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ENVIRONMENTAL ACCOUNTING: AN EFFORT TO MAKE SUSTAINABLE BUSINESS

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ABSTRACT

This research is a descriptive study aimed at discussing the role of accounting in efforts to improve environmental sanitation. The environment referred to here is the environment in which a company or business organization operates and the general environment experiencing degradation in sanitation. This study uses a qualitative descriptive method with a literature study approach, drawing upon various sources and references such as journals and textbooks. This literature-descriptive study indicates that accounting plays a significant role in the existence of a healthy and sustainable environment. Accounting provides room for the costs of improving environmental performance. A healthy environment will have an impact on the sustainability of more robust and healthy business activities.

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1. INTRODUCTION

Post-Cold War, which ended in 1991, environmental issues have become a global concern (Pujayanti, 2012). The environment (read: Earth) is aging and experiencing sanitation degradation. The degradation of environmental health quality has become the focus of all elements. Environmental pollution has become a problem affecting all aspects of life: economic, social, and cultural (Budhiawan et al., 2022). Destructive actions towards the environment have resulted in various disasters such as landslides, floods (Budhiawan et al., 2022), water pollution, air pollution, soil pollution, and extreme weather conditions (Hidayat, 2022). The urgency to restore the level of environmental sanitation is the responsibility of all parties, including business actors. This includes green marketing, where all products receive attention in terms of marketing, packaging, and changes in production processes (Noviardy & Mellita, 2014), all of which need to be methodically and sustainably considered.

Amidst the rapid advancements in these business processes and systems, there's another entity that has been neglected by business players: environmentally unfriendly businesses or those that are not yet environmentally friendly (Muhsin et al., 2011). The use of substances that are harmful to the environment and can pollute water, soil, and air is still common. The use of substances like pesticides in agricultural activities not only impacts the soil but also contributes to water contamination (Retno, 2006). Society needs to be accustomed to loving environmentally friendly products to ensure the sustainability of businesses (Waskito, 2015).

Business activities generally require various chemicals in their production processes (Aniela, 2012). This is one of the major contributors to environmental pollution. The consequence is an unhealthy environment unfit for habitation. Discussions about the environment and the economic activities of global society have become a major focus in various discussions since 2015. The focus on sustainable development has become a primary issue known as the Sustainable Development Goals (SDGs) (Soesanto, 2022). In response to this, research has been conducted from various perspectives or disciplines. The purpose of this research is to contribute to efforts to minimize further impacts from business activities. Restoring or recovering from the impacts of environmental pollution requires significant costs. This responsibility falls on companies or business actors. Therefore, the discipline of accounting offers a review known as environmental accounting (Green Accounting).

This concept began to evolve in Norway in the 1970s and continued to develop until 1999. The Environmental Agency of Japan issued environmental accounting guidelines and practiced them extensively in all companies in Japan (Pujayanti, 2012). The fundamental basis of environmental accounting actually stems from the reality that industries or companies solely pursue profits and consequently neglect environmental factors (Pujayanti, 2012).

The discipline of accounting has recently come under scrutiny, notably due to indications of fraud occurring in financial reporting processes. The high occurrence of fraud is one of the causes of errors in decision-making by stakeholders. Phenomena such as profit maximization that tends to overlook many aspects (capitalist systems) have also garnered attention. Companies solely focused on generating high profits tend to neglect other essential aspects, such as environmental health. Several economic principles are violated in the business world, including economic cost, accounting cost, and opportunity cost. Companies are excessively profit-driven, leading to a lack of interest in or disregard for environmental conservation. Although this is merely an ethical issue, it has had a significant impact on the sustainability of the global environment (Suartana, 2010).

