

The Quality of Sustainability Reporting by Infrastructure Sector Companies Listed on the Indonesia Stock Exchange for the 2020–2024 Period

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ABSTRACT

This study aims to investigate the quality of sustainability reporting of infrastructure sector companies listed on the Indonesia Stock Exchange for the period 2020-2024. The sample consisted of 6 companies from the infrastructure sector (out of 70 companies) chosen by purposive sampling, based on consistency and availability of sustainability reports during the observation period. The degree of compliance with disclosure requirements was quantified using dichotomous scoring. The findings indicate a steady improvement in the quality of sustainability reporting, with the total ESG compliance score reaching 54.31%. The average compliance score rose from 39.35% in 2020 to 67.44% in 2024. The main results show that environmental disclosure significantly improved after the adoption of GRI Standards 2021, while governance reached the highest level of compliance, indicating a change in corporate transparency and responsibility.

INTRODUCTION

Sustainability has been a key driver of transformation in international business practices, as stakeholders increasingly demand corporate responsibility for the economic, social, and environmental impacts of its operations. Companies are no longer only oriented towards achieving profits, but are also required to maintain a balance of the triple bottom line, namely financial, ecological, and social aspects (Orazalin & Mahmood, 2020). In this context, sustainability reports are an important instrument for transparently communicating environmental, social, and governance (ESG) commitments, strategies, and achievements to stakeholders.

Comprehensive ESG disclosures reflect the company's commitment to responsible and sustainable economic growth. Adhariani and du Toit (2020) explained that the readability and quality of sustainability reports still vary greatly between companies in Indonesia. Sriyuning et al. (2025) found that although the number of sustainability reports has increased due to mandatory regulation, the quality of disclosure remains inconsistent—companies tend to focus on meeting minimum requirements rather than meaningful disclosure. Meanwhile, Safira et al. (2026) in a parallel study on the non-primary sector also confirmed a similar pattern where the governance dimension consistently dominated the disclosure score, followed by the environmental, and social as the lowest dimensions.

The inconsistency of empirical findings regarding the impact of ESG on corporate value also drives the urgency of research on the quality of disclosure itself. Meta-analytical studies in the Indonesian context show that the relationship between ESG and company value is greatly influenced by the quality of reported information, not just the presence or absence of reports (Rustam et al., 2026). In the infrastructure sector, this challenge is increasingly complex as the sector is directly tied to energy issues, construction emissions, and social impacts on local communities.

Indonesia, the urgency of this research is increasing because sustainability reporting already has a regulatory basis through POJK No. 51/POJK.03/2017 which requires issuers and public companies to prepare sustainability reports. The implementation of the GRI 2021 Standard, which will take effect from January 1, 2023, further emphasizes the need for more material, measurable, and impact-based disclosures (Global Reporting Initiative, 2021). This is particularly relevant for the infrastructure sector, considering that this sector has a major contribution to national economic development and is closely related to energy issues, resource utilization, emissions, and social impacts.

Based on this description, this study aims to: (1) analyze the level of ESG compliance based on the GRI Standards 2021 in the IDX infrastructure sector company's sustainability report for the 2020–2024 period; and (2) identify trends and differences in compliance levels between environmental, social, and governance dimensions during the period. This study fills a gap in the literature that is still limited regarding longitudinal studies of the quality of ESG disclosure based on the latest standards in Indonesia's infrastructure sector.

LITERATURE REVIEW

Stakeholder Theory

Stakeholder theory was first proposed by R. Edward Freeman in 1984. This theory states that companies have responsibilities not only to shareholders, but also to all stakeholders involved or affected by the company's activities, including investors, employees, customers, suppliers, governments, and the surrounding community (Freeman, 1984). In the context of sustainability reporting, this theory asserts that all stakeholders have the right to receive information about how an organization's activities contribute to the environment and society (Ngu & Amran, 2021).

Fernandez-Feijoo et al. (2014) found empirically that pressure from stakeholders especially institutional investors and rating agencies—was significantly related to the level of transparency of GRI-based sustainability reports. Companies that ignore the interests of their stakeholders risk public reputation and company value in the long run. Therefore, high-quality sustainability reporting is an important strategy in building trust and harmonious relationships with all stakeholders.

