

FIRM REPUTATION AND EXTENT OF WASTE DISCLOSURE

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ABSTRACT

Waste disclosure represents a crucial aspect of corporate social responsibility, serving to ensure transparency and meet stakeholder expectations. This study aims to analyze the effect of Firm Reputation on the Extent of Waste Disclosure among publicly listed companies in Indonesia. A quantitative approach was employed using Two-Stage Least Squares (2SLS) regression analysis, with secondary data obtained from annual and sustainability reports of companies listed on the Indonesia Stock Exchange. The findings indicate that firms with strong reputations tend to disclose waste-related information more extensively as a strategy to maintain legitimacy in the public eye and to enhance firm value. These results imply that a positive reputation serves as a key driver of environmental transparency.

Keywords: Firm Reputation, Extent of Waste Disclosure, Legitimacy Theory

INTRODUCTION

Indonesia faces serious challenges related to environmental pollution, particularly due to hazardous and toxic waste (B3) generated by the industrial sector. Greenpeace Indonesia has identified river pollution caused by hazardous chemicals as a major environmental issue, with severe impacts on aquatic ecosystems and public health (Ashov, 2018). The problem is exacerbated by the high contribution of industrial sectors to B3 waste generation, where during the COVID-19 pandemic (2020–2023), industrial waste production reached approximately 200 million tons, a figure significantly higher than in previous years (Imami & Rahmah, 2022).

The COVID-19 pandemic in Indonesia officially began in 2020, following Presidential Decree No. 12 of 2020, which designated it as a national non-natural disaster, and concluded in 2023 with Presidential Decree No. 17 of 2023. Despite restrictions on community activities, industrial operations continued relatively normally, resulting in increased waste production. This condition underscores the urgency of effective and transparent waste management practices.

Elkington's (1997) Triple Bottom Line concept emphasizes that corporate sustainability is not only measured by profitability but also by contributions to environmental preservation (planet) and community welfare (people). This principle has been adopted into several national policies, including Law No. 40 of 2007 on Corporate Social and Environmental Responsibility, the Financial Services Authority (OJK) Regulation No. 51/POJK.03/2017 on Sustainable Finance, and the Public Disclosure Program for Environmental Compliance (PROPER), which assesses corporate environmental performance through a color-coded ranking system. Furthermore, the Global Reporting Initiative (GRI) 306 (2020) establishes waste management disclosure standards, requiring firms to report on impacts, management strategies, and waste processing outcomes (Putri & Davianti, 2022).

Within the framework of legitimacy theory, firms strive to maintain social legitimacy by aligning their actions and disclosures with societal norms and expectations

(Afifah et al., 2021; Wicaksono et al., 2021). Companies with strong reputations are generally more transparent in disclosing environmental information, including waste management, as a means of building and sustaining public trust. In the manufacturing sector identified as the largest contributor to B3 waste in Indonesia (Ministry of Environment and Forestry, 2024) firm reputation is likely to be a decisive factor influencing the extent of such disclosures.

Based on this background, the present study focuses on analyzing the effect of firm reputation on the extent of waste disclosure among manufacturing companies in Indonesia, while also considering relevant control and instrumental variables.

According to data from the Directorate General of Waste, Hazardous, and Toxic Material Management (PSLB3), the manufacturing sector generates the highest volume of B3 waste, amounting to 9,249.7 tons. Of this, only 0.36 tons are processed further, while 9,248.91 tons remain stored in temporary storage facilities (TPS).

The growing number of factors influencing environmental disclosure and pollution in Indonesia correlates with the expansion of industrial activities in certain regions. A recent example is the toxic sludge pollution amounting to several tons in residential areas of Darawolong Village, Purwasari, Karawang, West Java, caused by a textile company in Bandung (Setiawan, 2022).

These phenomena, reinforced by government regulations and environmental performance assessments, underscore the importance of sustainability reporting, particularly in waste disclosure. From the perspective of legitimacy theory, waste disclosure serves as a communication tool between firms and stakeholders.

Based on the identified problem, the **conceptual framework** of this study can be presented as follows.

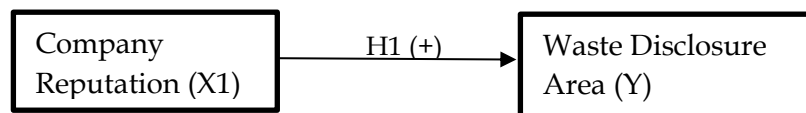


Figure 1 Conceptual Framework

Source: Research Data, 2025

Legitimacy theory explains that organizations strive to ensure that their activities fall within socially accepted boundaries and norms (Dowling & Pfeffer, 1975). Companies require legitimacy from society to sustain their operations, which drives them to align their practices and disclosures with public expectations. Legitimacy can be achieved through information transparency, including disclosures related to environmental management (Suchman, 1995). In the context of waste management, adequate disclosure demonstrates a company's commitment to environmental sustainability, thereby strengthening its positive image in the eyes of stakeholders.

