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FACTORS AFFECTING THE LEVEL OF SUSTAINABLE DEVELOPMENT INFORMATION DISCLOSURE OF ENERGY COMPANIES LISTED IN VIETNAMESE STOCK EXCHANGES

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Abstract

The study analyses factors affecting the level of sustainable development information disclosure of energy companies listed in Vietnamese Stock Exchanges from 2018 to 2020. Data collected is presented in the form of panel data and analyzed using both descriptive and inferential statistics. The author then used SPSS to design a multiple Ordinary Least Squares (OLS) regression model to adequately analyze the impact of the factors on the level of sustainable development information disclosure. The empirical results provide evidence of a positive relationship between the Size of the Company and State Ownership with the level of sustainability disclosure of energy listed companies whilst finding no significant impact of the other factors on the level of sustainability disclosure. The study offers company stakeholders a better understanding of the role played by factors affecting the level of sustainable development information disclosure which can assist them to comply with the current legal framework, have responsibilities to the environment and society, and to improve investors' confidence.

Keywords: Energy, information disclosure, sustainable development, listed companies, stock exchange.

1. Introduction

In recent years, the energy business has emerged as a dynamic economic sector, contributing significantly to boosting socio-economic development and assuring national defence and security in a variety of communities and countries. According to aggregated data, in 2020 the national energy consumption will increase significantly. The energy consumption structure is shifting towards energyzization.

However, renewable energy sources such as wind, solar, geothermal, biomass, and hydroelectricity also have certain impacts on the environment. The level of environmental impact

varies depending on the specific technology used, geographical location, and several other factors. Fossil fuels such as coal, oil, and natural gas are essentially more polluting than renewable energy sources in most respects, such as air and water pollution, damage to public health, loss of wildlife and habitat, land use, and increased global warming. As a result, worldwide solutions must be developed to limit the negative influence of the energy sector on the environment and to restore natural conditions as much as feasible. A clear strategy focuses on ecologically friendly industrial growth.

In Vietnam, there are still certain restrictions on official and public disclosure of sustainable development information. Consequently, both theoretically and experimentally, the study of factors affecting the sustainability information disclosure of companies in this industry listed in Vietnamese stock exchanges is extremely important. Furthermore, it assists businesses in clearly understanding the role, duty, and benefits of sustainability information disclosure, as well as future long-term values. As a result, the author decided to choose the research topic: *“Factors affecting the level of sustainable development information disclosure of energy companies listed in Vietnamese Stock Exchanges”*.

2. Introduction

2.1. Definition of sustainable development information

Sustainable development is a concept that was widely used in 1987 through the Brundtland report issued by the World Commission on Environment and Development (WCED). According to this report, “sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. In other words, sustainable development must ensure effective economic development, a just society and a protected and preserved environment. A company with a sustainable development orientation is one that considers the economic, social and environmental aspects of its operations over time (Perrini and Tencati, 2006). Sustainable development information is often shown on annual reports, sustainability reports...

Thus, based on the definitions of sustainable development as well as sustainability reports, the author finds that sustainable development information is information related to the sustainable development of enterprises and is expressed through three aspects: economic, environmental and social information. For many organisations, associations and commentators, Sustainability Reporting is simply an extension of earlier forms of corporate reporting. According to the definition from the Global Reporting Initiative (GRI, 2016) Reporting Guidelines, “Sustainability reporting is a tool for measuring, disclosing, and being accountable to internal and external stakeholders for the performance of an organization towards sustainable development goals”.

2.2. Sustainable development information level scale

A review of previous studies shows that three main methods can be considered to assess the level of sustainability disclosure, namely word count, sentence measure and percentage measure of a page (Chan et al., 2014), (Usman and Amran, 2015), (Kasbun et al., 2017). However, these methods have been criticized. Hackston and Milne (1996) critiqued the adoption of the word count measure and described it as an ambiguous measure and the use of sentence counts, or page rates for CSR disclosures was criticized on average because of the subjectivity related to the

measurement process because font size, column size, page size may differ from one annual report to another. Furthermore, all of the above techniques have the limitation of not displaying information content (Samaha et al., 2012). With the limitations of the above methods, sustainable development information is transferred to content analysis techniques. Content analysis is a method of coding content according to selected criteria and is more objective. After coding, quantitative techniques were used to perform the analysis. This method has been widely used in previous publications on sustainable development (Nguyen Thi Thu Nguyet, 2021; Adams, 2002; Chan et al., 2014; L. Chen et al., 2015; Karagiorgos, 2010).