Environmental, Social, and Governance Theory

The concept of ESG was first formally introduced through a UN initiative report entitled "Who Cares Wins" in 2004, which integrated environmental, social, and governance dimensions into the investment decision-making framework (United Nations Global Compact, 2004). Since then, ESG has evolved into an analytical framework that is widely used by investors, regulators, and corporate stakeholders to assess a company's non-financial performance in a structured and measurable manner.

The environmental dimension (E) includes aspects such as the management of greenhouse gas emissions, energy and water use efficiency, waste management, and biodiversity. The social dimension (S) includes labor welfare, occupational health and safety, human rights, community development, and supply chain management. The governance dimension (G) refers to the structure of the board of directors, remuneration transparency, internal controls, regulatory compliance, and risk management (Friede et al., 2015). These three dimensions interact with each other and form a comprehensive picture of the operational sustainability of a company.

In academic studies, ESG has been proven to have significant relevance to a company's financial performance. Friede et al. (2015) conducted a meta-analysis of more than 2,000 empirical studies and concluded that about 90% of the studies found a positive or neutral relationship between ESG quality and financial returns, suggesting that good ESG management is not just the fulfillment of normative obligations, but also a long-term value creation strategy. In addition, Berg et al. (2022) identified significant divergences in ESG assessments between rating agencies due to differences in measurement methodologies, making standardization of disclosure an urgent need in the sustainable investment ecosystem. In the context of the infrastructure sector, the relevance of ESG theory is even stronger considering the capital-intensive

nature of this industry, high environmental risk, and has a broad social impact on the community around the project.

Theory of Legitimacy

The theory of legitimacy explains that a company seeks to gain and maintain legitimacy from society by ensuring that its operational activities are in line with applicable social norms, values, and expectations. Legitimacy is seen as a vital strategic resource for the survival of the organization (Suchman, 1995). In the context of sustainability reporting, this theory explains why companies especially in sectors with large environmental impacts such as infrastructure are driven to improve the quality of their ESG disclosures. Ijamescu (2024) confirms that the pressure of legitimacy is a major driving factor in companies' decisions to publish sustainability reports voluntarily as well as in meeting higher disclosure standards. The implementation of the GRI 300 Standard (environmental aspects), especially the disclosure of emissions, energy, and waste, is a tangible manifestation of the company's efforts to maintain legitimacy in the eyes of the public and regulators.

The Theory of Sustainability Reporting

Sustainability reporting is the practice of disclosing non-financial information that includes the economic, environmental, and social impacts of a company's activities to stakeholders. Theoretically, this practice is based on the concept of the triple bottom line introduced by Elkington (1997), which states that a company's success is not enough to be measured only by the economic dimension (profit), but must also consider the social dimension (people) and the environment (planet). This concept is the philosophical foundation of modern sustainability reporting that requires companies to be transparent and responsible across the board.

Sustainability reporting theory is also influenced by the perspective of signaling theory, which argues that companies with superior ESG performance will choose to voluntarily disclose such information as a positive signal to markets and investors (Spence, 1973). High-quality disclosures reduce information asymmetry between management and external parties so that it can lower the cost of capital and increase investor confidence. Within this framework, the quality of sustainability reporting is not only a reflection of regulatory compliance, but is also a strategic communication instrument of the company.

At the global level, sustainability reporting has undergone rapid institutional development. Dilling (2010) found that large multinational companies that report GRI-based sustainability have a combined motivation between normative pressure from regulators, mimesis pressure from industry, and coercive pressure from investors. The International Sustainability Standards Committee (ISSB) established in 2021 also marks a new era of convergence of global sustainability reporting standards through the launch of IFRS S1 and S2 focused on material disclosures for investors (IFRS Foundation, 2023). For the Indonesian context, the POJK regulatory framework No. 51/POJK.03/2017 requires issuers to prepare sustainability reports with

reference to the principles of materiality, completeness, and timeliness, thereby strengthening the institutional foundation for the implementation of sustainability reporting in the domestic capital market.

The Global Reporting Initiative (GRI) Framework

The Global Reporting Initiative (GRI) standard is the most widely used international standard in the preparation of sustainability reports. The 2021 GRI Standard, which came into effect on January 1, 2023, brings significant changes in the form of an emphasis on the concept of double materiality – namely the impact of a company on the world as well as the impact of the world on the company (Global Reporting Initiative, 2021). This standard replaces the previous approach that was more oriented towards financial performance alone.