What about accounting? Accounting information systems must be designed with systemic, measurable, and methodical analysis (Suartana, 2010). Environmental accounting, at the very least, helps companies or business organizations to be environmentally conscious and prepare costs as efficiently as possible for the continuous or sustainable operation of the company. Nevertheless, companies are established to generate profits while facing limitations in resources amid almost unlimited needs. This is where problems often arise for companies. To address or minimize the impact of environmental damage, comprehensive studies in the field of accounting are necessary. A new paradigm has emerged, primarily to shift the perspective that companies are solely organizations driven by profit. Companies are now not only pursuing profits but also have responsibilities toward the survival of all creatures on this planet. This social responsibility has become a strategic issue (Suartana, 2010).

Environmental accounting becomes an alternative in the field of accounting that attempts to identify, measure, evaluate, and report environmental accounting (Suartana, 2010). According to AICPA (Aniela, 2012), environmental accounting is "The identification, measurement, and allocation of environmental costs, the integration of these environmental costs into business decisions, and the subsequent communication of the information to a company's stakeholders." (Accounting that involves the identification, measurement, and allocation of environmental costs where these costs are integrated into business decision-making and communicated to stakeholders.)

Literature Review

Legitimacy Theory

Pertaining to the foundational view of legitimacy theory, it involves aligning perceptions or assumptions that the actions taken by an entity are desired or in accordance with the normative system, values, beliefs, and definitions socially developed (Chairia et al., 2022). This implies that a company always holds a form of social contract or agreement with its surrounding environment. Here, the environment encompasses both the natural and social environments. "Legitimacy theory as the idea that in order for an organization to continue operating successfully, it must act in a manner that society deems socially acceptable." In essence, company management must ensure that their operations are always acceptable to the surrounding community, particularly in relation to norms believed and accepted by that community. Therefore, all company activities are legitimized by the community (Mumtahanah & Septiani, 2017).

Legitimacy theory has a close relationship with how companies voluntarily disclose their environmental impact (Corporate Social Disclosure). Within the literature, it is mentioned that one theory providing space for environmental disclosure by companies is the legitimacy theory. The legitimacy theory explains that companies' disclosure of social responsibility aims to gain legitimacy from society so that the company can maximize its financial performance in the long term (Chairia et al., 2022). Put simply, companies need recognition or approval from society to conduct their business activities without harming the environment and gain acceptance from the surrounding community. Legitimacy theory becomes important when environmental accounting has become a concern of society due to corporate financial reporting. This theory is suitable for use in the accounting world when discussing environmental accounting because it is through legitimacy that companies become more concerned about the environment.

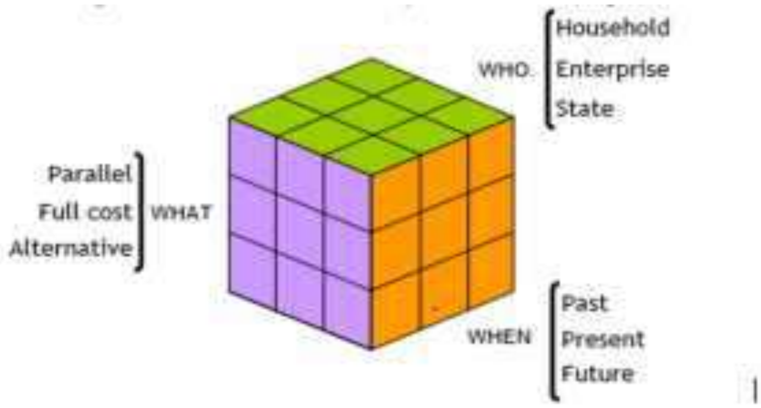

Figure 1. Green Accounting Conceptual Framework (Adopted from Greenham, 2010)

The conceptual framework above can be explained as follows: WHO; relates to the question of accountability. There are three key entities to answer the question: households, companies, and governments. These three elements serve as sources for how individuals act or assume roles; acting as family members, as companies, or as governmental authorities. WHEN; addresses the question of when actions and environmental impacts occur. This is linked to the proposed number of sustainable reporting methodologies, identifying the timing and duration of actions impacting the environment. This information assists in assessing environmental impacts over time. WHAT; concerns the measurement of environmental impacts. This dimension includes various parameters allowing for the measurement of impacts, such as carbon emissions, water usage, waste, and other effects on the environment. This dimension is associated with the time dimension that needs to be considered.