2.3. Literature review

The concept of legitimacy was presented by Suchman (1995) as follows: "the behavior of an entity is expected to conform to, or conform to, some social architectural system in terms of norms, values, beliefs and concepts". Legitimacy theory suggests that to survive, all business activities must be widely accepted by society. Legitimacy can be threatened if society perceives that a company is not operating in a socially acceptable way, and this theory requires that the interests of the participants in the "social contract" be satisfied.

The stakeholder perspective derives from Freeman's (1983) idea that in order for a company to survive, it must meet the needs of its stakeholders. Therefore, to have stable growth, companies must take into account the different views and expectations of the group of components that are related to the company's performance (Laplume et al., 2008).

Stakeholder theory describes how the relationship between the company and its stakeholders is managed, and the way in which the company realizes and fulfills the desires of its stakeholders. It is instrumental in arguing that companies that communicate effectively with stakeholders will be more successful than those that do not (Vormedal and Ruud, 2009). Disclosure related to sustainable development can be seen as a tool to shape the recognized legitimacy of the company (Campbell, 2003). As a result, Roberts (1992) uses this theory to explain the influence of an organization's sustainability disclosure on performance and corporate strategy.

Signaling theory suggests that in situations of asymmetric information distribution, one party will attempt to reliably convey information about itself to the other party (Campbell, 2003). This means that the more signals organizations provide about sustainable development, the better their brand, reputation, and access to capital will be. This has undoubtedly aided them in improving their performance (Cheng et al., 2016; Kasbun et al., 2017). As a result, the signal theory is utilized to explain how the amount of sustainability disclosure affects company performance.

3. Hypothesis development

3.1. Size of the company

The size of a company influences the level of sustainable development information disclosure. According to Ho and Taylor (2007), large firms reveal more financial and non-financial information than small firms. Large companies are always optimistic about their prospects, so they are often willing to pay money to broadcast more voluntary information in order to distinguish themselves from competitors and boost their value. Furthermore, according to a study by Barako et al. (2007), large corporations deliberately share sustainability information in order to attract more investment money in order to continue and expand their enterprises. According to Garde-

Sánchez et al. (2016), rising business size increases informational volume; larger corporations report more in order to improve their reputation and image.

Hypothesis 1 (H1): The larger enterprises are, the more sustainable development information disclosure.

3.2. Profitability

The more prosperous a corporation is, the more ambitious it is to fulfill and satisfy the information demands of the stakeholders. According to Said et al. (2009), highly prosperous businesses strive to attract additional investment and improve their image. Businesses with limited resources are stated to prioritize actions that increase their financial performance above non-financial activities (Christensen and Gallo, 2011). Furthermore, this is a chance for managers to demonstrate their skills and increase their market worth (Barako et al., 2007). According to a previous study, the profitability component has a good association with long-term disclosure (Rahman, Zain, & Al-Haj, 2011).

Hypothesis 2 (H2): Profitable enterprises will disclose more sustainable development information in their reports compared to less profitable ones.

3.3. Financial leverage

The greater the financial leverage and debt-to-equity ratio, the greater the conflict of interest between the parties involved, according to stakeholder theory. In an empirical study, Chiu and Wang (2014) discovered that the debt-to-equity ratio is negatively linked to the degree of transparency. Furthermore, Andrikopoulos and Kriklani (2012) discovered that firms with strong financial leverage reduce disclosure information in order to save money on gathering and presenting sustainability data.

Hypothesis 3 (H3): The higher financial leverage ratio, the less sustainable development information disclosure.

3.4. Liquidity

Liquidity ratios are a sort of financial indicator that analyzes a debtor's ability to fulfill existing debt commitments without incurring additional external debt. Liquidity ratios analyze a company's ability to meet financial commitments and margin of safety by utilizing factors such as the current ratio, quick ratio, and operational cash flow ratio. It was found that liquidity was positively associated with the level of corporate disclosure by Alnabsha et al. (2018) among Libyan companies and by Nandi and Ghosh (2013) among Indian listed companies.

Hypothesis 4 (H4): The higher liquidity ratio, the more sustainable development information disclosure.

