility Journal*, 15(8), pp.1033–1053. Available at: https://doi.org/10.1108/SRJ-03-2018-0078
- Agustia, D., Sawarjuwono, T. and Dianawati, W., 2018. Green innovation as implementation of sustainability development in Indonesia. *ICIEBP* 2017, pp.364–369. Available at: https://doi.org/10.5220/0007082303640369
- Amos, G.J., 2023. Sustainability reporting in multinational enterprises: Focus on human resources and community. *Research Journal of Finance and Accounting*, 14(19), pp.45–54.
- Biswas, N., 2011. Sustainable green banking approach: The need of the hour. *Business Spectrum*, 1(1), pp.32–38.
- Brammer, S. and Pavelin, S., 2004. Building a good reputation. *European Management Journal*, 22(6), pp.704–713. Available at: https://doi.org/10.1016/j.emj.2004.09.033

- Buallay, A., 2019. Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of Environmental Quality: An International Journal*, 30(1), pp.98–115. Available at: https://doi.org/10.1108/MEQ-12-2017-0149
- Cakranegara, P.A. and Sidjabat, F.M., 2021. Green investment: Incorporate environment, social, and government factors in investment decision. *Eksis: Jurnal Riset Ekonomi dan Bisnis*, 16(1), pp.17–28. Available at: https://doi.org/10.26533/eksis.v16i1.773
- Freeman, R.E. and David, L.R., 1983. Stockholders and stakeholders: A new perspective on corporate governance. *California Management Review*, 25(3), pp.88–106. Available at: https://doi.org/10.2307/41165018
- Galeotti, R.M., Camilleri, M.A., Roberto, F. and Sepe, F., 2023. Stakeholder engagement disclosures in sustainability reports: Evidence from Italian food companies. *Business Ethics, the Environment & Responsibility*, 34(1), pp.260-279. Available at: https://doi.org/10.1111/beer.12642
- Indonesia Environment & Energy Center, 2024. The role of society in environmental impact analysis, regulation enforcement, and sustainability. *Indonesia Environment & Energy Center News*. Available at: https://environment-indonesia.com/peran-masyarakat-dalam-amdal-penerapan-regulasi-dan-keberlanjutan-lingkungan/
- Islam, F., Shahbaz, M., Ahmed, A.U. and Alam, M.M., 2013. Financial development and energy consumption nexus in Malaysia: a multivariate time series analysis. *Economic Modelling*, 30(1), pp.435–441. Available at: https://doi.org/10.1016/j.econmod.2012.09.033
- Khusnah, H., Anugraini, M., Fabiola, V.P. and Putra, R.S., 2021. Mediating effect of financial performance on the effect of green innovation on firm value. *IEOM Society Proceedings*, pp.1762–1769. Available at: http://ieomsociety.org/proceedings/2021monterrey/293.pdf
- Krippendorff, K., 2004. *Content Analysis: An Introduction to Its Methodology.* Thousand Oaks: Sage Publications, Inc.
- Landrum, N.E. and Ohsowski, B., 2017. Content trends in sustainable business education: An analysis of introductory courses in the USA. *International Journal of Sustainability in Higher Education*, 18(3), pp.385–414. Available at: https://doi.org/10.1108/IJSHE-07-2016-0135
- Lisin, A., Kushnir, A., Koryakov, A.G., Fomenko, N. and Shchukina, T., 2022. Financial stability in companies with high ESG scores: Evidence from North America using the Ohlson O-Score. *Sustainability (Switzerland)*, 14(1), pp.1–13. Available at: https://doi.org/10.3390/su14010479
- Milne, M.J., 2002. Positive accounting theory, political costs and social disclosure analyses: A critical look. *Critical Perspectives on Accounting*, 13(3), pp.369–395. Available at: https://doi.org/10.1006/cpac.2001.0509

- Mousa, G. and Hassan, N.T., 2015. Legitimacy theory and environmental practices: Short notes. *International Journal of Business and Statistical Analysis*, 2(1), pp.41–53. Available at: https://doi.org/10.12785/ijbsa/020104
- Mousa, A., 2015. A business approach for transformation to sustainable construction: An implementation on a developing country. *Resources, Conservation and Recycling*, 101, pp.9–19. Available at: https://doi.org/10.1016/j.resconrec.2015.05.007
- Mousa, S. and Bouraoui, T., 2023. The role of sustainability and innovation in financial services business transformation. *Theoretical Economics Letters*, 13(01), pp.84–108. Available at: https://doi.org/10.4236/tel.2023.131005
- Omotilewa, O.O., Akintoye, I.R., Adegbie, F.F. and Ogunwede, J.K., 2024. Bridging stakeholders' expectations gap: The role of sustainability reporting of listed firms in Nigeria. *European Journal of Business and Innovation Research*, 12(2), pp.17–40. Available at: https://doi.org/10.37745/ejbir.2013/vol12n21740
- Otoritas Jasa Keuangan, 2017. POJK No. 51 /POJK.03/2017 tentang penerapan keuangan berkelanjutan bagi lembaga jasa keuangan, emiten, dan perusahaan publik.
- Parniangtong, S., 2017. Gaining sustainable competitive advantage. *Springer*, pp.1–18. Available at: https://doi.org/10.1007/978-981-10-4442-7 1
- Patel, S., Desai, R. and Soni, K., 2024. Unveiling the drivers of green loan disclosures: A study of financial and governance determinants. *Journal of Financial Regulation and Compliance*, 32(5), pp.699–725. Available at: https://doi.org/10.1108/JFRC-08-2024-0161
- Presiden RI, 2022. Peraturan Presiden RI No. 111 Tahun 2022. *Kementerian Sekretariat Negara RI*.
- Rusu, T.M., Odagiu, A., Pop, H. and Paulette, L., 2024. Sustainability performance reporting. *Sustainability (Switzerland)*, 16(19). Available at: https://doi.org/10.3390/su16198538
- Vidyantina, H. et al., 2018. Analisis industri telekomunikasi Indonesia untuk mendukung efisiensi. *Kemkominfo*. Available at: balitbangsdm.kominfo.go.id
- Yavuz, A.E., Kocaman, B.E., Doğan, M., Hazar, A., Babuşcu, Ş. and Sutbayeva, R., 2024. The impact of corporate governance on sustainability disclosures: A comparison from the perspective of financial and non-financial firms. *Sustainability* (*Switzerland*), 16(19). Available at: https://doi.org/10.3390/su16198400