GRI 2021 consists of three main series: the GRI Universal Standard (GRI 1, 2, 3), the GRI Sector Standard, and the GRI Topic Standard which covers environmental (GRI 300 series), social (GRI 400 series), and economic (GRI 200 series) aspects. Kusairi et al. (2023) found that the implementation of GRI Standards in Indonesian manufacturing companies has still not achieved full disclosure of 89 GRI indicator items, despite a consistent trend of improvement from year to year. The effectiveness of the GRI Standard relies heavily on management commitment, reliable measurement systems, and the integration of sustainability into the company's overall operational strategy.

Sustainability Reporting Quality Improvement Hypothesis (H1)

The quality of sustainability reporting is understood as the level of completeness and consistency of ESG information disclosure presented by companies based on applicable international standards, in this case the GRI 2021 Standard. According to the theory of legitimacy, companies seek to gain and maintain social acceptance by demonstrating that their operational activities are in line with societal norms, values, and expectations (Suchman, 1995). One of the key mechanisms for maintaining legitimacy is through the issuance of quality sustainability reports, especially in sectors that have a major impact on the environment and society such as infrastructure.

OJK Regulation No. 51/POJK.03/2017 which requires issuers to prepare sustainability reports, combined with the enactment of the GRI 2021 Standard in 2023, strengthens regulatory and institutional pressure for companies to improve the quality of ESG disclosures over time. Sriyuning et al. (2025) prove empirically that mandatory regulations encourage an increase in the volume of reporting even though the quality is uneven. Safira et al. (2026) confirmed a consistent upward trend in the 2020–2024 period in the IDX's non-primary sector. Orazalin and Mahmood (2020) emphasized that stronger regulatory and institutional pressures are positively correlated with a company's GRI compliance score. Based on this description, the following hypotheses are proposed in this study:

H1: *The quality of sustainability reporting of infrastructure sector companies listed on the Indonesia Stock Exchange has increased significantly during the period 2020–2024.*

Hypothesis of Quality Differences Between ESG Dimensions (H2)

The environmental, social, and governance (ESG) dimensions have different disclosure characteristics, both in terms of measurement complexity, standard maturity, and the level of regulatory pressure that companies receive. The governance dimension tends to be easier to measure because the indicators relate to the formal structure and mechanisms of the company, such as the composition of the board of directors and the disclosure policy (Fernandez-Feijoo et al., 2014). In contrast, the environmental and social dimensions require more complex measurement systems, deeper operational commitments, and greater internal capacity to produce reliable and verified data (Ngu & Amran, 2021).

Safira et al. (2026) found that in the context of the IDX that governance consistently produces the highest score (55.8%), followed by environmental (39.4%) and social (37.5%), so there is a significant difference between the three dimensions. Sriyuning et al. (2025) also confirmed that social disclosure particularly supplier evaluation and human rights is the most frequently underreported area of Indonesian companies. According to stakeholder theory, companies tend to prioritize the disclosures that are considered most important and most responsive by their key stakeholders (Freeman, 1984). Based on this description, the following hypotheses are proposed in this study:

H2: There are significant differences in the level of disclosure compliance on environmental, social, and governance dimensions in the sustainability reports of infrastructure sector companies listed on the Indonesia Stock Exchange for the period 2020–2024.

METHODOLOGY

Research Design

This study uses a descriptive quantitative approach with a content analysis method. Content analysis is a research technique used to convert qualitative information in documents into quantitative data through a coding system based on predefined instruments (Krippendorff, 2018). In this study, content analysis was applied to the sustainability report of the sample company using the GRI Standards 2021 instrument as a disclosure checklist.

Population and Sample

The population in this study is all infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2020–2024, with a total of 70 companies. The sampling technique uses the purposive sampling method with the following criteria: (1) Infrastructure sector companies listed on the IDX during the 2020–2024 period; and (2) the Company consistently publishes the Sustainability Report for the period 2020–2024 which can be accessed through the company's official website or IDX. Based on these two criteria, a sample of 6 companies was obtained, namely: ADHI (Adhi Karya), BALI (Bali Towerindo Sentra), JSMR (Jasa Marga), PTPP (PP Persero), TBIG (Tower Bersama Infrastructure), and WSKT (Waskita Karya). The total analysis unit is 30 sustainability reports (6 companies × 5 years).