3.5. State Ownership

State ownership, according to Pham and Do (2015), has a negative relationship with an entity's level of sustainability information disclosure. State-owned enterprises generally have limited motivation to create a profit or do not place profit as a top goal. Because state ownership is open to the public, the lack of particular rights results in the owner losing control, which leads to corruption and bad corporate governance.

Hypothesis 5 (H5): The higher the proportion of state ownership, the less sustainable development information disclosure.

3.6. Foreign Ownership

As the global economy has been more integrated and developed, there has been an increasing number of enterprises with foreign stockholders. As a result, sustainability reporting is seen as a tool for evaluating management performance. Haniffa and Cooke (2002) identified a relationship between foreign ownership and Malaysian publicly-traded firms' degree of sustainability disclosure. The bigger the foreign investment, the more information must be disclosed. Chambers et al. (2003) examined the websites of the top 50 firms to study the sustainability reports of companies in seven Asian nations.

Hypothesis 6 (H6): The higher the proportion of foreign ownership, the more sustainable development information disclosure.

3.7. Reputation of External Audit Firm

Chalmers and Godfrey (2004) argue that, in order to maintain their reputation, large auditing firms are more likely to require a relatively high level of client disclosure. According to Nguyen & Nguyen (2014) and Nguyen & Le (2018), if audited by Big4 firms including PwC, Deloitte, E&Y, and KPMG, the companies will disclose more information.

Hypothesis 7 (H7): If audited by 4 major auditing firms including PwC, Deloitte, E&Y, and KPMG (Big4), the companies will disclose more sustainable development information.

3.8. Independence of Board of Directors

The agency theory states that a board of directors with a high level of independence will be more successful in monitoring and supervising the company's activities. As a result, the Board of Directors' large share of non-executive directors is intended to improve monitoring and control. This also promotes the dissemination of transparency and sustainability information. Pham & Do (2015) discovered a favorable relationship between the independence of the Board and an entity's level of sustainability information disclosure.

Hypothesis 8 (H8): The higher independence level of the Board of Directors, the more sustainable development information disclosure.

4. Method research

4.1. Research data

The Ministry of Finance issued Circular No.155/2015/TT-BTC in 2015 on standards for information disclosure on the securities market, including regulations for public firms releasing information relevant to sustainable development. From January 1, 2016, until the present, the Circular is in force. The author chooses a three-year time span from 2018 to 2020.

In addition, according to data on the website cafef.vn updated in the second quarter of 2022, the total number of energy companies listed on the Vietnamese stock exchanges is 68, including 30 companies listed on the HNX and 38 companies listed on the HOSE. With an initial sample size of 68 listed energy companies, after excluding samples that do not meet the conditions, the

remaining sample is 50 companies. Therefore, the final sample size is 150 observations (>114), which are 3 years reports from 50 companies.

The writer gathers the necessary information and data from the companies' websites, the HNX, the HOSE, and other websites. The companies' documents include the following:

Annual report 2018, 2019, 2020

Financial statements 2018, 2019, 2020

The data is then further examined with SPSS 20 to identify the influence of various factors on sustainability information sharing. The author uses quantitative approaches based on descriptive statistics, correlation analysis, and regression analysis to fulfill the thesis objectives.

Descriptive statistics: Collection data and general analysis of collected data. The descriptive statistics provided basic information about variables in the dataset using mean, standard deviation, minimum and maximum values of variables.

Correlation analysis: Determination of correlation between variables.

Regression analysis: to properly study the impact of the factors on level of sustainable development information disclosure, the author created a multiple Ordinary Least Squares (OLS) regression model using SPSS 20.

4.2. Research models

Based on the theoretical analysis and information availability in Vietnam, the author developed a multiple OLS regression model using SPSS software to assess the effects of factors on sustainability information disclosure, as shown below.

$$\text{LSDID} = \beta_0 + \beta_1\text{SZ} + \beta_2\text{ROA} + \beta_3\text{FL} + \beta_4\text{CR} + \beta_5\text{SO} + \beta_6\text{FO} + \beta_7\text{EA} + \beta_8\text{NED} + \varepsilon$$

Where:

Table 1. Measurement independent variables:

