

Corporate Social Responsibility Disclosure, Environmental Performance, and Corporate Profitability: Green Innovation as Intervening Variable

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Article info

Abstract

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This study aims to analyze and empirically prove the effect of corporate social responsibility disclosure and environmental performance on company profitability with green innovation as an intervening variable. This study uses a purposive sampling method conducted on 20 company samples with 60 research populations in mining companies listed on the Indonesia Stock Exchange in 2019-2021. The data analysis technique in this study used Panel Data Regression. This study results in Corporate Social Responsibility Disclosure has a significant positive effect on profitability, Environmental Performance has no significant effect on profitability, Green Innovation has a significant negative effect on profitability, Corporate Social Responsibility Disclosure has a significant positive effect on Green Innovation, Environmental Performance has a significant positive effect on Green Innovation, Green Innovation is able to mediate Corporate Social Responsibility Disclosure on Profitability, and Green Innovation is unable to mediate Environmental Performance on company profitability

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1. Introduction

Profitability is an index included in the company's long-term profit. This financial performance can be seen by analyzing financial statements (Madaleno & Bărbuță-Mișu, 2019; Hardi & Chairina, 2019; Haryanto et al., 2021; and Setiadi & Supatmi, 2022). The level of profitability of the company is used as the basis for measuring the financial performance of a company because the attractiveness of the company is an important measure in competition between companies, so that the attractiveness of the company can be measured by the company's profitability, such as ROA (Barauskaite & Streimikiene, 2021a).

In companies, financial reporting is the main reference for investors and other stakeholders to

evaluate company performance. However, to complement decision making, sustainability reporting which includes Corporate Social Responsibility Disclosure is required. (Oncioiu et al., 2020) argues that one of the benefits of CSR disclosure is to improve the company's reputation. This is because companies that implement CSR programs are given credibility and responsibility to manage the impact of their activities. With the increase in the company's reputation, the company's sales and market share also result in profitability.

Climate change and global warming has become a major problem and is one of the manifestations of climate change that should not be underestimated. The amount of carbon dioxide (CO₂) produced, causes an increase in the earth's surface temperature, resulting in the greenhouse effect. Cli-

mate change and extreme weather conditions are becoming an alarming threat. This concern is exacerbated by the fact that climate change has become a global problem, not just a national risk (Mikhaylov et al., 2020)

According to a 2021 Asian Development Bank (ADB) report, Indonesia is listed as one of three countries at high risk of environmental disasters, especially extreme floods and droughts. ADB also estimates that the temperature rise in Indonesia will range from 0.80-1.40°C by 2050. The same thing is also predicted by NASA Goddard Institute for Space Studies. Based on the data, global temperatures have increased significantly over the past 7 years.

The business world must also contribute to tackling climate change. According to a 2017 report by the Carbon Disclosure Project (CDP), as much as 70 percent of the world's carbon emissions are contributed by just 100 companies (Kouloukoui et al., 2019). A large number of large companies included in the "Top 100" list of carbon emitters are ExxonMobil, Shell, BHP Billiton, and Gazprom. The CDP report also calls on consumers to be more efficient in their energy consumption. At the country level, climate change conferences have been held since 1998 with the Kyoto Protocol agreement. This conference continues until 2021 through the organization of COP-26. This shows the seriousness of the governments of countries in the world in handling climate change (Dutu-Buzura, 2022).

There is research according to Wulandari (2020) This study found that CSR disclosure has a positive and significant effect on company profitability. But in contrast to research Shahnian & Davianti (2021) that disclosure of financial and environmental aspects of CSR has no significant negative effect on company profitability.

The research on the effect of Environmental Performance on Profitability, including research Sparta & Ayu (2017) has proven that environmental performance has a significant negative impact on profitability. Research Asjuwita & Agustin (2020) results in Environmental Performance not having a positive effect on Profitability.

There are previous researches that have made observations regarding the effect of Green Innovation, in mediating Corporate Social Responsibility Disclosure on Environmental Performance. Among them is research Kraus et al. (2020) has proven that Green Innovation significantly mediates between CSR and Environmental Performance. The results of previous studies show that CSR does not have a direct effect but has an indirect effect on

Environmental Performance in the presence of mediating variables such as Green Innovation.