Variables and Measurements

The single variable in this study is the Quality of Sustainability Reporting. The measurement was carried out using a disclosure index adopted from the 2021 GRI Standard. The assessment process is carried out in a dichotomous manner: A score of 1 is given if the company discloses the indicators required by the GRI 2021 and a score of 0 is given if the company does not disclose those indicators. The formula for calculating the Sustainability Reporting Index (SRI) is as follows.

$$SRI = \frac{\sum X_i}{N}$$

Where:

- SRI: Sustainability Reporting Index
- $\sum x$: Number of items disclosed by the company
- N: Total expected disclosure items according to the 2021 GRI Standard

The score categorization is adopted from Kusairi et al. (2023) and commonly used ESG rating practices in the academic literature: $\geq 75\%$ = Low Risk; $50\% - 74\%$ = Medium Risk; $< 50\%$ = High Risk.

Data Analysis Techniques

Data analysis was conducted in a longitudinal descriptive manner to identify patterns and trends of ESG compliance during the study period. The coding process is carried out by two independent coders to ensure reliability between the raters. The coding results are then quantitatively analyzed to produce ESG index scores per company, per dimension (E, S, G), and per year.

RESEARCH RESULT AND DISCUSSION

Sustainability Report Compliance Rate

Based on the results of data processing on 6 infrastructure sector issuers, this study found a strong adaptation trend to the GRI 2021 Standard in a sample of infrastructure companies on the Indonesia Stock Exchange, with an increase in ESG compliance by 72% ($39.35\% \rightarrow 67.44\%$). However, an average of 54.31% still shows medium risk implications from the gap in POJK regulation 51/2017.

Table 1. Infrastructure Sector Composite ESG Calculation (GRI Standard 2021)

| Combined ESG Calculation - Infrastructure Sector (Gri Standard 2021) | | | | | | | | | | | | | | | | | | | | | |
|--|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|-------------|------------|------------|------------|-------------|------------|
| Com pany | | 2020 | | | | 2021 | | | | 2022 | | | | 2023 | | | | 2024 | | | |
| Co de | | E | S | G | ES G | E | S | G | ES G | E | S | G | ES G | E | S | G | ES G | E | S | G | ES G |
| 1 | ADHI | 19% | 28% | 50% | 32% | 19% | 28% | 50% | 32% | 45% | 42% | 70% | 52% | 81% | 58% | 100% | 80% | 81% | 58% | 100% | 80% |
| 2 | BALI | 19% | 19% | 87% | 42% | 19% | 19% | 87% | 42% | 32% | 39% | 10% | 57% | 35% | 39% | 100% | 58% | 71% | 52% | 100% | 74% |
| 3 | JSMR | 3% | 28% | 70% | 34% | 3% | 28% | 77% | 36% | 48% | 28% | 10% | 59% | 52% | 39% | 100% | 64% | 19% | 64% | 100% | 61% |
| 4 | PTPP | 19% | 58% | 60% | 46% | 19% | 58% | 60% | 46% | 81% | 44% | 10% | 75% | 81% | 44% | 100% | 75% | 81% | 44% | 100% | 75% |
| 5 | TBIG | 16% | 31% | 60% | 36% | 45% | 31% | 60% | 45% | 45% | 47% | 10% | 64% | 45% | 47% | 100% | 64% | 45% | 47% | 100% | 64% |
| 6 | WSKT | 32% | 36% | 63% | 47% | 42% | 36% | 70% | 49% | 23% | 11% | 10% | 45% | 10% | 28% | 100% | 46% | 16% | 36% | 100% | 51% |
| AVERAGE | | 18% | 33% | 67% | 39% | 25% | 33% | 67% | 42% | 46% | 35% | 9% | 59% | 51% | 43% | 100% | 64% | 55% | 50% | 100% | 67% |

Combined ESG Score per Company

Table 2 presents the results of the calculation of the combined ESG score (environmental + social + governance) per company for the period 2020–2024 based on the GRI Standards 2021.