Symbol	Variable name	Measurement	Expected effect
SZ	Size of Company	Logarithm of total assets at the end of period	+
ROA	Return on total assets (Profitability)	Net income/Average Total Assets	+
FL	Financial leverage	Debt/Equity (%)	-
CR	Current ratio (Liquidity)	Current assets/Current liabilities	+
SO	State Ownership	State equity/Total equity (%)	-

FO	Foreign Ownership	Foreign equity/Total equity (%)	+
EA	Reputation of External Audit Firm	Dummy variable equals 1 if the company is audited by one of Big 4, 0 otherwise	+
NED	Non-executive Directors (Independence of Board of Directors)	Number of non-executive directors/Total number of members of Board of Directors (%)	+

Source: Author's synthesis

The writer utilized a set of 32 sustainability information criteria developed by Nguyen, T.T.N. (2021) based on Circular No.155/2015/TT-BTC issued by Ministry of Finance and the GRI Sustainability Reporting Standard issued by Global Sustainability Standards Board to evaluate the disclosure of sustainability information in the annual report.

The total number of maximum criteria connected to the firm is divided by the sum of the scores for all of these criteria. Items that are unrelated to the firm will receive 0 points.

$$LSDID_j = \frac{\sum_{i=1}^{n_j} d_i}{n_j}$$

Where:

- SDID_j: Level of sustainable development information disclosure of Company j
- n_j: number of items disclosed by Company j per total 32 criteria
- d_i: score of each item per total 32 criteria

5. Results

5.1. Descriptive Statistics

The amount of sustainability disclosure demonstrates firms' attention and responsibility for environmental and social issues in addition to their primary commercial activity. The author gathered information on 50 energy businesses registered on Vietnamese stock exchanges between 2018 and 2020.

Table 2. Descriptive statistics of LSDID 2018 – 2020

	N	Minimum	Maximum	Mean	Std. Deviation
Level of Sustainable Development Information Disclosure (LSDID)	150	.8148	2.7500	1.661852	.5165303

Source: Author's synthesis by SPSS software

Statistical results show that the average level of disclosure for sustainable development of listed companies in the energy industry falls to 1.66 on a scale of 3. The difference between the report with the highest score and the lowest score is quite large, even though it is in the same area. day. The company with the highest is PGS with 2.75 out of 3. On the other hand, there are still companies with poor information disclosure with a score of less than 1, and the lowest is 0.81.

According to the sample size, there are 9 companies in the coal-mineral sector, 24 in the oil-gas sector, and 17 in the electricity sector. Research results show that all 3 sectors have an average score of information disclosure of 1.5 to 1.85 out of 3. In which, the sector with the highest average score is Coal - Mineral, the second is Oil - Gas, and the lowest is Electricity. However, if we consider each company in these sectors, the companies with the highest scores (over 2.5) belong to the Oil & Gas sector. The companies with the lowest scores (below 1.0) belong to the coal-mineral and electricity sectors.

In this study, the annual reports within 3 years (2018–2020) of 50 energy companies listed on the Vietnam stock exchange are used to assess the level of information disclosure for sustainable development.

There is a clear difference in the approach to sustainability disclosure standards presented by listed companies in the energy sector in their annual reports. Most companies only publish in the form of a sample prescribed in Circular 155 and only fill out the information in the form. It also shows that the company's information disclosure department has not really invested in research and preparation for information disclosure in the most transparent and complete way. Therefore, the scores of these companies belong to the group below 1.5 out of 3, which accounts for 44.66% of the total 150 evaluated annual reports.

At a higher level, companies have been more researched when their annual report mentions that the framework they use, in addition to circular 155, also has The Sustainability Reporting Handbook for Vietnamese Companies by SSC & IFC. In their reports, these companies included more E & S information and included clear and easy-to-understand illustrations for users. This second group has an average score of 1.5 to less than 2.0, which accounts for 27.33%.

The reporting group is rated as having the highest score, with a score of 2.5 or higher, accounting for about 8.66% of the total. This is an annual report group of companies that have made great investments in not only complying with Vietnam's legal framework but also disclosing information according to GRI standards. This is also a group of leading energy companies in Vietnam with famous names such as PGS, CNG, PGD, PVD, etc. That is also the reason that the annual reports of these companies receive awards from the governing bodies.

