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THE INFLUENCE OF INDUSTRY YTPE, GROWTH, PROFITABILITY, AND MEDIA EXPOSURE ON CARBON EMISSION DISCLOSURE OF HIGH PROFILE INDUSTRIAL COMPANIES ON THE INDONESIA STOCK EXCHANGE

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ABSTRACT

Carbon emission disclosure refers to an important element of corporate social responsibility reporting that focuses on environmental issues. This information is usually included in additional reports published along with the Statement of Financial Accounting Standards (PSAK). This study aims to determine the effect of industry type, growth, profitability, and media exposure on carbon emission disclosure of high profile industrial companies on the Indonesian stock exchange. This research is a quantitative study with secondary data in the form of the company's annual financial statements. The sample of this study was selected using purposive sampling technique and obtained sample data as many as 21 companies with a total sample of 105 samples. The data analysis technique uses multiple linear regression analysis with the SPSS 22 program. The results of this study indicate that industry type and profitability have a positive effect on carbon emission disclosure. While growth and media exposure have no effect on carbon emission disclosure.

Key word*: *industry type, growth, profitability, media exposure, carbon emission disclosure.

A. INTRODUCTION

Sustainable Development Goals is a global development agreement, namely a global action plan to end poverty, reduce inequality and protect the environment (SDGs, 2017). The environment is one of the main pillars in the SDGs that must be maintained consistently by companies, especially those whose operational activities are related to natural resources. The implementation of a sustainable environment is reflected in the sustainability report on the Environmental aspect. According to the Financial Services Authority Regulation (POJK) No. 51 / POR: 03 / 2017, a sustainability report refers to a document that provides information regarding the environmental, social, and economic performance of a company. The follow-up corporate report covers various topics, one of which is the environment. This section specifically focuses on metrics related to carbon emissions. These indicators must be disclosed or what is generally known as carbon emission disclosure in the sustainability report, the main purpose of which is to provide information to the public regarding the environmental sustainability of the company's operational activities.

Carbon emission refers to the release of carbon (CO2) into the atmosphere that occurs naturally and originates from human activities (EarthHero, 2017). Most human activities, including high-profile industrial companies, use fossil fuels that will increase carbon emission levels, then become very high hazardous energy sources, especially for the environment. Companies in Indonesia, in the high-profile industry, really need energy to support their operational activities and the source of energy is obtained from fossil fuels, which can

certainly cause high carbon emission levels (Rosyid de Immawati, 2022).

The level of carbon emissions in Indonesia has increased every year, and the largest contributor to greenhouse gas emissions comes from the combustion of fossil fuels. The graph of Indonesia's annual CO2 emissions can be shown in (Figure 1) that fuel combustion is the primary factor causing most greenhouse gas emissions (GHG), with carbon dioxide (CO2) emissions being the most significant Indonesia has experienced a marked increase in emissions since 1990, reaching a peak of 620 megatons of CO2 in 2018 The largest contribution to overall energy production comes from the power generation sector, which accounts for around 35% of total emissions. Meanwhile, the transportation and industrial sectors are in the next positions with each contributing 27%, which can be caused by the high activity in the industrial sector in Indonesia and in these activities the burning of fossil fuels to produce business entity products so that large emissions arise This is what makes researchers choose companies in high-profile industries to be studied regarding carbon emission disclosure, as contributors to quite high emissions in Indonesia (Rini et al., 2021).

The high emissions released by companies are not commensurate with the disclosures they make, as evidenced by the still low level of carbon emission disclosure contained in the sustainability report. Every company that is related to natural resources, especially high-profile industries, should be able to show its existence and become the most prioritized company for environmental sustainability, for example by conducting carbon emission disclosure in the sustainability report in each reporting period (Rini et al., 2021).

