

Impact of Green Accounting, Environmental Performance, and Company Size on the Profitability of the Energy Sector: A Study of Indonesian Companies (2019-2023)

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Abstract

The energy sector is an economic sector that requires large capital investments. In conducting their activities, investors will look at the profitability of a company when investing their capital. The energy sector is one of the contributors to state revenue that attracts investors. However, the activities carried out by companies in this sector have environmental impacts, which affect their profitability. In efforts to account for the environment, the field of accounting that plays an important role is green accounting. Green accounting is not the only aspect that determines profitability; environmental performance is equally important. Companies that consistently demonstrate both qualities will enhance their value in the public. The purpose of this research is to assess the impact of green accounting, environmental performance, and company size on the profitability of the energy sector listed on the Indonesia Stock Exchange from 2019-2023, utilizing secondary data from annual reports and sustainability reports. The sample size consists of 13 companies using a purposive sampling approach. The approach used is a quantitative method, with statistical testing using Eviews, involving data analysis that includes descriptive analysis, panel data regression analysis, classical assumption test analysis, and hypothesis testing. The results of the study show that, partially, environmental performance and company size affect profitability, but green accounting does not. This research is expected to be used by companies to evaluate the implementation of green accounting and environmental performance in order to enhance environmental interests, achieve a good corporate image, and generate profits in line with the company's objectives by conducting environmental activities.

Keywords: Green Accounting, Environmental Performance, Company Size, Profitability, energy sector companies

1.0 Introduction

Businesses that don't profitable No will endure so that management company must take all necessary Actions connection with source Power productive economy profit . Companies often combine source internal and external power For fund operation as well as increase profitability company. (Lim & Rokhim, 2020) as follows According to Barney (1986) a company with depend on source its power For can reach superiority compete so that can maintain the company's going concerns the . Internal company manage source its power in a way efficient and innovative must give attention to concepts costs and opportunities and identify key strategies that will influence growth and diversification strategy in matter profit (Kor&Mahoney , 2004). Activities performed company be one source happen problem environment . Objective main from A company is increase well-being holder shares and stakeholders interest . The way you can one of them did with optimizing profitability Besides that's an increase price share something company can become indicator from ability company in optimizing the profit . Profitability caused by effort company For optimizing management source Power To use create profit , with method explore and manage potency source power

that becomes material main in the production process (Zenitha , 2022). According to Abbas, Dillah , and Sutardji (2020),

Draft maximizing profit without caring impact from activity the can cause impact Serious for environment around . The company will try For increase profitability with method whatever happens next can impact on use sumber Power Nature is available Because very limited For fulfil need human and will need a long time for update it , usage source Power natural will influenced in a way Keep going continuously by companies that try increase profit .

Sector energy is part important in Indonesian economy , providing source much needed power For use industry and home ladder . However , activities sector This own impact significant environment , which gives rise to worries to sustainability and responsibility answer corporate. This article evaluate role accountancy green and performance environment in increase profitability companies in the sector Indonesian energy , with give proof empirical from 2019 to 2023. Company size is something scale Where can be classified big and small company with various methods , including total assets , log size, sales , and market capitalization (Agustia and Suryani , 2018). Company size will also influence structure on a funding in companies , increasingly big mark size company so can predict enhancement its profitability . Company size more big will relatively stable and capable generate profit. Besides size company , factor other influences Profitability something company is Growth Sales and Leverage (debt ratio).

The case experienced by PT Adaro Indonesia in 2021 did activity dredging and destruction environment life so that matter the cause floods and 24 deaths and 113,000 people were displaced to place evacuation . In 2018 , PT Adaro Indonesia was also suspected polluting the water in the Balangan River Because waste from activity they . This matter result thousands of caged fish owned by inhabitant dead so that make farmer experience loss until dozens million (mediaindonesia.com accessed in 2024). The impact seen when 2019 profit clean PT Adaro Indonesia only amounting to US\$ 404.19 million and experienced decline amounting to 3.24% of year previously amounting to US\$ 417.72 million (Databoks.katadata.co.id accessed in 2024).