The novelty in this research is adding Green Innovation as an intervening variable to help explain and understand the complex relationship between the independent variables, namely Corporate Social Responsibility Disclosure, Environmental Performance and the dependent variable namely Profitability (Novitasari & Agustia, 2022). This research was conducted on mining sector companies listed on the Indonesia Stock Exchange in 2019-2021. The selection of mining companies is because mining companies are a large contributor to carbon dioxide emissions especially from mining activities and steam power plants (PLTU). Therefore, this topic is an interesting topic for further research. This study aims to analyze and empirically prove the effect of corporate social responsibility disclosure and environmental performance on company profitability with green innovation as an intervening variable.

2. Hypothesis development

Stakeholder Theory

This theory is a theory that describes organizations that have social obligations to parties outside of management known as stakeholders. In Indonesian, stakeholders are defined as stakeholders which include employees, customers, suppliers, creditors, government, and society. This theory argues that stakeholder support is important for a company to succeed in their business to generate profits. Because these stakeholders have different influences on the company's operational activities (Zuhriah & Maharani, 2022)

In this stakeholder theory, there is a complex relationship between shareholders and stakeholders in enhancing social responsibility within the company. According to this theory no company acts in its own interest, but the company must be able to generate benefits for stakeholders. Therefore, in stakeholder theory the outside world is always seen from the perspective of management (Mu et al., 2023).

Legitimacy Theory

According to Kholmi & Nafiza (2022) legitimacy theory is a social contract between business and the community around the company. Companies operate based on a social contract so that the public can assess what the company's social responsibility is to the environment and receive financial benefits related to their investment in build-

ing impact in the local community. This legitimacy theory focuses on the relationship between business and society. This theory emphasizes that companies must pay attention to the standards or regulations that apply in the company's operating environment to create a more legitimized company.

Corporate Social Responsibility Disclosure provides information to stakeholders about the company's performance in relation to its responsibilities. Because stakeholders play a very important role in the development of corporate sustainability. By disclosing social activities, the company can reduce unfavorable responses to the impacts caused by its operational activities. The company can also increase public confidence in utilizing products or services from the company, so that sales and stock value increase. This will increase the level of investor confidence in the company so that the level of profitability of the company also increases. Research Wulandari (2020) shows that CSR disclosure has a positive and significant effect on projecting profitability proxied by the ROA ratio. Thus the hypothesis used is:

H₁: Corporate Social Responsibility Disclosure has a positive and significant effect on Profitability

Companies that care about the environment and company stakeholders can improve the company's financial performance. Stakeholders are more likely to invest, finance or buy products when the products produced by the company also involve corporate waste management. Increased sales of company products by customers lead to increased company profitability (Kholmi & Nafiza, 2022). There is research that states that environmental performance does not have a positive effect on profitability (Asjuwita & Agustin, 2020). Based on this description, the second hypothesis of this study is:

H₂: Environmental Performance has a positive and significant effect on Profitability

Green Innovation has a positive impact on increasing efficiency and saving production costs, including environmental costs. With these practices, companies can not only improve their financial performance but can also increase market share, and increase sales. Green Innovation can also improve the company's image and attract new customers to the company. Green Innovation has a positive effect on company profitability (Bibi & narsa, 2022) there is previous research according to Fabiola & Khusnah (2022) which states that green innovation on financial performance proxied by

ROA has a positive and significant effect, Green Innovation is one of the strategies to achieve company goals. Companies need strategies to maximize profitability. Green Innovation focuses on less use of resources or energy so as to minimize costs and increase company profits which will have an impact on improving financial performance.

H₃: Green Innovation has a positive and significant effect on Profitability

The value of Green Innovation arguably lies in the opportunity to improve environmental management performance, while meeting environmental protection requirements. Thus, Green Innovation is considered not only as an answer to environmental demands but also as an opportunity to encourage sustainable corporate growth. there is previous research according to Padilla-lozano & Collazzo (2021) which states that csr and green innovation positively and significantly impact manufacturing competitiveness in emerging market settings. The introduction of socially responsible and ecologically innovative practices is an endeavor that should be widely considered as part of long-term planning to achieve corporate viability and sustainability.

H₄: Corporate Social Responsibility Disclosure has a positive and significant effect on Green Innovation.