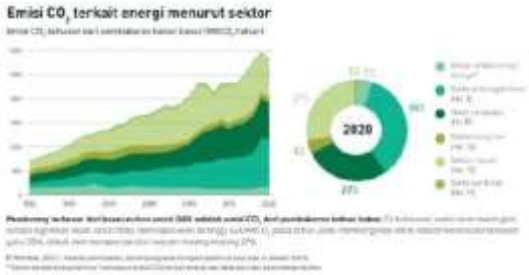

Figure 1. CO2 Emissions From Fruel Combustion

Source: *Climate Transparency* (2021)

B. RESEARCH METHOD

Method, is a way that can be used to obtain something. Meanwhile, the research method can be defined as a procedure in the research process, both in data search and the development of existing technologies, (Zalkarnaen, W, et al., 2020)

Types of research

In this research, the method used to conduct the research is a quantitative method. According to Sugiyamo (2022), the quantitative method is a method for testing theories by examining the relationship between variables.

Research Population and Sample

The population of this study includes energy sector industrial companies listed on the Indonesia Stock Exchange (BET) from 2019 to 2023. The population size of this study is 83 companies. The sample for this study was obtained through the proposive sampling method, where the selection of samples is based on certain criteria. The companies that are the subjects of this study were selected through purposive sampling, namely selecting companies based on certain criteria.

1) Company profile of the energy sector listed on the IDX for the period 2019-2023.
2) High profile industrial companies that must publish annual reports and sustainability reports during the 2019-2023 period.
3) Companies that disclose carbon entities implicitly or explicitly (including at least a summary of their greenhouse gas carbon emissions policy or disclosing at least one item of carbon information).

Of the 83 companies included in the high profile companies in the energy sector that are included in the BE2 2019-2023 list, there are 21 companies that have achieved the criteria that

have been sampled using the purposive sampling method, therefore, the amount of data This research involved 105 people

Data Analysis Techniques

In writing this research, the multiple regression data analysis method is used to run tests related to the influence of independent variables on dependent variables. The regression equation used is

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where :

Y	=	*Carbon Emission Disclosure*
α	=	Konstanta
$\beta_1\beta_2\beta_3\beta_4$	=	Koefesien Regresi
X_1	=	Tipe Industri
X_2	=	*Growth*
X_3	=	Profitabilitas
X_4	=	*Media Exposure*
ε	=	*Standar eror*

C. RESULT AND DISCUSSION

RESULTS

In this study, the descriptive statistics of 105 samples are shown in (Table 1), which shows that

1) The results of the descriptive analysis of the Carbon Emission Declosure (CED) variable show a minimum value of 0.11 at Buana Lintas Lautan Tbk (2019) and a maximum of 0.89 at Indo Tambangraya Megah Tok (2022) with an average of 0.3847 and a standard deviation of 0.17546.

2) The results of the descriptive analysis of the Industry Type variable (II) show a minimum value of 0.00 from a maximum of 1.00 with an average of 0.5238 and a standard deviation of 0.50183.

3) The results of the descriptive analysis of the Growth (GW) variable indicate a minimum value of -0.70 at Alfa Energi Investama Tbk (2072) and a maximum of 1.75 at Dian Swastatika Sentosa Thi (2022) with an average of 0.1474 and a standard deviation of 0.42144.

4) The results of the descriptive analysis of the Profitability (PS) variable show a minimum value of -0.38 at Buana Lintas Lautan Thi (2021) and a maximum of 0.62 at Golden Energy Mines Tok (2022) with an average of 0.0568 and a standard deviation of 0.15991. T

5) The results of the descriptive analysis of the Media Exponent (ME) variable show a maximum value of 0.00 and a maximum of 1.0) with an average of 0.6667 and a standard deviation of 0.4/367.

Table 1. Results of Descriptive Statistics Test
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CED	105	,11	,89	,3847	,17546
TI	105	,00	1,00	,5238	,50183
GW	105	-,70	1,75	,1474	,42144
PS	105	-,38	,62	,0588	,13991
ME	105	,00	1,00	,6667	,47367
Valid N (listwise)	105				

Classical Assumption Test

Normality Test

Determining whether the variables are normally distributed using the Kolmogorov-Smirnov (K-S) Technique and normal probability plot graph analysis (Ghozali. 2021). Based on the test in (table 2) it shows that the data has been normally distributed as evidenced by its significance value of 0.20 0.05 Therefore, the research data has been normally distributed, so the data can be used for testing with a multiple regression model.