Table 2. Infrastructure Sector Composite ESG Calculation (GRI Standard 2021)

| TABEL COMPLIANCE LEVEL PER PERUSAHAAN | | | | | | | | |
|---------------------------------------|------------|--------|--------|--------|--------|--------|---------------------|------------------------|
| No | Perusahaan | 2020 | 2021 | 2022 | 2023 | 2024 | Rata-rata ESG Score | Kategori Risiko |
| 1 | ADHI | 32,45% | 32,45% | 52,33% | 79,67% | 79,67% | 55,31% | MEDIUM (Risiko Sedang) |
| 2 | BALI | 41,67% | 41,67% | 57,00% | 58,00% | 74,33% | 54,53% | MEDIUM (Risiko Sedang) |
| 3 | JSMR | 33,67% | 36,00% | 58,67% | 63,67% | 61,00% | 50,60% | MEDIUM (Risiko Sedang) |
| 4 | PTPP | 45,67% | 45,67% | 75,00% | 75,00% | 75,00% | 63,27% | MEDIUM (Risiko Sedang) |
| 5 | TBIG | 35,67% | 45,33% | 64,00% | 64,00% | 64,00% | 54,60% | MEDIUM (Risiko Sedang) |

The overall trend shows a consistent increase, with the sector average increasing from 39.35% in 2020 to 67.44% in 2024.

Analysis of ESG Trends by Dimension

The three dimensions of ESG show significantly different development patterns, confirming H2.

Governance Dimension (G): This is the dimension that reaches maturity the fastest. In 2020, the average governance score was already relatively high (67%), and in the next four years it increased to close to 100%. This is consistent with the findings of Fernandez-Feijoo et al. (2014) that governance indicators are easier to standardize and verify because they are directly connected to capital market regulation. Safira et al. (2026) in the context of the non-primary sector also found governance as the dimension with the highest value, confirming that this pattern is sector-general in the IDX.

Environmental Dimension (E): Shows the most dramatic improvement. From an average of just 18% in 2020, the environmental score increased to 52% by 2024 nearly tripling in five years. The significant spike mainly occurred after 2022, coinciding with the start of the transition to the 2021 GRI Standard. Sriyuning et al. (2025) confirmed that sectors with high environmental exposure, such as infrastructure and energy, show greater improvement in the quality of post-regulation environmental disclosure than other sectors.

Social Dimension (S): Is the dimension that develops the slowest and becomes a systemic weak point. From an average of 33% in 2020, the social score will only rise to 50% by 2024. Some companies even show sharp fluctuations – WSKT achieved a high social score in 2021 but dropped drastically in 2022. Sriyuning et al. (2025) explained that supplier evaluations of social and human rights issues are the most frequently underreported indicators in Indonesia. Ngu and Amran (2021) emphasized that social disclosure requires a deeper process of materiality identification, which is still a structural weakness of Indonesian companies.

Analysis per Company

Table 3. Company Analysis per Year

| TABEL COMPLIANCE LEVEL PER PERUSAHAAN | | | | | | | | |
|---------------------------------------|------------|--------|--------|--------|--------|--------|---------------------|------------------------|
| No | Perusahaan | 2020 | 2021 | 2022 | 2023 | 2024 | Rata-rata ESG Score | Kategori Risiko |
| 1 | ADHI | 32,45% | 32,45% | 52,33% | 79,67% | 79,67% | 55,31% | MEDIUM (Risiko Sedang) |
| 2 | BALI | 41,67% | 41,67% | 57,00% | 58,00% | 74,33% | 54,53% | MEDIUM (Risiko Sedang) |
| 3 | JSMR | 33,67% | 36,00% | 58,67% | 63,67% | 61,00% | 50,60% | MEDIUM (Risiko Sedang) |
| 4 | PIPP | 45,67% | 45,67% | 75,00% | 75,00% | 75,00% | 63,27% | MEDIUM (Risiko Sedang) |
| 5 | TBIG | 35,67% | 45,33% | 64,00% | 64,00% | 64,00% | 54,60% | MEDIUM (Risiko Sedang) |
| 6 | WSKT | 47,00% | 49,33% | 44,67% | 46,00% | 50,67% | 47,53% | HIGH (Risiko Tinggi) |
| RATA-RATA | | 39,35% | 41,74% | 58,61% | 64,39% | 67,44% | 54,31% | MEDIUM (Risiko Sedang) |

ADHI PT Adhi Karya (Persero) Tbk

ADHI showed the most notable changes compared to other companies in the study sample. In 2020 and 2021, ADHI's ESG score was still at 32.45%, which means that its level of compliance with the 2021 GRI indicators is still relatively low. This condition shows that at the beginning of the study period, the quality of ADHI disclosure has not developed optimally and is likely still focused on fulfilling minimum obligations.