Research conducted by Putri , AM, Hidayati , N., & Amin, M. (2019) with use ROA and ROE measurements for measure profitability results study show that green accounting and performance environment influential significant on ROA, green accounting and performance The environment also has an influence on ROE, other research also shows Similar results were carried out by Chasbiandani , T., Rizal , N., & Satria, II (2019). That Green accounting and performance environment influential positive to profitability company . Hadriyani , I., & Dewi , NWY (2022). also found results study that performance environment , disclosure environment , product friendly environment , costs environment and activities environment influential to profitability Good with ROA (Return on Assets) and ROE (Return on Equity) projections are different with research Niandari , N., & Handayani , H. (2023). Find results study that green accounting has an effect positive to profitability However performance environment No influential . Furthermore research conducted Atikah , I., & Sastradipraja , U. (2024). Partial test results show that green accounting and environmental performance do not affect profitability, while liquidity affects probability. In simultaneous testing, the results showed that green accounting, environmental performance, and liquidity together did not affect the probability.

Alim, M., & Puji, W. (2021). There is an influence between Environmental Performance on profitability, while CSR Disclosure has no effect on profitability. Simultaneously, the results

show that Environmental Performance and CSR Disclosure have an influence on profitability, hasil yang serupa juga di temukan oleh Nurrasyidin, M., Meutia, M., Bastian, E., & Yulianto, A. S. (2024). there is no statistically significant influence of green accounting and CSR on profitability, Sumiati, A., Susanti, S., Maulana, A., Indrawati, L., Puspitasari, D., & Indriani, R. (2021). While the use of green accounting is voluntary, its impact on profitability is greater than that of environmental performance, Lindawati, A. S. L., Ramadhani, V., Oktavianie, H., & Kathera, V (2022), the environmental performance positively effect profitability is proxied by ROA and ROE. While environmental cost and corporate social responsibility disclosure did not have significant affect profitability proxied by ROA and ROE. Serta Egbunike, A. P., & Okoro, G. E. (2018). there was no significant relationship between green accounting and profitability measures among the non-consumer goods firms.

A number of phenomenon that has been explained above naturally impact on the decline price shares and income received (Fortuna & Putra, 2020). This matter impact on the company That Because negligence company in operate not quite enough he answered which resulted in a decline income . Sector companies *energy* basically own strong relationship with environment Because they involved in possible activities damage nature . For handle existing phenomenon , government implement policy to companies involved direct in management source Power nature . Licence companies operating nearby society also includes obligation For bear not quite enough answer social , as is arranged in Article 74 paragraphs 1 to 4 of the Law Republic of Indonesia Number 40 of 2007 concerning Limited Liability Companies . Chapter the oblige activities of the company its operations relate direct with natural must For implementing CSR programs as well obey budget operational in a way appropriate .

Control environment . However , this not the worst . When the company try register for the PROPER program from the Ministry of Environment Live and accept mark one , still There is companies that don't register . This show two possibility that is company Possible No know about the program or Possible company try avoid inspection comprehensive PROPER program by the Ministry of Environment Life . This matter Still can happen Because Not yet exists rule standard accountancy conventional Which arrange problem environment (Michael Saputra Tampubolon and Sari Nuzullina Rahmadhani , 2023). Therefore that , company need concepts accountancy based environment or *Green Accounting* for overcome matter the .

Based on current phenomena progress and differences from results studies previously , researcher feel interested For do study more in about impact application *green accounting* , performance environment , and size company to profitability . Difference researcher This with researcher previous that is writer add criteria in determining the sample using report continuity Where study previously only use criteria the company disclosed report annual just . Researcher add hypothesis study Where *green accounting* and performance environment in a way together influential to mark company . Objects used is company listed *energy* sector on the Indonesian Stock Exchange (BEI) where researcher previously use sector *basic* materials listed on the Indonesian Stock Exchange . Period used is 2019-2023 meanwhile researcher previously use 2015-2020 period .

2.0 Literature review

2.1 Theory signaling

Theory legitimacy proposed by Dowling & Pfeffer (1975). Theory This explain that company must ensure that activity operation company Still in accepted norms public . Theory This

based on thought that company will Keep going continues its existence if values in company in accordance or aligned with mark or norms that apply in society . System management company No only important right holder share but also interests society and impact to environment . Activity companies that ignore impact environment will contradictory with norm And mark Which applies in public . Impact bad management environment by the company will felt by society around Good direct nor No direct . Therefore That company must create system management impact good environment .

Management impact environment since early by the company will reduce risk for company get demands society in the future come . For that , company disclose action taken For reduce impact environment the . Disclosure done company through report finances prepared by the company

2.2 Influence Green Accounting and Profitability

In accordance with principle legitimacy , the company that implements it accountancy green has show good performance in activity operations and offers protection environment with guard condition surrounding environment company , anticipate and face impact negative from activity operational poured company in report finance company . Steps taken company related environment reflected life in report annual will become illustrative guide operational company related environment life (Zenitha Soraya Tri Yastynda , 2022). Theory This in accordance with draft theory signal that delivery information to party external through report annual is one of method organization For increase mark his company . (Ganut Muhharomi et al ., 2021). The theory above in line with results study Zenitha Soraya Tri Yastynda (2022), Cintya Full Moon et al . (2023), and Ethics Ethics et al . (2019) who provide results if green Accounting provides good impact to mark something company , then companies that implement it can interesting more Lots investment from holder share . By No direct convey impression positive and with maximum capital will increase profitability .