Table 2. Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		105
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	,13124107
Most Extreme Differences	Absolute	,067
	Positive	,067
	Negative	-,051
Test Statistic		,067
Asymp. Sig. (2-tailed)		,200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Multicollinearity Test

Assessing whether there is a correlation between independent variables with a Tolerance value >0.10 and VIF 10 (Ghozalı, 2018) Based on (table 3) the values, tolerance and VIF show that there is no tolerance value below 0.10, with

a range between 0.756 to 0.988. Likewise, there is no VIF value above 10, with a range between 1.012 to 1.294, so it can be concluded that there is no multicollinearity problem.

Table 3. Multicollinearity Test Results

Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1	TI	,988	1,012
	GW	,773	1,294
	PS	,756	1,322
	ME	,974	1,027

a. Dependent Variable: CED

Heteroscedasticity Test

Assessing the residual variation between observations with a point pattern spread above and below the O child on the Y axis (Ghozali. 2021) It can be seen (table 4) that the R Square value is 0.419 with 105 then c n x R 105 x 0.419-43.995 While c'table with di (n-k) = 105-4101 with a sig value of 0.05 then the c'table value is 125.458. Then chitung e'table, which is 43.995 <125.458 so it can be concluded that there is no heteroscedasticity in the regression model

Table 4. Results of Heteroscedasticity Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,647[a]	,419	,343	,01659

a. Predictors: (Constant), x34, x11, x44, x22, x13, x33, x24, x12, x14, x23, GW, PS

Sumber: Hasil Output SPSS 22 (2024)

Autocorrelation Test

Checking the correlation between the nuisance errors in period, t with period 1-1 using the Durbin Watson method (Ghozali, 2018) Based on the results of the autocorrelation test (table 5) the DW value was obtained as 2.012, this value was compared with the table value using a significance value of 5% with an N of 105 and the number of independent variables as many as 4 (k = 4) with a du of 1.7617 with a 4-du value of 2.2383. The results obtained were 1.7617-2.012-2.2383, so it can be concluded that there is no autocorrelation in the regression model.

Table 5. Autocorrelation Test Results

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,664[a]	,441	,418	,13384	2,012

a. Predictors: (Constant), ME, TI, GW, PS

b. Dependent Variable: CED

Multiple Linear Regression Analysis

The multiple regression analysis method is used to test the influence of independent variables on dependent variables with a regression equation. Based on (table 6) shows the results of multiple linear regression testing and is formulated in the following equation

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

$$Y = 0{,}233 + 0{,}204 X_1 - 0{,}013 X_2 + 0{,}340 X_3 + 0{,}040 X_4 + \varepsilon$$

As for the statistical interpretation of writing in the regression equation model above, it can be explained as

1) The constant value (a) is 0.233, meaning that if the value of the industry growth, profitability and media exposure tips variables is equal to 0, then the carbon emission disclosure indicator value is 0.733.
2) The regression coefficient value of the industry type (X1) is positive at 0.204, meaning that if the industry type (X1) increases by one unit, then carbon emission disclosure (Y) will also increase by 0.204.
3) The value of the regression growth coefficient (X2) is negative at 0.013, meaning that if growth (X2) increases by one unit, carbon emission disclosure (Y) will decrease by 0.013.
4) The profitability regression coefficient value (X3) is positive at 0.340, meaning that if the profitability value (X3) increases by one unit, carbon emission disclosure (Y) will also increase by 0.340.
5) The value of the media exposure regression coefficient (X4) is positive at 0.040, meaning that if the media exposure value (X4) increases by one unit, then carbon emission disclosure (Y) will also increase by 0.040.

