



Green Accounting, Green Innovation, and Emission Carbon Disclosure: A Literature Study

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ABSTRACT

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Literature studies regarding Green Accounting, Green Innovation, and Carbon Emission Disclosure show that companies must pay attention to environmental impacts in their operational activities. A focus on economic and environmental sustainability is important for companies, especially with increasing concerns about environmental impacts. Green Accounting is the process of managing environmental costs to support management decisions. Green Innovation, as an important part of environmental protection, can change consumer lifestyles and encourage sustainable behavior. Carbon Emission Disclosure plays a role in validating a company's efforts to reduce carbon emissions. The results of previous research show that Green Accounting has a positive effect on company sustainability performance, especially in waste management. Green Innovation can improve a company's ESG performance, while Carbon Emission Disclosure helps in reducing carbon emissions and disclosing information to stakeholders. Overall, this article provides an in-depth understanding of the importance of Green Accounting, Green Innovation, and Carbon Emission Disclosure in maintaining a company's environmental and social sustainability. By paying attention to environmental impacts in business activities, companies can improve their performance in a sustainable manner

INTRODUCTION

Many companies have developed management environment and systems audit and change practice disclosure social and environmental (Eugenio, Lourenco, & Morais, 2010). Not quite enough answer to environment has been one field not quite enough answer the most important social. A number of years finally has watched increasing concern to degradation environment, which happens especially in form pollution from various types (Almaliki, 2020). Company that produces goods or services with use various material raw materials and other materials in the production process that, of course produce various the impact there is, one among them exists in material waste, products, up to waste packaging production process (Latifah & Soewarno, 2023). Therefore, the company can increase performance environment they with decide how much source Power environment that will used and when must used, this can be happen through accountancy green (Almaliki, 2020). General facts that companies industry has contribute to pollution and with thereby destroy Lots source Power nature, therefore demands For give attention to issues environment has increase especially in two decades final last century, a the pressure required company For shoulder not quite enough answer they to society and the environment, resulting in , in 1987 the United Nations form a known body as Brundtland Commission, chaired by former Prime Minister Gro Harlem Brundtland (Al-Dhaimesh, 2020). Years final has watched growth interest in the question social and environmental. This also gives rise to worries certain in a entity. Concern to environment nature that appears on the beak second 20th century no quick get response in practice accounting and science knowledge, at least part Because focus accounting in organizations compared to system economy (Bebbington, Laine, Larrinaga, & Michelon, 2023). However, it's a worry on impact to continuity economy can lower sales and profits operational Because consumer more choose product friendly environment, as well impact the No only can reduce damage environment like pollution land and water, increasing global warming and so on, but it can also be done lower well-being employee along with decreasing profit business (Latifah & Soewarno, 2023). Since its publication Report Bruntland in 1987, concept development sustainable create framework conceptual new For overcome tension between environment and development economic development sustainable become language, agenda and plans work of inter-agency agencies government (okay national and regional), cities and settlements, as well as corporation (Bebbington, Laine, Larrinaga, & Michelon, 2023) with objective review worsening global environment, conditions life, health, and resources Power natural life (Al-Dhaimesh, 2020). Lack power work triggered by increase aging population give rise to challenge sustainable to activity innovation friendly environment company. However, aging population can too force company For improve governance company, so give benefit for innovation activities friendly environment. Innovation friendly environment Keep going get attention in studies global innovation during a number of decade final Because the focus is on management conflict (Sheng, Ruiding, & Yang, 2024). Innovation green make company motivated For produce product green through a green process.

Innovation green urge company For disclose information carbon. Carrying out innovation activities green need investment source Power (Ladista, Lindrianasari, & Syaipuddin, 2023). In a global context, countries must reduce emission carbon dioxide to "net zero" by 2050 for limit global warming up to 1.5 °C above level pre-industrial (Liu a, Failler, & Ramrattan, 2023). Carbon dioxide considered as house gas glass (GHG) is the most important contributor to global warming (World Resource Institute, 2022). This article, only focuses on uplifting literature studies theme green accounting, green innovation, and emission carbon disclosure with see phenomena that occur in the field through study previous ones that have been discuss related third theme discussion the.

