

GREEN ACCOUNTING ON SUSTAINABILITY INDEX DISCLOSURE IN INDONESIA

Richard Sanjaya¹, Diana Frederica^{2*}

^{1,2}Faculty of Economics and Business, Krida Wacana Christian University, Indonesia

*Corresponding Author:

diana.frederica@ukrida.ac.id

Abstract

This study aims to examine the factors influencing sustainability index disclosure among non-cyclical companies listed on the Indonesia Stock Exchange. The factors investigated include management commitment, institutional ownership, and green accounting. Sustainability index disclosure is measured using the Global Reporting Initiative (GRI) Standards 2021. The research data were obtained from annual reports and sustainability reports for the 2023–2024 period. The sample was selected using a purposive sampling method, resulting in 35 non-cyclical companies included in the analysis. Multiple linear regression analysis was employed to assess the effect of each independent variable on sustainability index disclosure. The results indicate that management commitment and institutional ownership have a positive and significant effect on sustainability index disclosure. In contrast, green accounting does not have a significant effect on the level of disclosure. These findings suggest that strong managerial commitment and institutional ownership play a crucial role in encouraging greater transparency in sustainability reporting. However, the implementation of green accounting practices has not yet been fully reflected in sustainability index disclosure. This study contributes to the sustainability reporting literature by highlighting key governance-related factors that influence corporate sustainability disclosure in emerging markets.

Keywords: Sustainability Index, GRI 2021, Management Commitment, Institutional Ownership, Green Accounting

1. Introduction

Environmental and social reporting has become a global imperative as stakeholders demand greater corporate accountability. In Indonesia, sustainability reporting has been formally mandated by the *Otoritas Jasa Keuangan* and subsequent regulations, requiring listed companies to disclose environmental and social impacts (Nurdialy & Wijaya, 2025). This regulatory push has dramatically increased the number of sustainability reports filed in recent years. However, research indicates that while the volume of sustainability reporting rose sharply, the quality of environmental disclosure did not necessarily improve. The average disclosure scores declined after the regulation was implemented. Notably, firms in environmentally sensitive sectors (energy, waste management) tend to produce higher quality disclosures than others, suggesting a disparity in transparency across industries

Despite this, most Indonesian studies of sustainability disclosure have focused on limited factors or specific industries. Prior research often examines determinants in cyclical sectors like banking or energy (Zhou et al., 2024). There is relatively little work on non-cyclical sectors industries that operate continuously and typically have large environmental footprints. In fact, Indonesia now has over 100 non-cyclical companies

listed on the stock exchange (growing from 98 in 2021 to 108 by 2024), reflecting their economic importance. These firms face intense stakeholder scrutiny due to their environmental impacts, making their sustainability disclosures particularly salient. However, comprehensive studies that examine multiple governance and accounting factors in these non-cyclical firms are lacking.

To address this gap, our study investigates three drivers of sustainability disclosure in Indonesian non-cyclical firms: management commitment, institutional ownership, and green accounting. We ground the analysis in legitimacy theory, which posits that firms disclose social and environmental information to align with societal norms and maintain public support (Suchman, 1995). In this framework, committed leaders and vigilant investors pressure the company to appear transparent. Our goal is to extend the literature by testing all three factors simultaneously in an emerging-market context. Specifically, we ask: Does top management's commitment to sustainability lead to more extensive disclosure? Does a higher proportion of institutional ownership encourage greater transparency? And does adoption of green accounting practices (reflected by the PROPER environmental rating) translate into higher sustainability reporting?

Answering these questions will clarify how corporate governance and accounting practices jointly influence disclosure, and provide new evidence from the under-studied non-cyclical sector in Indonesia. The findings have both theoretical and practical implications. Theoretically, we test whether legitimacy pressures from management and institutional investors drive disclosure, and whether internal green accounting systems are linked to outward reporting. Practically, results will guide managers and regulators: if management commitment and institutional oversight indeed raise disclosure levels, then promoting these may be key to improving sustainability reporting. Our contribution lies in rigorously examining these relationships and filling the research void on non-cyclical firms.