Research conducted by Putri , AM, Hidayati , N., & Amin, M. (2019) with use ROA and ROE measurements for measure profitability results study show that green accounting and performance environment influential significant on ROA, green accounting and performance The environment also has an influence on ROE, other research also shows Similar results were carried out by Chasbiandani , T., Rizal , N., & Satria, II (2019). That Green accounting and performance environment influential positive to profitability company . Hadriyani , I., & Dewi , NWY (2022). also found results study that performance environment , disclosure environment , product friendly environment , costs environment and activities environment influential to profitability Good with ROA (Return on Assets) and ROE (Return on Equity) projections

H1: Green Accounting has an effect to Profitability Performance

Environment And Mark Company

According to theory legitimacy , quality company generally communicate activities and achievements the environment with objective For increase image company , so guard business continuity . Environmental performance something reflected company in PROPER rating indicates achievement company And show level his concern to environment .

This matter signify that company in operate activity its operations has carry out with Good in guard sustainability environment . Theory This consistent with theory signal that PROPER assessment will be give information important for holder share For evaluate difference performance environment of each company . This matter give opportunity for holder share For

take decision possible investment influence enhancement mark company . Results of research conducted by Khanifah Khanifah et al . (2020), shows that performance environment influential positive to profitability company . This is also in line with Ethics Ethics et al . (2019) And Sapulette & Limba (2021) Which everything state that performance environment have significant influence to profitability company , visible from effort which is conducted company . in increase performance environment , performance environment can role in increase mark company (Khanifah Khanifah et al., 2020) So it's a hypothesis study This is :

H2 : Performance Environment influential to profitability company

Big small size something company will influential to profitability , increasingly big company so the more the profits generated are also large company matter This will make enhancement profitability in the company (symbolon et al 2019). Company size can be seen of the total assets owned by a person company . Large company size reflect that company currently experience good development so that increase profitability company . Research conducted by (Gill and Obradovich 2012) stated that size company influential positive and significant to mark company . study previously carried out by (Prasetyorini , 2013:191) who stated that size company influential positive and significant to mark company .

H3: Company size has an effect to profitability

3.0 Method Study

3.1 Population and Sample

Population in study This that is energy sector companies in Indonesia with sample company as many as 13 companies and using t data with purposive sampling method , namely In study this , researcher determine criteria to be become sample namely : Sector companies *energy* listed on the Indonesian Stock Exchange, the issuing company report annual and reports continuity in a way consecutive from 2019-2023 , and the company that received it PROPER rating during period 2019-2023. As well as companies that have complete data in accordance with criteriaime serious namely 5 years from 2019-2023

4.0 Hypothesis test results

Dependen Variabel :Y	Coefficient	Std.Error	t-Statistic	Prob
Method:Panel EGLS (Cross-section random effect)				
Date:06/14/24 time 14;33				
Periode included:5				
Cross sections included :13				
Total Panel (Balance) Observation:65				
Swamy and arora estimator of component variances				
Variable	Coefficient	Std.Error	t-Statistic	Prob
C	-1.180316	0.514634	-2.293505	0.0253
X1	0.038687	0,022191	1.743368	0.0863
X3	0.045504	0.017797	2.556775	0.0131
X2	-0,044629	0.019668	-2.269103	0.0268