Table 6. Results of Multiple Linear Regression Analysis Test

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,233	,027		8,538	,000
	TI	,204	,026	,583	7,751	,000
	GW	-,013	,035	-,032	-,374	,709
	PS	,340	,108	,271	3,152	,002
	ME	,040	,028	,108	1,428	,156

a. Dependent Variable: CED

Hypothesis Testing

Model Feasibility Test (F Test)

According to Ghozali (2021), the F test is used to evaluate the overall suitability of the regression model. If the significance level of the F test <0.05, the research model is considered feasible. Based on the results of the F test (table 7), a significant value of 0.00 and an F value of 19.685 Embal-E05.4.100 is 2.31, so the sig value is 0.00-0.05 and Fm 19.685> F 2.31 So the regression model in this study is suitable for use to test the hypothesis or in other words, the research is suitable for use to measure carbon emission disclosure.

Table 7. F Test Results

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,411	4	,353	19,685	,000[b]
	Residual	1,791	100	,018		
	Total	3,202	104			

a. Dependent Variable: CED
b. Predictors: (Constant), ME, TI, GW, PS

Partial Significance Test (t-Test)

Test-t is used to measure the contribution of independent variables to dependent variables. The hypothesis is accepted if starting from p <0.05 (Ghozali, 2021) Based on (table 8) it shows the results of the test calculated from the sig level of 0.05/2 = 0.025 and dfin)-k-1, df (n) is the number of data, k is the number of independent variables means 105-4-1-100, so milar to 100-1.983972 The results of the Uut in this study are as follows.

1) Tip Industra (X1)

The results of the T test show a sig value of 0.000 with a line of 7.751, mocha nila, sig 0.000 <0.05 (a) with a thang value of 7.751 ftabel 1.983972, so it can be concluded that the tips variable, industry has a positive effect on carbon emission disclosure.

H1 is accepted

2) Growth (X2)

The results of the T test show a sig value of 0.709 with a theme of -0.374, so the sig value of 0.709> 0.05 (0) with a thang value of -0.374 <table 1.983972. so it can be concluded that the growth variable has no effect on carbon emission disclosure.

H2 is rejected

3) Profitability (X3)

The results of the T test show a sig value of 0.002 with a thing of 3.152, then the sig value of 0.002 < 0.05 (a) with a value of 3.152 table 1.983972. So it can be concluded that the profitability variable has a positive effect on carbon emission disclosure.

H3 is accepted

4) Media Exposure (X4)

The results of the T test show a sig value of 0.156 with b 1.428, so the sig value is 0.156 > 0.05 (0) with a palette of 1.138 table 1.983972, so it can be concluded that the media exposure variable has no effect on carbon emission disclosure.

H4 is rejected

Table 8. T-Test Results

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	,233	,027		8,538	,000
	TI	,204	,026	,583	7,751	,000
	GW	-,013	,035	-,032	-,374	,709
	PS	,340	,108	,271	3,152	,002
	ME	,040	,028	,108	1,428	,156

a. Dependent Variable: CED

Test of Determination Coefficient (R^2)

According to Ghozali (2021:147) this test aims to determine how large the percentage of the capacity of the independent variable is in describing the dependent variable. The percentage value produced ranges from zero to one. The results in (table 9) show a coefficient value determination with a value, adjusted R square of 0.418. This means that the independent variable influences the dependent variable by 41.8%, while the remaining 58.2% is due to other variables not used in this study.

Table 9. Results of the Determination Coefficient Test

Model Ssummary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,664[a]	,441	,418	,13384

a. Predictors: (Constant), ME, TI, GW, PS
b. Dependent Variable: CED

DISCUSSION

Based on the results of the test analysis that has been carried out in this research using SPSS software, the following conclusions can be drawn from each variable:

The Influence of Industry Type on Carbon Emission Disclosure

Based on the results of the study, it is concluded that the type of industry affects carbon

emission disclosure. This is evident from the t-value of 7.751> table 1.983972 with a significance value of 0.000 <0.05 so that the H1 hypothesis is accepted. This means that the study shows that the type of industry in high-profile industrial companies listed on the IDX during the 2019-2023 period has a positive effect on carbon emission disclosure.