2. Theoretical Background

2.1 Management Commitment

Management Commitment to sustainability is widely recognized as a driver of reporting quality. If CEOs and directors prioritize environmental and social issues, they typically implement structures such as CSR committees, dedicated reports, and stakeholder programs that facilitate transparency (Qays et al., 2024). Empirical evidence supports this link. For instance, (Ardhia et al., 2024) find that company with commitment to prepare sustainability reports is associated with richer and more comprehensive sustainability disclosure. Similarly, management commitment ensures that sustainability reporting not only fulfills regulatory requirements, but also represents the company's long-term sustainability commitment (Mutihah, 2022).

2.2 Institutional Ownership.

Institutional ownership refers to the percentage of a company's shares held by institutions such as investment companies, insurance firms, pension funds, and other financial institutions (Sujatnika et al., 2023). Institutional investors, such as pension funds and insurance companies, often demand high standards of transparency and governance from the firms they invested in (Fathurohman et al., 2022). Their large shareholdings and reputational concerns can pressure management to improve disclosure. Emerging evidence supports a positive role for institutional ownership in driving sustainability reporting. For example, a study by (Fathurohman et al., 2022) shows that sustainability

reporting among companies listed on the Indonesia Stock Exchange is influenced by the level of institutional ownership.

2.3 Green Accounting

Green accounting is a measurement tool designed to evaluate the effectiveness of conservation efforts by classifying conservation costs (Oktaviani & Metalia, 2024). In Indonesia, green accounting practices are closely tied to the PROPER program, an environmental compliance rating administered by *Kementerian Energi dan Sumber Daya Mineral Republik Indonesia* (Muljono & Dyna Rachmawati, 2024). The PROPER rating (Gold, Green, Blue, Red, Black) assesses firms on energy efficiency, emissions, waste, and other sustainability criteria. Previous studies indicate that PROPER Index scores are significantly associated with sustainability disclosure and corporate performance. Firms with higher PROPER ratings tend to provide more extensive and transparent environmental disclosures, consistent with legitimacy theory, which emphasizes maintaining societal support through effective environmental management. Consequently, PROPER scores are widely used in Indonesian studies on green accounting, CSR, and sustainability reporting (Lestari & Khomsiyah, 2023).

2.4 Sustainability Index

The sustainability index serves as a measurement standard for corporate sustainability aspects and is used to assess the quality of sustainability disclosure. This standard provides information on the performance and impacts of companies' environmental and social activities. (Safitra & Tirayoh, 2025). In Indonesia, the obligation to disclose sustainability aspects has been strengthened through *Peraturan Otoritas Jasa Keuangan* (POJK) No. 51/POJK.03/2017 on the Implementation of Sustainable Finance, which requires financial institutions, issuers, and public companies to periodically submit sustainability reports (Nurdialy & Wijaya, 2025). The objective of this regulation is to reduce public concern regarding the environmental impacts arising from corporate business activities (Zulhaninta & Ardhiarisca, 2022).

2.5 Conceptual Framework

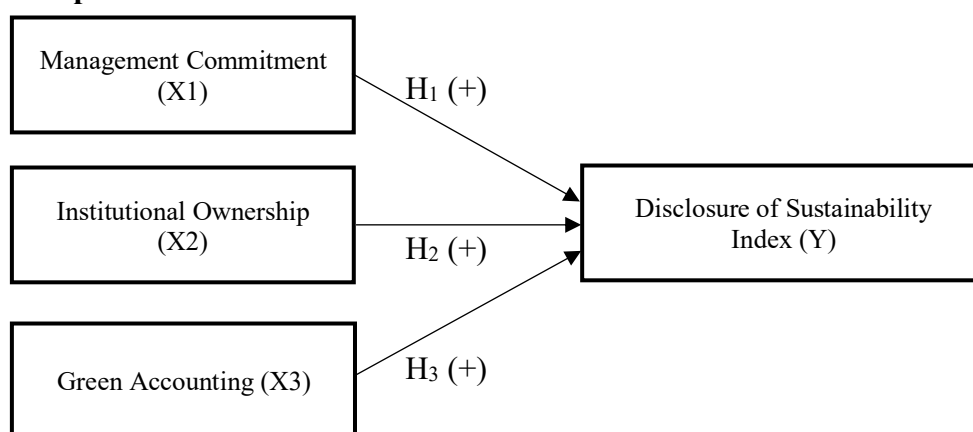


Figure 1. Conceptual Framework

2.6 Hypotesis

Based on the theoretical foundation and framework of thought that has been explained, three hypotheses are formulated in this study:

H1: Management commitment has a positive effect on sustainability index disclosure.