5.0 Research Results and Discussion

5.1 The Effect of Green Accounting to Profitability

Based on statistical tests using eviews that variable green accounting level significance, namely $0.0863 > 0.05$ shows that the data does not significant and hypothetical rejected . from this data show that green accounting does not own influence to often need investment big in matter technology , training , and systems new . Cost beginning This can reduce profitability in period short , aside That Resulting profitability from green accounting practices possible difficult For be measured in a way direct . There are many benefits period long or not give impact direct to profit in period the same accounting . In a number of industry , focus main company is on efficiency costs and profitability period short . If green accounting is not in line with market desires or No give profit clear competitive , company Possible No feel need implement it . In a few sector , action company For become more friendly environment No always impact positive to image brand or desire consumers , especially If consumer No Enough care with issues environment . Next Without exists strict regulations or incentive from government For push practice sustainability , company Possible No will see reason strong For invest in green accounting. Impact from green accounting perhaps different between sector . In a few industry , like energy or mining , its effects Possible more significant compared to with other sectors do not relate direct with issue environment .profitability because green accounting, in implementation cost Implementation of green accounting Research results This own similarity with research conducted by Atikah, I., & Sastradipraja, U. (2024). Partial test results show that green accounting and environmental performance do not affect profitability, while liquidity affects probability. In simultaneous testing, the results showed that green accounting, environmental performance, and liquidity together did not affect probability selain itu penelitian yang dilakukan oleh Lindawati, A. S. L., Ramadhani, V., Oktavianie, H., & Kathera, V (2022) the environmental performance positively effect profitability is proxied by ROA and ROE. While environmental costs and corporate social responsibility disclosure did not have a significant effect on profitability proxied by ROA and ROE. Egbunike , A.P., & Okoro, G.E. (2018). there was no significant relationship between green accounting and profitability measures among the non-consumer goods firms. Plus Again Study This own similarity with research conducted by (Angelina & Nursasi , 2021) and (Rosaline & Wuryani , 2020) which says Green Accounting does not influential to profitability , company No do reporting accounting nature volunteer because No exists benefit Good in a way written nor implied.

5.2 Effects of Environmental Performance To Profitability

Based on statistical tests using eviews that The Environmental Performance variable X2 shows significance $0.0268 < 0.005$ which means hypothesis accepted

5.3 Discussion

A company that focuses on performance environment often found method For reduce waste and improve efficiency source Power . Subtraction use energy and materials can lower cost operational , which is next can increase profitability , With increasing awareness consumer to problem environment , a lot developing company more products and services friendly environment . Product This often interesting interest willing consumers pay more , so can increase income , Good environmental performance can open access to new markets , incl opportunity contract from governments and organizations that own them policy continuity .

This Can contribute to growth income. besides it's a committed Company to performance environment often have more reputation Good . Positive image This help build loyalty customers , who can effect on improvement sales and profitability. more carry on With focus on performance Company environment more Possible For obey environmental regulations and standards . This matter can reduce risk caught fines , sanctions , or litigation , which in turn Can impact positive on profitability . Good environmental performance can push innovation in technology and processes. Companies that innovate For become more sustainable tend more competitive and able enjoy progress in profitability ., Active company in performance environment often creates culture positive work , which can increase motivation employees and productivity , as well impact positive to profitability . This matter in line with research conducted by Putri , AM, Hidayati , N., & Amin, M. (2019) with use ROA and ROE measurements for measure profitability results study show that performance environment influential significant on ROA, performance The environment also has an influence regarding ROE, Other research also shows this Similar results were carried out by Chasbiandani , T., Rizal , N., & Satria, II (2019). That Green accounting and performance environment influential positive to profitability company . Hadriyani , I., & Dewi , NWY (2022). also found results study that performance environment , disclosure environment , product friendly environment , costs environment and activities environment influential to profitability Good with ROA (Return on Assets) and ROE (Return on Equity) projections Alim, M., & Puji, W. (2021). There is an influence between Environmental Performance on profitability Lindawati, A. S. L., Ramadhani, V., Oktavanie, H., & Kathera, V (2022) the environmental performance positively effect profitability is proxied by ROA and ROE.

5.3 The Effect of Company Size on Profitability

Based on statistical tests using eviews that variable Company Size shows significance $0.0131 < 0.005$ which means hypothesis accepted

Big small company reflected from many sales , total employees and total assets of the company , company big inclined capable For avoid risk bankruptcy or failure business Because own source enough power , company big own flexibility and capability For increase capital as well more easy in accessing capital in the capital market (afiezan , et al, 2020)

6.0 Conclusion

Study This own objective For know influence variable independent Green Accounting, Environmental Performance and Company Size towards Profitability Amount The sample used was 13 companies in the sector Energy with a total of 52 data samples , so obtained conclusion as following : Green Accounting is not own influence to Profitability , Environmental Performance own influence positive to Profitability , size company own influence to profitability . The application of green accounting shows necessity testing more carry on For know How understanding and commitment company in management impact the resulting environment so that can increase trust public to company and so on will influence profitability company .

7.0 Suggestion

In study This The implementation of green accounting is not own influence to profitability because it's on research next expected necessity testing more carry on For know How

understanding and commitment company in management impact the resulting environment so that can increase trust public to company and so on will influence profitability company .

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