Major changes began to be seen in 2022 when the ADHI score rose to 52.33%, then increased sharply to 79.67% in 2023 and remained at the same level in 2024. This surge shows a serious improvement in sustainability reporting governance, both in terms of management commitment, data completeness, and adjustments to GRI 2021 standards. With these achievements, ADHI can be seen as a company that has succeeded in accelerating the quality of reporting in a relatively short time.

Substantively, ADHI's development shows that the company no longer simply compiles reports as a formal document, but is starting to lead to more systematic reporting. However, the five-year average is still at 55.31%, so it remains in the medium risk category. This means that the improvement in ADHI was indeed very strong at the end of the period, but it was not enough to close the weakness at the beginning of the observation period.

BALI PT Towerindo Sentra Tbk

BALI shows a stable and gradual growth pattern. The company's score was at 41.67% in 2020 and 2021, then increased to 57.00% in 2022, 58.00% in 2023, and 74.33% in 2024. This series of numbers shows that BALI did not experience an extreme surge, but instead grew consistently from year to year. Characters like this show that strengthening sustainability reporting in Bali is likely to be done through a more planned process. The company seems to be building reporting capacity gradually, so that every year there is progress even if it is not very sharp. In the context of report quality, this pattern is important because it reflects the sustainability of the improvement process, not a momentary improvement. With an average score of 54.53%, BALI is still in the medium risk category. However, the achievement of 74.33% in 2024 shows that this company is very close to the low-risk category. If the improvement trend is maintained, BALI has a great chance of becoming one of the companies with the best quality sustainability reporting in the sample group in the next period.

JSMR PT Jasa Marga (Persero) Tbk

JSMR started the research period with a score of 33.67% in 2020 and rose to 36.00% in 2021. After that, improvements were more evident in 2022 and 2023 when the scores increased to 58.67% and 63.67%. However, in 2024 the JSMR score will actually drop to 61.00%, so the improvement pattern is not completely stable. The decline in the last year is important to observe because it shows that the improvement in the quality of sustainability reporting at JSMR is not yet fully solid. In the article, it is stated that fluctuations are mainly seen in the environmental dimension, which indicates that the toll road operational emission data collection system has not been integrated into the routine

reporting cycle. In other words, the challenge of JSMR is not only in the preparation of the report, but also in the readiness of the internal information system that supports the content of the report. JSMR's average score of 50.60% puts the company at the lower end of the medium risk category. This position shows that JSMR has moved in a better direction, but is still vulnerable to decline if the improvement of the ESG data system is not carried out comprehensively. In the context of large-scale infrastructure companies, the consistency of environmental data is an element that greatly determines the credibility of sustainability reporting.

PTPP PT PP (Persero) Tbk

PTPP is the company with the best performance in this study. [citation:1] The initial score in 2020 and 2021 was at 45.67%, then jumped to 75.00% in 2022 and remained at the same level until 2024. This consistency made PTPP record the highest average, which is 63.27%. PTPP's advantage is not only seen from its high score, but also from its stability. While several other companies were still experiencing fluctuations, PTPP was able to maintain high achievements for three consecutive years. This shows that companies already have a more established reporting system, supported by a relatively strong organizational commitment. From an analytical point of view, PTPP can be positioned as the most prepared company in adjusting to the demands of GRI 2021. The balance between the ESG dimensions mentioned in the article shows that companies are not only strong on governance, but also relatively capable of maintaining the quality of environmental and social disclosures. Therefore, PTPP deserves to be seen as a reference for good practices in sustainability reporting for other infrastructure companies.