H2: Institutional ownership has a positive effect on sustainability index disclosure.

H3: Green accounting has a positive effect on sustainability index disclosure.

3. Methods

3.1 Research Design

This study uses a sample of non-cyclical sector companies listed on the Indonesia Stock Exchange (IDX) during the 2023–2024 period. The data consist of secondary data obtained from annual reports and sustainability reports accessed through the official IDX website (www.idx.co.id) and the official websites of the respective companies.

3.2 Population, Sample, and Data

The sample was selected using purposive sampling based on the following criteria: non-cyclical sector companies listed on the IDX, publication of annual and sustainability reports during 2023–2024, and preparation of sustainability reports in accordance with the GRI 2021 standards. Based on these criteria, 35 companies met the requirements, resulting in a total of 70 observations (35 companies × 2 years).

3.3 Variable Measurement and Model Specification

This study employs a multiple regression analysis model to examine the extent to which independent variables influence the dependent variable. Multiple regression analysis is used to test the significance of the proposed hypotheses. The regression equation applied in this study is as follows:

$$SI = \beta_0 + \beta_1 MC + \beta_2 IO + \beta_3 GA + \varepsilon$$

Where:

- β_0 = Constant
- $\beta_1, \beta_2, \beta_3$ = Regression coefficients
- SI = Sustainability Index
- MC = Management Commitment
- IO = Institutional Ownership
- GA = Green Accounting
- ε = Error term

3.4 Data Analysis Techniques

The data analysis began with descriptive statistics to summarize the characteristics of the research variables. Prior to hypothesis testing, several classical assumption tests were conducted to ensure the validity of the regression model. These tests included the normality test to examine the distribution of residuals, the multicollinearity test using Variance Inflation Factor (VIF) and tolerance values, the heteroscedasticity test to detect unequal variance in the error terms, and the autocorrelation test to identify serial correlation among residuals.

The study employed pooled panel data regression using multiple linear regression analysis to examine the effect of management commitment, institutional ownership, and green accounting on sustainability index disclosure. The goodness of fit of the model was evaluated using the coefficient of determination (R^2) and the F-test, while the significance

of individual independent variables was assessed using the t-test. All statistical analyses were performed using SPSS version 25

4. Results And Discussion

4.1 Descriptive Statistics

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Management Commitment (KM)	70	1.00	3.00	2.0857	0.69663
Institutional Ownership (KI)	70	0.00	100.00	75.2857	26.40276
Green Accounting (AH)	70	3.00	4.00	3.6429	0.48262
Sustainability Index (IK)	70	26.00	108.00	74.1857	19.33480

Source: Processed data (SPSS Statistics 25)

The mean value for management commitment (2.09 on a 1–3 scale) indicates a moderate level of managerial commitment across the sample. Institutional ownership has a high average (75.29%), but a large standard deviation (26.40) indicates substantial variation between firms. Green accounting scores are generally high (mean = 3.64 on a 3–4 scale) with low dispersion, suggesting most firms score similarly on the green accounting measure. The sustainability index shows considerable dispersion (mean = 74.19; SD = 19.33), indicating heterogeneous sustainability disclosure levels among sampled firms.

4.2 Normality Test

Table 2. Normality Test

Statistic	Value
Mean (residual)	0.0000000
Std. Deviation (residual)	18.23408477
Most Extreme Differences (Absolute)	0.067
Test statistic (K–S)	0.067

Source: Processed data (SPSS Statistics 25)

Asymp. Sig. = 0.200 (> 0.05) indicates that residuals do not significantly deviate from normality. Therefore, the normality assumption is satisfied.

4.3 Multicollinearity Test

Table 3. Multicollinearity Test

Variable	Tolerance	VIF
KM (Management Commitment)	0.997	1.003
KI (Institutional Ownership)	0.997	1.003
AH (Green Accounting)	1.000	1.000

Source: Processed data (SPSS Statistics 25)

Asymp. Sig. = 0.200 (> 0.05) indicates that residuals do not significantly deviate from normality. Therefore, the normality assumption is satisfied.