LITERATURE REVIEW

1. Green Accounting

Green Accounting are the activities of identifying, recognizing, measuring, assessing, presenting and disclosing expenditure cost environment with Meaning manage environment as a result of operational activities companies that have an impact on the environment, and can used to use support decision related management with business company (Safitri & Sari, 2022). Accountancy green help plan business For source power, impact source Power to business and environment. Accountancy green is a process of recognition, measurement, recording, summarizing, reporting and disclosure information about transactions, events, and objects integrated and owned financial, social and environmental matters benefit for the stakeholder interest in doing taking decision (Lako, 2018) in (Santoso & Handoko, 2023). Accountancy management environment life is a process of identification, measurement and allocation cost environment life as well as integrate cost environment life carried out by MSME entities in taking decision business (Latifah & Soewarno, 2023). The more Lots cost released environment for support accountancy green through activity not quite enough answer social company, will increase performance finance company. Getting higher performance environment (PROPER rating) of the company will push did it activity not quite enough answer social company, will but Not yet influence performance finance company (Santoso & Handoko, 2023).

2. Green Innovation

Innovation friendly environment, which is component important in maintaining protection environment, is very important for organizations and society (Chavira, Shamzsuzzoha, Kuusniemi, & Jovanovski, 2023). Innovation friendly environment, which is defined as activity innovation where an business collect and apply knowledge from outside For facilitate activity innovation or bringing knowledge to external markets For earn money, suggested For overcome this challenge and succeeded apply innovation friendly environment (Takalo and Tooranloo , 2021) in (Chavira, Shamzsuzzoha, Kuusniemi, & Jovanovski, 2023). Green innovation naturally holding hands A lots of theories used by researchers, among others that is innovation technology, which is sword two eyes are seen as A matter big is the cause like change climate, imbalance technology, increasing pollution, as well efficient way for overcome problem the is push development sustainable (Qi & Yang, 2023). Innovation

green will reduce risk environment certain, like CO₂ emissions and other consequences of change climate, as well use product (Shafique Khan, et al., 2022)

3. Emission Carbon Disclosure

According to Taurisianti & Kurniawati (2016) in (Rahmawati, Tsamrotussaadah, Salsabila, & Maulana, 2021) carbon accounting have a number of underlying theory, one of them namely: accounting carbon, this is a process when organization calculate and report house gas emissions glass they. Company that owns performance carbon Good considered capable do disclosure emission more carbon Good Because company the motivated for disclose efforts What only that has they travel For achievement subtraction emission carbon the (Ladista, Lindrianasari, & Syaipuddin, 2023). This is of course refers to the definition from accountancy carbon itself, which is where accountancy own role in doing recording report finance about emission carbon produced by a company (Rahmawati, Tsamrotussaadah, Salsabila, & Maulana, 2021).

4. Grand Theory

A. Stakeholders Theory

Stakeholder theory importance expressed by Freeman in 1984 , which shows that success actually something company lies in satisfaction all over holder interests , no only those who might get profit from the shares. In this article, we will explain theory holder interests , and also talk with two leading global economists and philosophers about Why this is shaping more companies good and more strong (Freeman, Harrison, Wicks, Parmar, & Colle, 2010). Stakeholder theory interest depend on the company to satisfy its interests Alone. This theory looking organization as something system that takes into consideration No only interest owner, but also interests other groups in the environment where the business the operate (Latifah & Soewarno, 2023). Stakeholder theory interest describe business as gathering connection between group with interest in activities shaper business, so company own task For manage relationships is in order For create mark for holder interest (Santoso & Handoko, 2023). Transparency information in this case, namely disclosure emission carbon considered capable become means For guard connection company with stakeholders (Ladista, Lindrianasari, & Syaipuddin, 2023).

B. Legitimacy Theory

Legitimacy theory is managing tool perception holder interest about need For reach legitimacy organization (Suchman, 1995). With this, legitimacy offer to something organization right For do his activities in accordance with stakeholders ' interests interest. In this theory too, the company have contract with public For operate his activities based on values justice , and how the company respond various group interest For legitimize action company (Latifah & Soewarno, 2023). This theory has base thinking that is company will experience continuity if public understand that system run value company aligned with system mark public the (Ladista, Lindrianasari, & Syaipuddin, 2023).

C. Polluters Pays Principle Theory

The company doesn't only bear action prevention and control pollution , but also bear obligations in terms of cost cleaning. PPP theory believes that if the company take into account and reveal cost the environment , then will increase

trust and image Good company, which in the end will increase performance (Latifah & Soewarno, 2023).

D. Institutional Theory

Institutional theory is a prominent perspective in research organization contemporary. This matter covers gathering work broad and varied theoretical and empirical perspectives linked by emphases general understanding culture and expectations together (Latifah & Soewarno, 2023).