Table 3. Descriptive statistics of all variables

	N	Minimum	Maximum	Mean	Std. Deviation
LSDID	150	.8148	2.7500	1.661852	.5165303
SZ	150	4.5205	7.8008	6.146384	.6426498
ROA	150	-.1768	.4163	.066557	.0760178
FL	150	.0706	11.0602	1.685207	2.0347429

CR	150	.2073	9.7208	1.805555	1.6603344
SO	150	.0000	.9576	.479205	.2324124
FO	150	.0000	.4900	.081357	.1163835
EA	150	.0000	1.0000	.453333	.4994852
NED	150	.2000	1.0000	.679945	.1428526

Source: Author's synthesis by SPSS Software

As mentioned above, a total of 150 annual reports of listed energy companies are included in the research data.

The first group of factors shown in the table is a group of financial factors, including business size, profitability index (ROA), financial leverage index (Debt/Equity) and liquidity index (Current Ratio). Theoretically, if ROE is at least 15%, then ROA should be above 7.5%. However, because of the high inflation rate in Vietnam, the expected ROA of enterprises is around 10%–12%. Accordingly, listed energy companies in Vietnam have an average ROA of 6.67%; the lowest is -17.68% and the highest is 41.63%. In the period from 2018 to 2020, the average ROA of the energy industry is relatively low; only businesses have a negative ROA. This can be explained by the COVID-19 pandemics appearing at the end of 2019, spreading and affecting heavily in 2020. Additionally, the higher the debt-to-equity ratio, the greater the risk, because the business's operations are heavily dependent on debts, including many short-term debts with a payment cycle of less than 1 year. If the debt to equity ratio (debt to equity ratio) > 1, this shows that the total debt of the business is greater than the equity. The average financial leverage index in the energy industry in the period 2018-2020 is around 1.68. This may be a bad indicator of the energy industry in recent times. Considering the overall sample, most companies have a debt/equity level of approximately 1, but the average is also greatly affected when a few companies have excessive financial leverage, up to over 10 in 3 years (stock code HLC). The last is the current ratio. The higher the current ratio, the more reliable the company's solvency is, and vice versa, the lower the ratio, the harder it is to trust the company's ability to pay. The generally accepted short-term solvency ratio is approximately 2.0. Similar to financial leverage, the average current ratio of listed companies in the energy sector for the period 2018–2020 is 1.81, which is below the normal allowable level. However, the difference in this ratio between companies is extremely large when the lowest index is only 0.21 while the highest index is up to 9.72.

The second group of factors is about ownership. In general, the majority of listed companies in the energy sector in Vietnam have a very high rate of state ownership and vice versa for foreign ownership. On average, state ownership of the energy industry accounts for nearly 50%. In which, there are companies with a state ownership rate of up to 95.76%, like GAS. In contrast, the average foreign ownership rate for this industry is only 8.14%. The lowest is 0% and the highest is 49%.

The remaining 2 factors have quite impressive numbers. Almost half of the financial statements of energy companies are audited by one of the big four. Almost 70% of the board members are non-executive members, and some companies have numbers up to 100%. It can be seen that listed companies in the energy sector are quite focused on applying Best Practices to corporate governance in their companies.

5.2. Overall Model Fit

Table 4. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.566 ^a	.320	.301	.4317251	1.551

a. Predictors: (Constant), EA, SO, FO, SZ

b. Dependent Variable: LSDID

Source: Author's synthesis by SPSS Software

The percentage of variation in the dependent variable that can be forecasted using the independent variables is represented by R-Squared. This is an overall indicator of the magnitude of correlation, not the degree to which any one independent variable is linked to the dependent variable. R-Squared is another name for the coefficient of determination.

By chance, when additional predictors are added to the model, each predictor will explain part of the variance in the dependent variable. Adding predictors to the model would enhance the predictors' ability to explain the dependent variable, but some of the gains in R-squared would be attributable to random fluctuation in that specific sample. The adjusted R-squared attempts to provide a more accurate estimate of the R-squared of the population. R squared was 0.320, whereas Adjusted R-squared was 0.301. The adjusted R-squared value shows the percentage of variance explained exclusively by the independent variables that influence the dependent variable. As shown in Table 4, the adjusted R-squared is 0.306, indicating that the input variables explain 30.6% of the variation in the output variables.

Furthermore, the statistical coefficient Durbin – Watson = 1,551 ($1 < d < 3$) shows that there is no autocorrelation between the residuals. This means that the regression model does not violate the assumption of error independence.