4.4 Heteroskedasticity Test

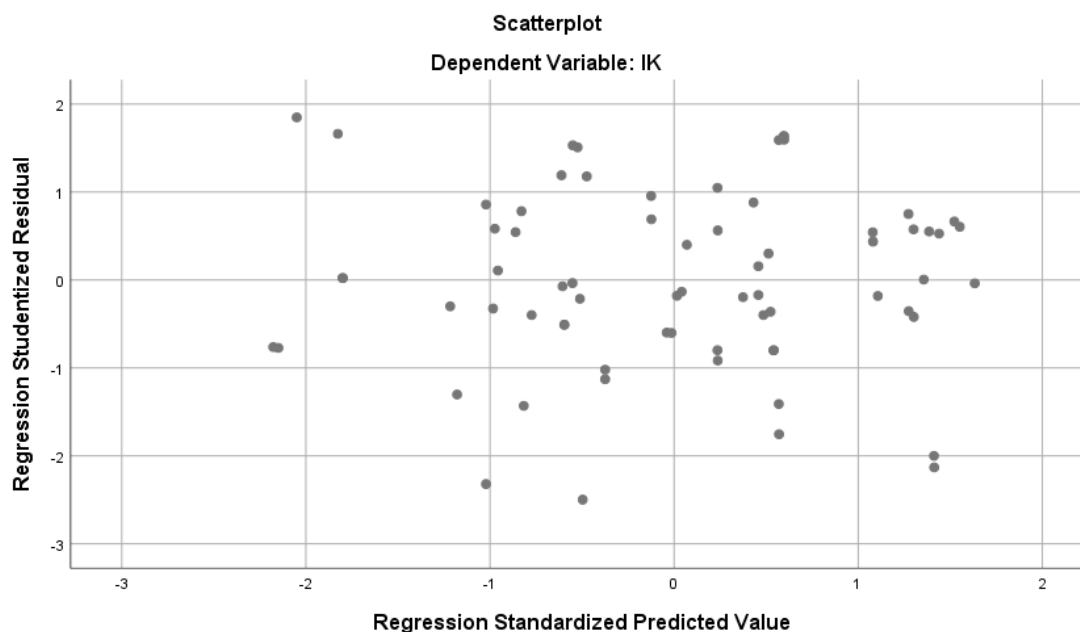


Figure 2. Heteroskedasticity Test Scatter Plot

The residuals are randomly dispersed around the zero line without any clear funneling or systematic pattern. Although a few outlying points exist, there is no evidence that residual variance depends on the level of predicted values. Thus, the homoscedasticity assumption is considered satisfied.

4.5 Autocorrelation Test

Table 4. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	0.333	0.111	0.070	18.64389	2.097

Source: Processed data (SPSS Statistics 25)

Autocorrelation was tested using the Durbin–Watson statistic calculated from the model summary. The Durbin–Watson value of 2.097 is close to 2, indicating no evidence of positive or negative autocorrelation among residuals. Therefore, the independence assumption of residuals is met.

4.6 Coefficient of determination (R²)

Table 5. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	0.333	0.111	0.070	18.64389	2.097

Source: Processed data (SPSS Statistics 25)

The model yields an R² of 0.111 (Adjusted R² = 0.070), indicating that Management Commitment, Institutional Ownership, and Green Accounting together explain 11.1% of the variation in the Sustainability Index. The remaining 88.9% of variation is attributable to other factors not included in the model. Although the explained variance is limited, such R² levels are common in social and accounting research where many omitted contextual factors influence the dependent variable.

4.7 F-Test

Table 6. F-Test

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	2853.338	3	951.113	2.736	0.050
Residual	22941.247	66	347.595		
Total	25794.586	69			

Source: Processed data (SPSS Statistics 25)

The model's F statistic = 2.736 with $p = 0.050$ (equal to $\alpha = 0.05$) implies that, at the chosen significance level, the set of independent variables is statistically significant in explaining the dependent variable. Therefore, the model is acceptable for further interpretation.