E. Signal Theory

Spence(1978) explain that party management endeavor convey relevant information for investors with give something signal or cue. Signal that could be something information related things that have been taken management in making it happen desire owner, disclosure emission carbon convey signal positive that company follow contribute to mitigation change climate (Ladista, Lindrianasari, & Syaipuddin, 2023)

METHODOLOGY

The design of this research is a Literature Review or review References. A literature review study is method used by researchers For collect data or search know related sources with This topic can be found from various source like journals, internet, and sources other also mentioned that studies literature use descriptive analysis of the data obtained from articles research (Mu'minah , 2021). Search method articles in journal databases research and search Through the internet. For search article, the keywords used are also included in data collection, namely "Green Accounting, Green Innovation, and Carbon Emission Disclosure. In context this research technical done with download 10 papers indexed 3 articles international and 7 articles lean national in range 10 years time latest (2015-2024.) Appropriate articles or journals with criteria inclusion and exclusion taken For furthermore analyzed.

RESULT AND DISCUSSION

1. Green Accounting

Study related green accounting carried out by Latifah & Soewarno (2023), mentioned that, accounting strategy the MSME environment is influential to performance sustainability , and proven that management MSME waste mediates influence of accounting strategy environment to performance sustainability of MSMEs. Study the analyzed use PLS-SEM, with collect research data as much 194 MSMEs in East Java, Indonesia via questionnaire online and offline, as well use Global Reporting Initiative (GRI) and Sustainability Development Goal's (SDGs) as contribution the literature . Study this is also strengthened with some theory related research with focus research, among others stakeholder theory, legitimacy theory, Polluters Pays Principle (PPP) theory , and institutional theory . Influence green accounting is very clear and tight its impact on sustainability economics and performance sustainable at a time entity business especially within the company manufacturer that produces goods and services, at PT Panggung Jaya Indah, role green accounting in management waste, entity said, revealed policies accountancy related cost management waste in the report position finance factory , however Not yet detail

cost incurred For finance activity processing the waste become one, as well asset details. Study the analyzed use descriptive comparative with collect data via interviews, recordings archives, as well as observation direct (Safitri & Sari, 2022). Application accountancy green own influence positive to success A effort, commitment management the company is in charge he answered to environmental, social and financial visible in business form a special unit For compile policy, drafting budget and carry out work programs, practices giving products, services as well as reporting information finances are correct and always audited in a way periodically. Study the use analysis descriptive quantitative and correlational with collect data via questionnaire with object House Sick general area of Malang kingdom (Ashari & Anggoro, 2021). The results of other studies also show this that accountancy green own influence positive to performance finance through not quite enough answer social as mediation, meanwhile influence performance environment No can mediated by responsibility answer social. Findings conclude that the more Lots cost released environment For support accountancy green through activity not quite enough answer social company, will increase performance finance company. Getting higher performance environment (PROPER rating) of the company will push did it activity not quite enough answer social company, will but Not yet influence performance finance company. Study the use analysis quantitative causality, with collected data on 132 samples on companies 2019-2021, with data source from report annual and sustainability company as well as rank PROPER, research it also uses teroi holder interest as contribution to research literature (Santoso & Handoko, 2023).

2. Green Innovation

A research in Sweden find results study that determination price carbon works as tool filtering innovation ; this thing creates price optimal carbon and raise it above Pigouvian level . Study identify condition for perfect filtering and generalizing results in policy filtering below regime riches intellectual alternatives and policies complement. calibration show that filtering can justify price carbon, with study role heterogeneity innovation in a model where the maker policy No can observe quality innovation and so on direct subsidize innovation friendly most valuable environment in a way social (Ahlvik & Bijgaart, 2024). Contribution theory on study related green innovation is innovation friendly environment, which is proven give benefit big for the business world and also the environment. Innovation friendly the environment also has strength For chang style life consumers and encourage they For apply more behavior sustainable , which will also be impact positive to environment, which reaches out three field main development : economic , social and environmental life. Apart from that, there are implications managerial own potency For moderate influence innovation friendly environment Not yet is known gap Skills employee related with innovation friendly environment and initiatives more carry on can adopted For increase skills and improve Skills worker. Literature study is the main model from study the (Chavira, Shamzsuzhoha, Kuusniemi, & Jovanovski, 2023). Other research shows that aging population increase company ESG performance , and pro- environment

ESG initiatives support innovation activities friendly environment company. Apart from that, aging population is also pushing change structure industry, which can push activity innovation friendly environment by companies, the study opinion that the PA-GI framework provides method structured For consider impact innovation friendly environment caused by aging population (Sheng, Ruiding, & Yang, 2024).