Environmental Performance relates to an organization's initiatives to meet and exceed society's expectations by meeting compliance with rules and regulations made by the government. It includes the environmental effects of an organization's processes, products, and resource consumption in a manner that best complies with legitimate environmental requirements. Environmental performance relies on green product quality, green process and product innovation, and the incorporation of ecological sustainability issues into business operations and product development (Singh et al., 2020). There is research according to Seman et al., (2019) which states that Green Innovation positively and significantly affects Environmental Performance this is because Green Product Innovation and Green Process Innovation not only reduce the negative environmental impact of company operations but also improve the company's financial and social performance through reduced waste and costs.

H₅: Environmental Performance has a positive and significant effect on Green Innovation

Companies need strategies to maximize profits. Green innovation develops products or processes that are environmentally friendly and efficient. Green innovation focuses on reducing resources or energy to minimize costs and increase corporate profits, which affects financial performance. Green innovation is an important mediator between corporate CSR and profitability. The results of the study Kraus et al. (2020) show that CSR has no direct effect, but has an indirect effect on environmental protection with the mediating variable of green innovation.

H₆: Green Innovation mediates the relationship between Corporate Social Responsibility Disclosure and Profitability.

When there is a discrepancy between the company's value system and society's value system, the company may lose its legitimacy, thereby affecting its continued viability. Therefore, a company's environmental performance affects its financial results and profitability, which is reflected in the company's annual return. Businesses need a strategy to maximize business profits, namely through Green Innovation which can develop products or processes that are environmentally friendly and efficient. Green Innovation can reduce the use of resources or energy to minimize costs and increase company profits. there is research according to Alfian & Widiyanesti (2021) which states that green innovation mediates the influence between Green Supply Chain Management and Environmental Performance.

H₇: Green Innovation mediates the relationship between Environmental Performance and Profitability.

3. Data and Methods

The type of research used in this study is associative research, and using purposive sampling technique, which uses criteria determined by the author at the time of sample selection. The data analysis technique in this study is panel data regression analysis technique. In this study using StaMP13 in conducting data testing. This study uses the dependent variable, namely Profitability and two independent variables, namely Corporate Social Responsibility Disclosure and Environmental Performance and uses the intervening variable, namely Green Innovation. The following is an operational definition and measurement of variables.

Corporate Social Responsibility Disclosure

The term Corporate Social Responsibility generally refers to a company's economic, environmental and social responsibility for its impacts (Barauskaite & Streimikiene, 2021). CSR disclosure is measured based on gri-g4 indicators that are generally applicable in various countries. GRI-G4 is the latest reporting standard published by GRI in 2013. The following are the proxies used in measuring Corporate Social Responsibility disclosure:

$$CSRDI_i = \frac{\sum X_{y \times i,t}}{n_{i \times i,t}}$$

Description: CSRDI : CSR disclosure index of company i;
 $\sum X_{yi}$: Value 1= if item y is disclosed; value 0= if item y is not disclosed; N_i : Number of companies i, n_i ≤ 91; i,t : period 2019-2021 (3 years)

Environmental Performance

Environmental Performance is the company's performance in creating a good environment. Companies pay attention to the environment as a form of corporate responsibility and concern for the environment (IFADA et al., 2021). Environmental performance it self can be determined by applying environmental accounting. The following are the proxies used in measuring Environmental Performance (Table 1).

Table 1. PROPER Ranking Criteria

No	Warna	Keterangan	Skor
1	Gold	Excellent	5
2	Green	Better	4
3	Blue	Good	3
4	Red	Fairly bad	2
5	Black	Bad	1

Source: Ministry of Environment

Profitability

Company profitability is the company's effort to generate profits within a certain period of time. The company's profitability is one of the milestones of assessment that describes the state of the company. Strong analytical tools and theoretical foundations are needed to assess this condition. The relevant analytical tools are financial ratios (profitability ratios). ROA (Return On Assets) is a measurement of the company's total ability to generate profits with all the assets available to the company. In measuring the profitability of the company in this study, it is proxied using the ROA formula as follows:

$$ROA = \frac{\text{Net Profit}}{\text{Total Assets}} \times 100\%$$

Green Innovation

Green Innovation was founded with the aim of reducing the impact of environmental damage to achieve energy efficiency, reduce pollution and waste, and develop green products. This research leads to the evaluation conducted. This assessment uses several indicators to determine whether a company is implementing Green Innovation.