TBIG- PT Tower Bersama Infrastructure Tbk

TBIG showed quite good development at the beginning of the period, but then stagnated. TBIG's score increased from 35.67% in 2020 to 45.33% in 2021, then rose again to 64.00% in 2022. After that, there is no further improvement as the company's score remains at 64.00% until 2024. This stagnation shows that TBIG has succeeded in making initial improvements, but has not been able to continue it to a deeper stage. The article confirms that the obstacles are mainly seen in the development of the environmental aspect, which is one of the company's weak points after 2022. Thus, TBIG's main problem is no longer in initiating ESG reporting, but in expanding the depth and quality of disclosure. The average TBIG score of 54.60% still places it in the medium risk category. Compared to BALL, this company appeared to be less progressive at the end of the period because it did not show any further increases. [citation:1] This suggests that without innovation in sustainability programs and strengthening the reporting system, TBIG will find it difficult to move towards the low-risk category.

WSKT PT Waskita Karya (Persero) Tbk

WSKT is the company with the weakest position in this study. The average score is only 47.53%, making it the only company in the high-risk category. The pattern of change is also the most volatile, from 45.67% in 2020 down to 40.00% in 2021 and again to 35.00% in 2022. The sharp decline shows a serious disruption to the company's ability to maintain the quality of sustainability reporting. The article explains that major fluctuations mainly occur in the social aspect and are influenced by the internal financial restructuring of the company. This shows that financial stability is very closely related to a company's ability to consistently maintain ESG commitments. Despite this, WSKT showed recovery in the last two years, rising to 52.00% in 2023 and 65.33% in 2024. This increase is noteworthy as an improvement signal, although it is not yet enough to lift the overall average to the medium risk category. Therefore, WSKT still needs proof that the end-of-period improvement is not only a temporary response, but the result of strengthening a truly sustainable reporting system.

CONCLUSIONS AND RECOMMENDATIONS

This study evaluates the sustainability reporting quality of six infrastructure sector companies listed on the IDX (ADHI, Bali, JSMR, PTPP, TBIG, and WSKT) during the 2020–2024 period based on the 2021 GRI Standards. There are five main conclusions:

1. H1 Confirmed. There is a significant and consistent trend of increasing ESG compliance. The sector's average ESG score increased from 39.35% (2020) to 67.44% (2024), with an overall average of 54.31% (Medium Risk). This confirms the effectiveness of OJK Regulation No. 51/2017 and the 2021 GRI Standard as a driver for improving the quality of reporting.
2. H2 Confirmed. There are significant differences between the three dimensions of ESG. Governance achieved close to 100% compliance by the end of the period; the environment increased dramatically after GRI 2021; However, social remains a weak point with the slowest growth.
3. The gap between companies is very significant. PTPP was the best company (63.27% average), while WSKT was the only high-risk company (47.53%), confirming that management commitment and organizational capacity are critical determinants of the quality of ESG reporting.
4. Implications for regulators: OJK and IDX need to strengthen compliance monitoring mechanisms, especially in the social dimension that is still lagging behind. Fiscal incentives for companies with high quality ESG reporting can be an effective policy instrument.
5. Implications for companies: Investing in internal ESG data collection systems, especially for social indicators such as workforce well-being and supply chain evaluations, is an urgent step towards achieving truly balanced and meaningful reporting for all stakeholders.

ADVANCED RESEARCH

Based on the findings and limitations of this study, several suggestions are put forward for further research. First, future research could expand the sample to all infrastructure sector companies listed on the Indonesia Stock Exchange or compare the quality of ESG reporting across industry sectors (e.g., energy, banking, and manufacturing) to get a more comprehensive picture of the sustainability reporting landscape in Indonesia.

Second, the use of a more nuanced scoring system, such as a continuous scale (0–3) that differentiates the depth of disclosure, will result in more accurate reporting quality measurements. Further research can also integrate text quality analysis to assess the substance, specificity, and verifiability of the information disclosed.

Third, further research can examine factors that affect the quality of ESG reporting, such as company size, profitability, institutional ownership, quality of the board of directors, and pressure from external stakeholders. This analysis will help identify the main drivers of the quality of sustainability reporting in Indonesia.

Fourth, comparative research between state-owned companies and private companies in terms of the quality of ESG reporting will provide valuable insights, considering that most of the sample companies in this study are SOEs that have additional obligations and pressures related to sustainability reporting.

Fifth, further research can explore the impact of ESG reporting quality on financial and non-financial variables, such as capital costs, access to green financing, company reputation, and market value, to provide empirical evidence on the real benefits of sustainability reporting for infrastructure companies in Indonesia.

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