3. Emission Carbon Disclosure

Based on results research conducted by Ladista, Lindrianasari, & Syaipuddin (2023) concluded that performance carbon and proportions director proven woman own influence positive and significant to disclosure emission carbon, meanwhile variable innovation product green, green process innovation, and costs environment No proven own influence significant to disclosure emission carbon. In this research, disclosure emission carbon No proven own significant influence to profitability or mark company, because is in the process of repair and improvement performance finance after exists COVID-19 pandemic. Research result the analyzed use method quantitative with panel data regression data processing as well collect data through the IDX with choose companies listed on the IDX in 2019-2021 that publish report finance annual and reports sustainability, as well disclose total emissions and costs environment. The results of other studies also show this that accountancy carbon role For help expansion area absorption of Green House Gases (GHG) and also helps holders interest company For set a strategy for emissions carbon produced can minimized. Apart from that, accounting carbon can also give Lots benefit for environment surroundings. So, with implemented it accountancy carbon in the company can expand land GHG absorption. With I see, accounting carbon will help global warming No the more worsened or even can lower it. Research result these, analyzed use method qualitative with collect source data from books text, official website on the internet, results research in form theses, and journals scientific. (Rahmawati, Tsamrotussaadah, Salsabila, & Maulana, 2021). Another research entitled calculation carbon blue For monitor ecosystem carbon blue coast show results the finding, that ecosystem carbon blue coast China is source carbon , no absorbent carbon. Although its potential outside normal as absorbent carbon , consciousness will this is necessary improved. The takers decision need at least estimation magnitude about potency importance changes in coastal habitats as contributor house gas emissions glass. Although there is uncertainty in the available data based on estimation the study the latest is very necessary For give adequate information To use evaluate interest absolute and relative from coastal Blue Carbon. Study the try introduce standard Blue Carbon calculation for three ecosystem carbon blue coast China, that is forest mangroves , swamps salty , and field seagrass (Liu a, Failler, & Ramrattan, 2023). Research conducted by Liu & Liu (2023) also shows that ETS or carbon emission trading scheme has in a way significant push innovation technology green in industrial companies, which is an effect the positive more big for company with large capital scale, with governance more companies well, esp for those in the industry mining and manufacturing .

CONCLUSION AND RECOMMENDATION

Green accounting or accounting green most influential positive to performance A enterprise and sustainable development, because when A company apply and pay attention circumstances something environment so matter the naturally will impact on sustainable performance by a company, primarily in focus main something accountancy environment , which is known with Triple Bottom Line 3P (people, planet, and profit). Real evidence, research conducted by Latifah & Soewarno (2023), disclose that accounting strategy the MSME environment is influential to performance sustainability, and proven that management MSME waste mediates influence of accounting strategy environment to performance sustainability of MSMEs. Likewise with green innovation, innovation friendly environment, which is proven give benefit big for the business world and also the environment. Innovation friendly the environment also has strength For change style life consumers and encourage they For apply more behavior sustainable (Chavira, Shamzsuzzoha, Kuusniemi, & Jovanovski, 2023). He continued , the policies and initiatives that exist in the European Union are related to research Chavira et al., , (2023)European Union Community apply agreement green Europe For by 2030, some policy inside it that is , plan action economy circular new , diversity strategy biological 2030 , plan action zero pollution , and the digital europe program . For example, in research conducted by Sheng, Ruiding, & Yang (2024) show that aging population increase company ESG performance, and pro- environment ESG initiatives support innovation activities friendly environment company. Not only that, it's related disclosure from impact process performance something companies that have the most impact on the environment , as example impact namely on emissions carbon caused by some pollution environment , then accountancy carbon role For help expansion area absorption of Green House Gases (GHG) and also helps holders interest company For set a strategy for emissions carbon produced can minimized (Rahmawati, Tsamrotussaadah, Salsabila, & Maulana, 2021). Through emission carbon disclosure, amount emissions produced earth especially on one company, then can done calculations, disclosures, as well as reporting on amount emissions used and produced. accountancy carbon will help global warming No the more worsened or even can lower it (Rahmawati, Tsamrotussaadah, Salsabila, & Maulana, 2021). Concrete evidence was also revealed by (Ladista, Lindrianasari, & Syaipuddin (2023), which mentions that performance carbon and proportions director proven woman own influence positive and significant to disclosure emission carbon, which is novelty from his research. Apart from that, initiative green is also planned at the Finnish Society which will be taking place 2030, regarding environmental education life, academy Finland, business Finland, edtech Finland (Chavira, Shamzsuzzoha, Kuusniemi, & Jovanovski, 2023). They also added related practice accounting in application innovation friendly environment, some among them that is with practice Company accounting can measure performance environment through development metrics and indicators performance environment, help companies in identifying , measuring and managing associated costs with innovation friendly environment , yes used For report information relevant

environment to holder interests , as well can help company in evaluating related investments with innovation friendly environment .

FURTHER STUDY

This research still has limitations, so it is necessary to carry out further research related to the topic of Green Accounting, Green Innovation, and Emission Carbon Disclosure: A Literature Study in order to improve this research and add insight to readers.

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