Green product innovation includes products or services that are improved and produced with environmental impact in mind. The indicators used to proxy Green Product Innovation are: (1) Companies that produce the least pollution to carry out product development or design; (2) Companies use materials that are easy to recycle; (3) Improve and create environmentally friendly packaging solutions; (4) Choosing materials from products that use the least amount of energy and resources in the production process.

Green process innovation is the implementation of new plans that consider environmental impacts, or significant improvements in production or delivery methods. The indicators used in proxying this green process innovation are: (1) Production processes that reduce emissions of hazardous substances or waste; (2) Using technology that can reduce and prevent pollution; (3) Streamlining the use of transportation to reduce pollution; (4) Company processes reduce water, electricity, and oil consumption.

The panel data equation model which is a combination of cross section data and time series data is as follows:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \epsilon_{it}$$

4. Result

Descriptive Statistics

Descriptive statistics is a statistical analysis that provides an overview of the characteristics of each research variable seen from the average (mean), maximum, and minimum values. The result of the statistical description of the research variabel are presented in table 2.

The mean value of the CSRD variable is 0.396 while the standard deviation value is 0.137 The standard deviation value which is smaller than the mean indicates that the data has a low level of variation and the data distribution is evenly distributed. The mean value of the EP variable is 3.766 dur-

ing 2019-2021 and the standard deviation value obtained is 0.767. Based on the mean and standard deviation values, it can be seen that the standard deviation value is smaller than the mean value, it shows that the data has a low level of variation and the data distribution is evenly distributed. The mean value of the Profitability variable is 0.073 during 2019-2021 and the standard deviation value is 0.108 Based on the acquisition of the mean and standard deviation values, it shows that the standard deviation value is greater than the mean value, which means that the data has a high level of data variation and uneven data distribution. The mean value of the GI Variable is 0.439 during 2019-2020 with a standard deviation value obtained of 0.172. Based on the mean and standard deviation values, it can be seen that the standard deviation value is smaller than the mean value, it shows that the data has a low level of variation and the data distribution is evenly distributed.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	60	0.073	0.108	-0.098	0.471
CSRD	60	0.396	0.137	0.131	0.725
EP	60	3.766	0.767	3.000	5.000
GI	60	0.439	0.172	0.125	0.875

Results From Panel Data Analysis

Determination of the selected panel data regression analysis estimation model is the Fixed Effect Model (FEM) This model assumes that differences between individuals can be compensated by intercept differences (McNeish & Kelley, 2019). To estimate the fixed effect panel data model, a dummy variable technique can be used to capture intercept differences between companies, intercept differences may occur due to differences in work culture, management, and incentives. This estimation model is also commonly referred to as the LSDV (Least Squares Dummy Variable) technique . With the following results in table 3.

Based on the results of panel data regression testing, the Corporate Social Responsibility Disclosure has a probability value of 0.004 <0.05, show that Corporate Social Responsibility Disclosure has a significant positive effect on profitability. From the panel data regression test results, the Environmental Performance the probability value is 0.529 > 0.05, show that Environmental Performance has no significant effect on profitability. From the results of panel data regression testing, Green Inno-

vation has a probability value of 0.006 < 0.05, show that Green Innovation has a significant negative effect on profitability.

Table 3. Results of Estimation Model Determination

ROA	Coef.	S.E	t	p> t	[95% Conf. Inter- val]
CSR	0.311	0.101	3.05	0.004	0.104 0.517
EP	-0.018	0.029	-0.64	0.529	-0.077 0.040
GI	-0.269	0.091	-2.94	0.006	-0.454 -0.083
_cons	0.138	0.120	1.14	0.260	-0.106 0.382
R-sq = 0.3676		Prob>F = 0.00007			

Regression Test Result

Regression testing is used to prove the influence between the dependent variable and the independent variable. The following are the results of the fourth hypothesis regression test in table 4.

Table 4. Regression Corporate Social Responsibility Disclosure on Green Innovation.

GI	Coef.	Std. Err.	t	p> t	[95% Conf. Inter- val]
CSR	0.387	0.156	2.47	0.017	0.073 0.701
_cons	0.285	0.065	4.34	0.000	0.153 0.417

From the results of regression testing results in a coefficient value of Corporate Social Responsibility Disclosure of 0.387 and a probability value of 0.017 < 0.05, it can be concluded that Corporate Social Responsibility Disclosure has a significant positive effect on Green Innovation.