Environmental Accounting

Before discussing the definition of environmental accounting, let's briefly discuss accounting. Accounting is the art of recording, classifying, and summarizing transactions or events conducted by a company in such a way, predominantly in monetary terms or at least having financial implications, and interpreting their results (Ghozali and Anis, 2007, as cited in Islamey, 2016). According to the Accounting Terminology Bulletin No.1, Accounting is the art of recording, classifying, and summarizing, in a significant manner and in terms of money, transactions and events which are at least of financial character, and interpreting the result thereof (AICPA, 2003, as cited in Anam, 2020). Accounting involves the recording, grouping, summarizing in a meaningful way, and expressed in monetary value, all transactions and events that have some financial nature, and from these records, their results can be interpreted.

Environmental accounting began to evolve in the 1970s in Europe. Awareness of the importance of considering environmental aspects in business activities increased. Since then, various societal elements have raised the importance of ecological awareness. Professional organizations like AICPA (Association of International Certified Public Accountants) published "Considerations of ESG-related matters in an audit of financial statements," encouraging the business world to seriously consider environmental health. In the field of accounting, particularly in financial statement audits, environmental costs in business activities need attention (Soesanto, 2022).

Attention towards environmental accounting continues. In the year 2000, guidelines on environmental accounting were issued by The Environmental Agency. This illustrates that attention to environmental accounting continues to develop and receive reinforcement from various societal elements. Theoretically, the accounting process generates financial information. This financial information is produced through reports concerning assets, financial liabilities, profit or loss, and equity compiled in financial statements. However, it was realized that these reports have limitations. These conventional limitations include the inability to provide information about a company's overall productivity impacting social and environmental aspects. It was these limitations that triggered the emergence of environmental accounting (Soesanto, 2022).

Environmental accounting is a subset of accounting that focuses on a company's social and environmental issues. In the field of environmental accounting, the disclosure of environmental impacts or costs and measuring environmental performance is mandatory (Yudhanta, 2009). Environmental accounting is based on environmental considerations as the rational basis for financial reporting. A significant factor in environmental accounting is the inclusion of costs related to environmental damage caused by a company's activities (Soesanto, 2022). These costs refer to expenses that companies or businesses must bear for the sustainability of the environment where they operate and the broader environment.

The foundation of accounting's social responsibility towards the environment is stated in the Financial Accounting Standards (PSAK) No. 57. This forms the basis for measuring environmental performance in the information released in financial statements. It also becomes an indicator of a company's performance in environmental terms. A healthier environment implies better/higher company performance. There are three most important aspects in environmental accounting: first, environmental conservation costs or commonly known as monetary value; second, the benefits of environmental conservation in physical units; and third, the economic benefits associated with environmental conservation activities (Soesanto, 2022). The primary function of environmental accounting is disclosing environmental costs to stakeholders. This disclosure aims to motivate stakeholders to observe the efforts made to effectively manage environmental costs (environmental cost reduction) (Yudhanta, 2009). The objective of this reduction is to enhance environmental quality. In essence, environmental accounting involves the analysis and reporting of cost components and obligations that companies must fulfill regarding environmental issues.

2. METHOD

Metode penelitian ini mengadopsi desain penelitian studi pustaka/*literatur review.* Artinya pengumpulan informasi yang digunakan dalam studi adalah data sekunder dari berbagai literatur kemudian diramu untuk menjadi satu tulisan yang berdaya guna bagi pengembangan ilmu pengetahuan.