4.8 t-Test

Table 7. t-Test

Predictor	B (Unstandardized)	Std. Error	Beta	t	Sig.
Constant	46.885	19.541		2.399	0.019
KM (Management Commitment)	6.669	3.227	0.240	2.067	0.043
KI (Institutional Ownership)	0.178	0.085	0.244	2.095	0.040
AH (Green Accounting)	-0.010	4.651	0.000	-0.002	0.998

Source: Processed data (SPSS Statistics 25)

Based on the t-test results, it can be concluded that Management Commitment and Institutional Ownership individually have a significant effect on the dependent variable, as indicated by their significance values being below 0.05. This suggests that both variables play an important role in influencing the dependent variable. In contrast, Green Accounting does not show a significant individual effect, as its significance value is much higher than 0.05, indicating that its contribution to the dependent variable is not statistically supported.

4.9 Discussion

4.9.1 Effect of Management Commitment on Sustainability Disclosure

The analysis indicates a positive and significant effect of management commitment on the level of sustainability index disclosure ($\beta = 6.669$; $t = 2.067$; $p = 0.043$). This suggests that firms where top management actively demonstrates commitment to sustainability (e.g., forming sustainability committees, stakeholder engagement, separate sustainability reports) tend to disclose more sustainability information. The finding is consistent with legitimacy theory: management uses disclosure to obtain and maintain societal acceptance by showing that corporate operations conform to social expectations. Practically, the result emphasizes the importance of visible top-level commitment in improving transparency of sustainability reporting. Measurement limitations (e.g., available indicators of commitment, unobserved investments in sustainability) should be considered in future research.

4.9.2 Effect of Institutional Ownership on Sustainability Disclosure

Institutional ownership positively and significantly affects sustainability disclosure ($\beta = 0.178$; $t = 2.095$; $p = 0.040$). Firms with larger institutional shareholdings tend to provide more comprehensive sustainability disclosures, likely because institutional investors exert monitoring pressure and favor transparency to protect long-term value. However, institutional investors are heterogeneous: long-term, active institutions may push harder for disclosure than short-term or passive investors. Future studies could disaggregate institutional types to examine heterogeneous effects.

4.9.3 Effect of Green Accounting on Sustainability Disclosure

Green accounting (as measured here) does not have a significant relationship with sustainability disclosure ($\beta = -0.010$; $t = -0.002$; $p = 0.998$). Several explanations are possible: (1) green accounting practices may be implemented operationally or internally without being translated into broader GRI-style disclosures; (2) firms may achieve compliance scores on environmental programs but lack systematic reporting systems that expand into the dimensions captured by the sustainability index; (3) the green accounting metric used may emphasize regulatory compliance rather than disclosure breadth. The result implies a gap between internal environmental performance/management and external disclosure practices. Policy implications include encouraging integration between internal environmental accounting systems and external reporting frameworks so stakeholders can observe environmental performance through formal disclosures.

5. Conclusion

This study sheds light on the determinants of sustainability disclosure in Indonesian non-cyclical companies. By analyzing management commitment, institutional ownership, and green accounting simultaneously, we find that stronger management commitment and higher institutional ownership significantly enhance the level of sustainability reporting. In contrast, adoption of green accounting (as measured by PROPER rating) does not by itself increase disclosure extent. These findings have several important implications:

- 1) **Theoretical Contribution:** We confirm that legitimacy theory applies in an emerging-market, non-cyclical sector context. Management commitment and institutional investor pressure motivate firms to improve transparency about sustainability, supporting the view that legitimacy-seeking behavior drives disclosure. The insignificant role of green accounting suggests that internal environmental practices must be complemented by explicit communication efforts.
- 2) **Practical Implications:** For managers, the results highlight the value of visibly committing to sustainability (e.g. through active committees, separated reports, and stakeholder engagement) as a means to improve reporting and public perception. Institutional investors and governance bodies should recognize their role in encouraging disclosure as a higher proportion of such owners correlates with better transparency, so engaging them in sustainability governance is beneficial. Regulators may consider requiring not just internal compliance (PROPER) but also comprehensive disclosure of those activities. In particular, mandatory sustainability reporting policies (GRI 2021) appear more effective when accompanied by active leadership and investor involvement.
- 3) **Limitations and Future Research:** The sample size (35 companies) and focus on a two-year period limit generalizability. Future research could extend to more years and

include other sectors in the research or using other variables that affect sustainability index better.