Table 5. Regression Environmental Performance on Green Innovation

GI	Coef.	Std. Err.	t	p> t	[95% Conf. Inter- val]
EP	0.067	0.028	2.32	0.024	0.008 0.122
_cons	0.192	0.108	1.77	0.082	-0.025 0.410

Based on the results of regression testing, the Environmental Performance regression coefficient value is 0.067 and the probability value is 0.024 < 0.05, so it can be concluded that Environmental Performance has a significant positive effect on Green Innovation.

Based on the results of classical assumption testing, namely multicollinearity, and heteroscedasticity tests, the data shows that the data fulfils classical assumptions.

The results of the sobel test calculation manually for the sixth hypothesis in this study are in table 6. Based on the results of the sobel test calculation above it is concluded that H6 is accepted, obtained the magnitude of the Z value is 2.058 > 1.96 (absolute value of the mediating variable).

Which means Green Innovation can mediate Corporate Social Responsibility Disclosure on ROA.

Table 6. Sobel Test Results Green Innovation mediates the relationship between Corporate Social Responsibility Disclosure and Profitability.

GI	Coef.	S.E
CSR	0.387	0.157
_cons	0.285	0.065
ROA	Coef.	S.E
GI	0,153	0,079
_cons	0,140	0,037

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

$$Sab = \sqrt{0,153^2 0,157^2 + 0,387^2 0,080^2 + 0,157^2 0,080^2}$$

$$Sab = \sqrt{0,0005 + 0,0000 + 0,0001}$$

$$Sab = \sqrt{0,0008}$$

$$Sab = 0,0288$$

And to test the significant indirect effect of the mediating variable using the following equation:

$$Z = \frac{ab}{Sab}$$

$$Z = \frac{0,0593}{0,0288}$$

$$Z = 2,0581$$

The results of the sobel test calculation manually for the seventh hypothesis in this study are in table 7. From the results of the manual sobel test calculation above, it can be concluded that H7 is rejected, the Z value is 1.400 < 1.96 (absolute value of the mediating variable). from the sobel test results it is concluded that Green Innovation cannot mediate Environmental Performance on Profitability

Table 7. Sobel Test Results Green Innovation mediates the relationship between Environmental Performance and Profitability

GI	Coef.	S.E
EP	0.065	0.028
_cons	0.192	0.108
ROA	Coef.	S.E
GI	0,153	0,079
_cons	0,140	0,037

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

$$Sab = \sqrt{0,153^2 \cdot 0,283^2 + 0,656^2 \cdot 0,080^2 + 0,283^2 \cdot 0,080^2}$$

$$ab = \sqrt{0,000001 + 0,000002 + 0,0000}$$

$$Sab = \sqrt{0,00005}$$

$$Sab = 0,0071$$

And to test the significant indirect effect of the mediating variable using the following equation:

$$Z = \frac{ab}{Sab}$$

$$Z = \frac{0,010}{0,007}$$

$$Z = 0,1400$$

5. Discussion

Effect of Corporate Social Responsibility Disclosure on Profitability

The results showed that Corporate Social Responsibility Disclosure has a positive effect on Profitability. It can be concluded that the higher the company's Corporate Social Responsibility disclosure, the higher the company's sales profit, because consumers value products from companies that are socially responsible and have a good image in the community. This research is in line with legitimacy theory which explains that companies use CSR disclosure to gain legitimacy in the community where the company is located. The results according to this study are in line with the research Machmuddah et al. (2020); Thuy et al. (2021); Srouji et al. (2023) results that CSR has a significant effect on profitability, because the implementation of CSR in a company can be supported by the community. Such support can improve the company's reputation.

Effect of Environmental Performance on Profitability

The results showed that environmental performance has no effect on profitability. It can be concluded that even though the average company gets a blue rating, it means that the company has tried to manage the environment in accordance with legal regulations. However, it can be assumed that environmental performance results cannot guarantee an increase in company profitability. The

results of this study are in line with stakeholder theory, Stakeholders can decide whether to use this information or not, because stakeholders are considered influential, but they can also influence business. This study agrees with research according to Ramlawati et al. (2022) which results that profitability has no effect on Environmental Performance, because most people do not value the products of companies that apply sustainable business concepts. However, this research contradicts research by Rosaline & Wuryani (2020) and Yurdakul & Kazan (2020).