Firm reputation refers to the collective perception of stakeholders regarding a company's integrity, performance, and responsibility (Fombrun, 1996). A strong reputation not only enhances public trust but also provides a solid basis for social legitimacy. Reputable firms tend to disclose information more extensively to maintain their positive image, including disclosures related to environmental performance. Previous studies indicate that a good reputation motivates companies to engage in more transparent reporting as a strategy to maintain harmonious relationships with stakeholders (Afifah et al., 2021; Wicaksono et al., 2021).

The extent of waste disclosure refers to the degree to which companies report information regarding the management of generated waste, including types, quantities, handling methods, and environmental impacts. The Global Reporting Initiative (GRI) 306 (2020) provides detailed guidelines on the indicators that must be disclosed, such as total waste generated, the proportion recycled, and efforts to reduce waste at the source (Putri & Davianti, 2022). From the perspective of legitimacy theory, the greater the pressure from society, regulators, and stakeholders, the more extensive the disclosures made by companies to preserve their social legitimacy.

Based on these arguments, the first hypothesis can be formulated as follows:

H₁: Firm reputation has a positive effect on the extent of waste disclosure.

Firm reputation is the collective perception of stakeholders regarding a company's integrity, quality, and social responsibility (Fombrun, 1996). A positive reputation encourages firms to maintain consistency in behavior and communication to align with the established image (Wartick, 2002). Afifah et al. (2021) found that firm reputation positively influences the extent of corporate social and environmental responsibility disclosures. Similarly, Wicaksono et al. (2021) noted that reputable companies tend to provide more comprehensive environmental information to sustain public trust.

In the context of waste management, the Global Reporting Initiative (GRI) 306 (2020) establishes disclosure standards covering waste volume, type, treatment methods, and reduction strategies (Putri & Davianti, 2022). The extent of waste disclosure thus serves as an indicator of corporate transparency in managing environmental impacts. According to legitimacy theory, companies with strong reputations have greater incentives to disclose such information comprehensively, both to comply with regulatory demands and to maintain legitimacy in the eyes of society.

METHOD

This study employs a quantitative approach with the Two-Stage Least Squares (2SLS) regression analysis to examine the effect of firm reputation on the extent of waste disclosure. The use of 2SLS is motivated by the potential endogeneity between the independent and dependent variables, necessitating the application of instrumental variables to produce unbiased estimations (Gujarati & Porter, 2009).

Firm reputation is measured using the PROPER rating (Company Performance Rating Program in Environmental Management), which is converted into numerical scores: gold (5), green (4), blue (3), red (2), and black (1). The extent of waste disclosure is measured using a disclosure index based on the GRI 306 (2020) guidelines. Each disclosure item is assigned a score of 1 if disclosed and 0 if not disclosed. The disclosure index is then calculated as follows:

$$\text{Disclosure Index} = \times 100\% \frac{\text{Number of Items Disclosed}}{\text{Total Number of Items in the Index}}$$

The study population included all manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2023 period. The manufacturing sector was selected based on the consideration that this sector is one of the largest contributors of Hazardous and Toxic Materials (B3) waste in Indonesia (Ministry of Environment and Forestry, 2024). Companies in this sector are required to report waste management information in accordance with environmental regulations, such as the Global Reporting Initiative (GRI) 306 (2020) and PROPER.

This population is relevant to the research objective, namely to test the influence of corporate reputation on the extent of waste disclosure, because all members of the population have the potential to produce significant amounts of industrial waste and are under strict regulatory oversight.

This study uses secondary data obtained through documentation methods. Data sources include: (1) annual reports and corporate sustainability reports downloaded from the official website of the Indonesia Stock Exchange (IDX) and the official websites of each company, used to measure the extent of waste disclosure based on the Global Reporting Initiative (GRI) 306 (2020) guidelines; and (2) PROPER data obtained from the official publication of the Ministry of Environment and Forestry (KLHK) to measure corporate reputation by converting ratings into numerical scores. All collected data were then processed according to the research variable indicators. The data analysis technique used in this study was the Two-Stage Least Squares (2SLS) regression method to examine the effect of corporate reputation on the extent of waste disclosure. The selection of the 2SLS method aims to overcome potential endogeneity problems that can occur if the independent variable is correlated with the error term.

$$Y = \alpha + \beta_1 X_1 + \varepsilon \dots\dots\dots (2)$$

Information:

- Y = AreaWaste Disclosure
- α =Constantine
- β_1 , =Regression coefficient for X_1 ,
- X_1 = Company Reputation
- e = error

RESULTS AND DISCUSSION

The initial test conducted in this study was a descriptive analysis that described the research variables, such as the number of samples (N), average, minimum, maximum, and standard deviation values. The results of the descriptive analysis can be seen in Table 1.