The study continues to run a test on model's variance inflation factor (VIF). As demonstrated in Table 5 below, model's average VIF is 1,49 with all values smaller than 2. Given this result and the conclusion from the correlation matrix, it is safe to conclude that there is no multi-collinearity threat to the interpretation of the regression coefficients.

5.3. Parameter Estimates

The B coefficient, R-square, and Sig. for each independent variable are shown in Table 5. If the independent variable grows by one unit in percentage, the B-coefficient represents the influence on the dependent variable. The Sig. value indicates if the coefficient is statistically significant or whether the B coefficient is genuine. The confidence level for the regression result is 5%; values more than 0.05 are not statistically significant, but values less than 0.05 are.

Table 5. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF

	(Constant)	-.261	.399			-.653	.515	
1	SZ	.253	.074	.315		3.425	.001	.555
	SO	.591	.182	.266		3.251	.001	.701
	FO	.424	.345	.096		1.230	.221	.777
	EA	.110	.086	.106		1.281	.202	.681

a. Dependent Variable: LSDID

Source: Author's synthesis by SPSS Software

The Sig value will show if there is a statistically significant relationship between your two variables. If the Sig value is greater than 0.05, there is no statistically significant relationship between your two variables. That is, changes in one variable have no meaningful link with changes in the other. If the Sig (2-tailed) value is less than or equal to 0.05, the correlation between your two variables is statistically significant. That is, changes in one variable have a strong relationship with changes in the second variable. Variable FO – Foreign Ownership has Sig. = 0.221; EA – External Audit Firm Reputation has Sig. = 0.202. These variables' Sig values are all bigger than 0.05, implying that they are not connected to the level of disclosure of sustainability information. As a result, two variables, FO, and EA will be removed from the research model.

According to the Table 5, there is a unstandardized multiple regression model:

$$\text{LSDID} = -0.261 + 0.253\text{SZ} + 0.591\text{SO}$$

When one independent variable changes while the remaining independent variables remain constant, the regression coefficients represent the change in the dependent variable. The size (SZ) of the firm has a B-coefficient of 0.253 and is statistically significant because the Sig. value is smaller than 0.05 (0,001) in comparison to the LSDID. This means that the declared sustainability measures will rise by 0.253 for every unit increase in company size. When compared to overall sustainability, state ownership (SO) has a B-coefficient of 0.591 and is statistically significant because the Sig. value does not exceed 0.05 (0,001). This means that if State ownership grows by one unit, the revealed sustainability metrics grow by 0.591.

However, it is not meaningful to comment on the order of effects of the independent variables on the dependent variable based on the unnormalized regression coefficient because the independent variables are not uniform in units or, if the units are homogeneous, the standard deviations of the variables are also different. Therefore, there is a standardized multiple regression model with uniformity of units and standard deviation of variables participating in the regression model:

$$\text{LSDID} = 0.315\text{SZ} + 0.266\text{SO}$$

The standardized coefficients Beta of two variables in the model are all positive. It suggests that both characteristics have a beneficial impact on LSDID. The size of the firm was shown to be the most influencing factor (β -coefficient = 0.315) on the amount of sustainable development information disclosure of energy companies listed on Vietnamese stock markets. The state

ownership has the second greatest influence on the amount of sustainable development information disclosure of energy businesses listed on the Vietnamese stock market (β -coefficient = 0.266).

6. Conclusion

This study contributes to the literature by (1) evaluating the current situation of sustainable development information disclosure of energy companies listed on the Vietnamese Stock Exchanges through the identification of a set of sustainable development information indicators announced by listed energy companies and comparison with the set of indicators according to current legal framework and GRI standards and (2) analysing the influence of factors on financial and non-financial aspects on the level of disclosure of sustainable development information of energy companies listed on the Vietnamese Stock Exchanges.

The empirical results provide evidence of a positive relationship between The size of the company and State Ownership with level of sustainability disclosure of energy listed companies whilst finding no significant impact of the other factors on level of sustainability disclosure.

Thereby, there are a number of recommendations for energies companies and the regulatory bodies upon how to improve the level of sustainable development information disclosure.

Finally, with the results of this thesis, it is hoped that it will contribute to the improvement of regulations on sustainability information disclosure, thereby orienting a generation of companies that not only focus on profitability but also society and environment.

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