Effect of Green Innovation on Profitability

The results showed that Green Innovation has a significant negative effect on profitability. It can be concluded that Green Innovation is made to reduce the use of energy and water, replace conventional energy sources with the latest, more efficient energy, and prevent water, soil and air pollution. These improvements have the potential to reduce operational costs, save on waste management costs, and increase productivity and efficiency so that increased profits are followed by an improvement in the company's financial performance. This study supports stakeholder theory which states that the company's goal is not only to create value for shareholders, but also to create value for all stakeholders. The results of this study are in line with research according to Fabiola & Khusnah (2022), and Suryani & Dianawati (2018) which found that green innovation has a positive and significant impact on financial performance (ROA). Businesses need strategies to maximize profits.

Effect of Corporate Social Responsibility Disclosure on Green Innovation

The results showed that Corporate Social Responsibility Disclosure has a significant positive effect on Green Innovation. It can be concluded that Corporate Social Responsibility Disclosure has a significant positive effect on Green Innovation. This research agrees with research according to Fauziah et al. (2020) which states that CSRD has a significant effect on Green Innovation. This hypothesis supports stakeholder theory, namely companies committed to CSR explicitly include attention to various stakeholders in corporate strategy.

Effect of Environmental Performance on Green Innovation

The results showed that Environmental Performance has a significant positive effect on Green Innovation. The results of this study agree with research according to Singh et al. (2020); Irfan et al. (2022) which states that Environmental Performance depends on the quality of green product innovation and green process innovation.

Green Innovation mediates the relationship between Corporate Social Responsibility Disclosure and Profitability

The results showed that Green Innovation can mediate Corporate Social Responsibility Disclosure on ROA. This indicates that Green innovation can support CSR disclosure in terms of increasing profitability. The existence of CSR disclosures owned by the company shows that the company has fulfilled its commitment to the environment so that it has gained community legitimacy. The fulfillment of this legitimacy makes it easier for companies to get support from stakeholders so that the implementation of green innovation is more optimal. Implementation of Green Innovation will reduce operational costs, reduce waste management costs, and increase productivity and efficiency so that increased profits will be followed by an increase in the company's financial performance.

Green Innovation mediates the relationship between Environmental Performance and Profitability.

The results showed that Green Innovation cannot mediate Environmental Performance on Profitability. The implementation of Environmental Performance as an effort towards sustainable environmental development does not affect market value where PROPER made by Kepmenlhk cannot guarantee an increase in company profitability. According to Damas et al. (2021). Environmental Performance as an environmental protection effort cannot affect market value. In this case, the PROPER rating cannot guarantee an increase in company profitability.

6. Conclusion and Suggestion

Conclusion

Based on the results of the analysis and discussion that has been carried out using panel data regression in the study, it can be concluded that the higher the company's corporate social responsibility

disclosure, the company's sales profit will increase, because consumers value products from companies that are socially responsible and have a good image in the community. Likewise, green innovation is made to reduce energy and water usage, replace conventional energy sources with the latest, more efficient energy, and prevent water, soil and air pollution. These improvements have the potential to reduce operational costs, save on waste management costs, and increase productivity and efficiency so that an increase in profits is followed by an increase in the company's financial performance. But it is different from environmental performance which cannot affect the company's profitability because even though the average company gets a blue rating, which means that the company has tried to manage the environment in accordance with statutory regulations. However, it can be assumed that the results of environmental performance cannot guarantee an increase in corporate profitability.

Suggestion

This study has several limitations that can be a reference in further research, namely mining companies listed on the Indonesia stock exchange that follow proper and make CSR disclosures are still relatively few, and in measuring green innovation researchers only use two measurement indicators, namely green product innovation and green process innovation, each of which is divided into 4 indicators. Based on the conclusions and limitations of the research above, the suggestions that researchers can provide to continue and develop in further research are: (1) Further researchers are expected to add variables that can affect Corporate Social Responsibility Disclosure, Environmental Performance, Profitability, and Green Innovation; (2) Further researchers are expected to use research samples other than mining companies listed on the Indonesia Stock Exchange in 2019-2021; (3) Further researchers are expected to take other measurements besides those used in this study.

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