In conclusion, our study underscores that in the context of Indonesian non-cyclical industries, management commitment and institutional ownership are crucial for enhancing sustainability disclosure. Firms aiming to meet stakeholder and regulatory expectations should therefore focus on strengthening leadership support and engaging institutional investors, alongside developing internal green accounting systems.

References

- Ardhia, O. M., Muawanah, U., & Farhan, D. (2024). Mediasi Komitmen Keberlanjutan Dalam Pengaruh Reputasi Dan Budaya Perusahaan Terhadap Kualitas Laporan Keberlanjutan. *Akurasi : Jurnal Studi Akuntansi Dan Keuangan*, 7(2), 331–350. <https://doi.org/10.29303/akurasi.v7i2.574>
- Fathurohman, M., Purwohedi, U., & Armeliza, D. (2022). Pengaruh Profitabilitas , Leverage , Kepemilikan Publik Dan Institusional Terhadap Pengungkapan Lingkungan. *Jurnal Akuntansi, Perpajakan Dan Auditing*, 3(1), 245–264.
- Lestari, A. D., & Khomsiyah, K. (2023). Pengaruh Kinerja Lingkungan, Penerapan Green Accounting, dan Pengungkapan Sustainability Report Terhadap Nilai Perusahaan. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi (JEBMA)*, 3(3), 514–526. <https://doi.org/10.47709/jebma.v3i3.2799>
- Muljono, M., & Dyna Rachmawati. (2024). Green Accounting dan Kinerja Bisnis: Peranan Proper sebagai Pemoderasi. *Jurnal Akuntansi*, 24(1), 29–42. <https://doi.org/10.36452/akunukd.v24i2.3196>
- Mutiha, A. H. (2022). *The Quality of Sustainability Report Disclosure and Firm Value: Further Evidence from Indonesia*. 26. <https://doi.org/10.3390/proceedings2022083026>
- Nurdialy, M., & Wijaya, H. (2025). Analysis of the Quality of Sustainability and Governance Disclosure in SR Reports: A Study of 51 Indonesian Public Companies Based on POJK 51. *Law and Economics*, 19(2), 187–196. <https://journals.ristek.or.id/index.php/LE/index>
- Oktaviani, Z., & Metalia, M. (2024). The Effect of Green Accounting Quality on Sustainability Report with Company Size as Moderating Variable Sudrajat. *International Journal of Economics, Business and Accounting*, 2(3), 359–367. <https://doi.org/10.5281/zenodo.13737283>
- Qays, S., Al, A., & Sadeghi, S. K. (2024). *Factors Influencing the Disclosure of SDG Activities at the Corporate Level in the Iranian Stock Market from 2016 to 2023*. 2, 33–42.
- Safitra, S. Y., & Tirayoh, V. Z. (2025). Pengaruh Pengungkapan Sustainability Index Terhadap Kinerja Keuangan (Studi Pada Perusahaan Sektor Industri Barang Konsumsi Yang Terdaftar Di Bursa Efek Indonesia Tahun 2020-2023) | Indonesian Journal of Economics, Management and Accounting. *Indonesian Journal of Economics, Management, and Accounting*, 2(2), 1498–1505. <https://jurnal.intekom.id/index.php/ijema/article/view/1102>
- Sujatnika, I. N. J., Sujana, E., & Werastuti, D. N. S. (2023). Pengaruh Kepemilikan Institusional, Komite Audit Dan Ukuran Perusahaan Terhadap Pengungkapan Sustainability Report Dengan Profitabilitas Sebagai Variabel Mediasi. *Jurnal Akuntansi Profesi*, 14(01), 194–207. <https://doi.org/10.23887/jap.v14i01.48555>

- Zhou, D., Saeed, U. F., & Agyemang, A. O. (2024). Assessing the Role of Sustainability Disclosure on Firms' Financial Performance: Evidence from the Energy Sector of Belt and Road Initiative Countries. *Sustainability (Switzerland)*, 16(2). <https://doi.org/10.3390/su16020930>
- Zulhaninta, Z. T., & Ardhiarisca, O. (2022). Faktor-Faktor Yang Mempengaruhi Kualitas Laporan Keuangan. *Jurnal Akuntansi Dan Keuangan Daerah*, 17(2), 140–150. <https://doi.org/10.52062/jaked.v17i2.2582>