3. RESULT AND DISCUSSION

Environmental Accounting in PSAK regarding the Presentation of Financial Reports

PSAK No. 1 serves as the primary accounting reference in Indonesia for financial statement presentation. It regulates the requirements for financial statement presentation, the structure of financial statements, and the minimum content requirements for financial statements. According to PSAK No. 1, the components of financial statements consist of (1) the statement of financial position at the end of the period, (2) the statement of profit or loss and other comprehensive income for the period, (3) the statement of changes in equity for the period, (4) the statement of cash flows for the period, (5) the notes to the financial statements containing a summary of accounting policies and explanatory information, and (6) the comparative statement of financial position presented if the entity applies retrospective policies or reclassifies financial statement items.

PSAK has acknowledged the importance of environmental aspects in financial reporting and provides guidance on environmental accounting. PSAK requires companies to disclose information regarding environmental impacts in their financial statements. In statement PSAK No. 1 paragraph 12 states that "Entities may also present, separately from the financial statements, reports on the environment and value-added statements, particularly for industries where environmental factors play an important role and for industries that consider employees as a significant user group of the reports."nBased on this statement, one important consideration is that if entities are serious about improving and controlling their environmental costs, reporting environmental costs becomes highly important. A well-prepared environmental cost report includes a breakdown of environmental costs by category. Presenting an environmental cost report based on cost categories can provide critical information regarding a company's profitability and the relative amount spent on each cost category.

Environmental Accounting and Conservation

Conservation is the deliberate preservation of the environment by humans to mitigate environmental issues such as pollution caused by human activities. Environmental problems have garnered attention from various sectors. The United Nations (UN) held a conference on the environment in Stockholm, Sweden, on June 5-6, 1972 (Rachman, 2012). This conference raised awareness among nations about the importance of environmental conservation. However, amidst this awareness, it faced a viewpoint in the economic realm that saw the environment as a subject of commodity exploitation and nuclear weapon development (Rachman, 2012). This perspective often overlooked the impacts on the environment and various other business activities.

Based on traditional accounting concepts, profit attainment is an absolute measure of company performance. However, a paradigm shift has occurred in modern accounting concepts that the purpose of a company is not only to achieve maximum profit but also to consider social well-being and its environment, known today as Triple Bottom Line Accounting (TBLA). Business organizations and the public sector cannot be considered sustainable if they do not prioritize social and environmental aspects in their management.

The significance of environmental accounting fundamentally demands full awareness from companies and other organizations that have benefitted from the environment. Environmental accounting is seen as capable of enhancing efforts by considering sustainable environmental conservation. Various companies implement environmental accounting to provide quantitative assessments of the costs and impacts of environmental protection. Environmental accounting aims to raise awareness and attention to the effects of a company's activities on its environment. Furthermore, this branch of accounting provides significant benefits to society, especially to companies, enabling them to implement practices appropriately and effectively.

The Role of Environmental Accounting in Supporting Sustainable Business

The concept of environmental accounting began to evolve in the 1970s in Europe. The International Accounting Standards Committee (IASC) developed principles of international accounting, including the development of environmental accounting and auditing human rights. Additionally, industry standards continued to advance, and professional auditors such as the American Institute of Certified Public Accountants (AICPA) issued universal principles regarding environmental audits (Soesanto, 2022).

The implementation of environmental accounting in Indonesia has been undertaken by several companies. For instance, PT Lippo Cikarang Tbk applied environmental accounting by planting 1000 trees in 2011 in the residential area it constructed. The planted trees included mahogany, teak, and rain trees. Furthermore, PT Lippo Cikarang Tbk established its self-nursery garden to meet the tree needs across its entire business area, encompassing residential, commercial, and industrial sectors. These activities aimed to assist in reducing carbon emissions (Aniela, 2012). PT. Indofood Sukses Makmur Tbk practiced environmental accounting by engaging students from SDN 41 Perum IV, Pontianak, in tree planting activities on National Children's Day in 2010. Trees such as 50 longan, 25 mango, 25 guava, 25 coconut, and 25 sapodilla were planted, with the objective of preserving life, supporting environmental education, and promoting health (Aniela, 2012).