Table 1. Results of Descriptive Statistical Analysis

Variables	N	Minimum	Maximum	Average	Standard Deviation
Company Reputation	104	2	5	3,394	1,185
Extent of Waste Disclosure	104	0	100%	60.961%	23.655%

Source :Research Data, 2025

Based on the results of the descriptive analysis, the Corporate Reputation variable has a sample size (N) of 104, a minimum value of 2, a maximum value of 5, a mean value of 3.394, and a standard deviation of 1.185. This indicates that, in general, corporate reputation is in the medium category, with considerable variation between companies (indicated by the relatively high standard deviation). The company with the highest reputation score achieved 5 (PROPER gold rating), while the lowest had a score of 2 (received a red rating).

The Waste Disclosure Extent variable also has a sample size (N) of 104, with a minimum value of 0%, a maximum of 100%, a mean of 60.961%, and a standard deviation of 23.655%. This average indicates that companies in the sample have disclosed approximately 61% of the total indicators recommended by GRI 306 (2020), but the level of disclosure varies significantly. Some companies disclose all indicators (100%), while others do not disclose any waste-related information at all (0%).

The results of the multiple linear regression analysis test can be seen in Table 3.

Table 3. Analysis Results

Variables	2sls	Xt2sls_fe	Xt2sls_re
Constant	-0.675	-0.688	-0.675
Company Reputation	0.306	0.297	0.306
R-square:	0.652		
F-count:	3.97		
Significance:	0.012		

Source :Research Data, 2025

Table 3 shows the regression equation formulated as follows.

$$Y = -0.675 + 0.306X + \epsilon$$

The constant value indicates that when Firm Reputation equals zero, the extent of waste disclosure is predicted to be -0.675. This negative value is not interpreted literally but rather signifies that without a favorable reputation, waste disclosure tends to be very low or even absent.

The positive coefficient of **0.306** implies that for every one-unit increase in firm reputation, the extent of waste disclosure increases by 0.306 units. This demonstrates a positive and significant effect of firm reputation on the extent of waste disclosure.

The F-test result shows that the overall regression model is significant at the 5% level ($0.012 < 0.05$), indicating that the model is appropriate for explaining the relationship between the independent and dependent variables.

The findings using the 2SLS method confirm that firm reputation has a positive and significant effect on the extent of waste disclosure, with a coefficient of 0.306 (p-value = 0.012). The model yields an R-square value of 0.652, suggesting that 65.2% of the variation in waste disclosure can be explained by firm reputation. These results indicate that the higher a company's reputation, the greater its commitment to providing transparent information related to waste management.

These findings are consistent with prior studies (Liestiyani & Rahmawati, 2022; Wicaksono et al., 2021; Al-Mutairi & Suzaida, 2023; Nirwana & Wedari, 2023; Zhou & Wang, 2020), which also document a positive and significant relationship between firm reputation and the extent of environmental disclosure.

CONCLUSION

Based on the 2SLS analysis, this study concludes that firm reputation has a positive and significant influence on the extent of waste disclosure. Firms with stronger reputations tend to disclose waste-related information more extensively. This tendency is driven by the need to maintain legitimacy and sustain the trust of stakeholders, including investors, the public, and the government. The findings demonstrate that reputation is not

only an intangible asset but also functions as a driving mechanism for corporate transparency in sustainability practices. In other words, firms striving to maintain a positive reputation are more likely to be transparent regarding their environmental practices, particularly waste management.

The practical implication of this study is that companies should view reputation as a long-term business strategy. Broader waste disclosure not only enhances corporate image but also strengthens competitiveness and attracts investors who are increasingly concerned with sustainability issues. Furthermore, this study contributes to the environmental accounting literature by reaffirming that firm reputation is a critical determinant of environmental disclosure practices.

For future research, the model may be expanded by incorporating additional variables such as media pressure, government regulation, or industry severity to provide a deeper understanding of the factors influencing the extent of waste disclosure.

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