Companies operating in industries that have a high impact on the environment tend to report more comprehensive carbon emissions. This is in line with Stakeholder theory, which emphasizes the importance of building good relationships with stakeholders. Transparent carbon emission reporting demonstrates a company's commitment to being accountable for its impact on the environment and society. Thereby increasing trust and support from stakeholders (Rosyid & Immawati, 2022)

The Influence of Growth on Carbon Emission Disclosure

Based on the research results, it is concluded that growth does not affect carbon emission disclosure. This is proven by the thneng value of -0.032 <table 1.933972 with a significance value of 0.709> 0.05 so that the H2 hypothesis is rejected. This means that the study shows

The Effect of Profitability on Carbon Emission Disclosure

Based on the results of the study, it was concluded that profitability affects carbon emission disclosure. This was proven by the value of 3.152 - 1.983972 with a significance value of 0.002 - 0.05 for all 113 tests. This means that the study shows that profitability in high-profile industrial companies listed on the IDX during the 2019-2023 period has a positive effect on carbon emission disclosure.

The findings of this study support the legitimacy theory, where companies are encouraged to show concern for the environment in order to be accepted by society. Companies with high profits find it easier to meet these expectations because they have the resources to disclose environmental information, making it easier to gain public legitimacy. Profitability shows the company's ability to generate profits (Warsiath et al, 2023)

The Influence of Media Exposure on Carbon Emission Disclosure

Based on the research results, it was concluded that media exposure did not affect carbon emission disclosure. This is proven by the thuong lai 1.428 Table 1.983972 with a significance of 0.156 0.05 so that hypothesis 14 is rejected. This means that the study shows that media exposure in high-profile industrial companies listed on the IDX during the 2019-2023 period has no effect on carbon emission disclosure.

The influence of media exposure on corporate carbon emissions on the disclosure of carbon emission information by companies to stakeholders. This is because companies are not driven by media pressure or encouragement, but by the natural values held by the company and in order to gain public legitimacy by showing concern for the environment (Laksanı et al, 2021)

CONCLUSION AND SUGGESTION

Conclusion

1) Tips Industry has a positive influence on carbon emission disclosure in high profile industrial companies on the Indonesia Stock Exchange in 2019-2023
2) Growth has no effect on carbon emission disclosure in companies, high profile industries in Bunna Eick Indosncasa Tulum 2019-2023
3) Profitability of buscuzatuh is positive towards carbon emission disclosure in high profile industrial companies on the Indonesia Stock Exchange in 2019-2023
4) Media exposure has no effect on carbon emission disclosure in high profile industry companies on the Indonesia Stock Exchange in 2019-2023
5) The variables of industry tips, growth, profitability and media exposure contribute 41.8% to carbon emission disclosure. While the remaining 58.2% is due to the old Yanabel which was not studied in the study.

Suggestion

1) The type of industry and profitability that influence this research are companies, especially those that produce a lot of carbon emissions, which can be more active in disclosing carbon emissions as part of their responsibility for the environmental impacts caused by the company and supporting

government efforts to address climate change.

2) Regarding growth and media exposure which did not have an influence in this study, companies with high growth can pay more attention to the environment accompanied by good finances, and start to be open in informing the public media about the carbon emissions they produce.
3) For further researchers, it is advisable to add a longer time span and add other independent variables outside of this research, such as company size, environmental performance, good corporate governance, etc.
4) For the government and the Ministry of Environment to strengthen regulations through more linked laws. This is to ensure effective environmental management by companies operating in Indonesia.
5) Investors can choose to invest in large, profitable companies. The reason is that large, profitable companies tend to be more transparent in disclosing carbon emissions and care about the environmental impact of their activities.

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