PT Sido Muncul is also a company with a high orientation towards the environment, demonstrated through tree planting activities in 2011. The company distributed 10,000 sengon tree seedlings free of charge to farmers in the Kemitir Village, Sumowono District, Semarang Regency. Additionally, it provided aid for food security (rice barns) amounting to Rp 150 million to the "Sedulur Sikep" Community Association in Sukolilo District, Pati, Central Java. Furthermore, the herbal products produced by PT Sido Muncul are environmentally oriented, made from traditional ingredients (medicinal plants) to green critical open areas in mountainous regions prone to erosion and landslides. PT Sido Muncul engaged local farmers in the area to execute programs for strengthening the agricultural sector (Aniela, 2012).

From these examples of environmental accounting applications, it can be seen that accounting's contribution to improving environmental quality is real and has been widely undertaken. In other words, every company or business organization, especially those reliant on natural resources, has the opportunity to make the environment healthier and more habitable. Environmental accounting specifically defines and incorporates all environmental costs into a company's financial statements. This is known as the disclosure principle in accounting. When these costs are clearly identified, companies tend to take advantage of opportunities to reduce environmental impacts. How a company explains environmental costs depends on how the company uses this cost information.

In implementing environmental accounting, companies need to clearly disclose environmental costs by allocating costs based on cost categories and the exact cost drivers in a structured environmental accounting system, and integrate environmental accounting into the environmental management system. Through this integration, companies indirectly enhance their environmental performance and improve the overall organizational performance, both financially and non-financially.

Research by Sawitri (2017) proves that when reading financial statements, investors are more interested in companies that disclose costs related to the environment. High costs associated with environmental activities suggest poor environmental performance. Investors believe that substantial costs related to environmental activities will impact future cash flows, dividends, and company profits,

consequently decreasing the company's value reflected in stock prices. This indicates that a company's openness regarding its environmental activities can determine the public's response to the company. A company is evaluated to provide serious attention to the environmental transformation's sustainability.
Consistent environmental activities implemented by companies that directly impact communities will increase public trust in the company. Indirectly, the public becomes loyal customers/consumers to the company. This demonstrates that the application of environmental accounting can enhance positive consumer perceptions, leading to increased sales and profits for the company. Companies must consistently apply environmental accounting and disclose it in their financial statements. The application of environmental accounting represents government guidelines provided to waste-generating companies to control pollution efforts and repair the functions of the natural environment, encompassing prevention, mitigation, and restoration, which will ultimately support sustainable business.

4. CONCLUSION

Based on the discussion and literature review conducted in this study, several conclusions can be drawn: Within the realm of accounting studies, there exists legitimacy regarding financing towards the environment. This indicates that accounting studies provide space or relevant items in an effort to support environmental performance. The environment referred to here is not limited solely to the workplace but encompasses a broader context, including the environment in which a company or business activities operate. Corporate social responsibility represents one form of both accounting and corporate responsibility towards environmental health. The environment becomes a healthy habitat if more comprehensive maintenance is undertaken. It requires a deeper awareness in providing support for environmental maintenance from a financing perspective. A healthy environment supports the implementation of sustainable business practices. Business operations will continue as long as nature provides sufficient raw materials for the manufacturing process. There is a mutually beneficial relationship between businesses that care about environmental health and the existence of an environment capable of providing higher quality raw materials, ensuring the availability of resources beneficial for sustainable business practices. Explanation about environmental accounting has brought new awareness to stakeholders. Therefore, the following suggestions need to be considered: Greater Attention and Responsibility towards Environmental Conservation: Companies should seriously adopt the concept of green accounting. This concept offers a new perspective on more adaptive and sustainable environmental preservation patterns, enabling companies to contribute more effectively to environmental health. Genuine Concern and Awareness in Cost Allocation: Companies must demonstrate genuine concern for the environment through appropriate cost allocation based on categories and good accounting standards. By doing so, environmental preservation can be carried out more effectively and sustainably, reflecting a strong commitment to environmental sustainability.

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