

Green Accounting Practices: An Exploration

Eliza Noviriani¹, Annisa Fitriana², Desty Wana³
{eliza.noviriani@gmail.com¹, aninis08@gmail.com², destywana@gmail.com³}

Sambas State Polytechnic, Indonesia¹, Malang State Polytechnic, Indonesia², Pontianak State Polytechnic, Indonesia³

Abstract. Green accounting in waste management at Fajar Saudara Kusuma (FSK) Sebawi Mill has five stages of environmental accounting treatment including identification, recognition, measurement, presentation and disclosure. Three of the five stages, identification, recognition and measurement have been completed by the company; however, presentation and disclosure have not been completed by FSK because this company only keeps track of transactions through the general ledger. Finally, for the balance sheet, income statement, and notes on financial statements prepared by the central company, FSK also disclosed the existing environmental accounting information so that it could function as an environmental management tool and a communication tool with the community.

Keywords: Environmental Accounting; Green Accounting; Waste Management

1 Introduction

As one of the “actors”, the company has a social responsibility to mitigate the damages. [1] points that development of the role of environmental accounting research has been the subject of numerous publications. Journal articles are then the most typical kind of document that looks at environmental accounting. [2] set that business entities have a role and responsibility towards society and the environment instead of merely running business activities for goods and services. Environmental accounting (this paper terms this as green accounting) is a consequence resulting from the company's responsibility. Therefore, accounting is required for companies to measure and record business activities, including environmental concerns. As [3] points out the emerging vision for Industry 4.0, the fourth industrial revolution, could incorporate environmental accounting and the broader context of corporate sustainability.

Green accounting is a term related to the inclusion of environmental costs into business accounting or government accounting. By implementing green accounting, the company can cut expenses and manage the responsibility for protecting the environment and producing waste to prevent environmental pollution [4]. Indonesia as a developing country is no exception, the government actively participates in environmental concerning Environmental Impact and guidelines for the preparation of Environmental Impact Analysis (AMDAL). The environmental performance measurement in Indonesia is issued as a rating by an environmental agency called Company Performance Rating Program (PROPER) [1].

In Indonesia, environmental accounting is still voluntarily reported in the company's annual report. However, the company should present the report if we consider the benefits the company will undergo when doing so. Environmental costs need to be reported separately

based on cost classification [5]. Therefore, it can be summarized that the environmental costs that companies incur because of environmental damage are presented separately. FSK Sebawi Mill company received a PROPER blue in 2016. This indicates that the business is regarded as having taken the necessary environmental management measures in accordance with the relevant provisions or regulations. Hence, FSK Sebawi Mill's green accounting practices are being investigated by researchers through this study.

2 Literature Review

2.1 Research Stages

FSK Sebawi Mill is one of the business units run by the Pontianak Branch of Fajar Saudara Kusuma company (commonly abbreviated as FSK), which is a part of the Ministry of State-Owned Enterprises and prioritizes operating oil palm plantations. FSK is equipped with a waste management facility that processes materials from raw materials to semi-finished products, which are then processed by other factories. Figure 1 illustrates the stages of this research.

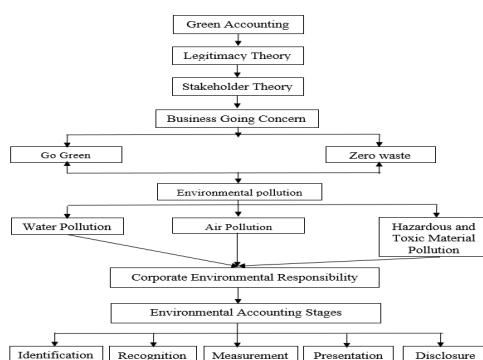


Fig. 1. Research Stages

2.2 Green Accounting

According to the United States Environmental Protection Agency (US EPA) in [5], environmental accounting is environmental costs that need to be taken into account by stakeholders in the company who can encourage the identification of ways to reduce or avoid costs while also enhancing the company's quality. Green accounting includes all aspects of environmental (planet) and social (people) costs in an integrated manner to improve the quality of the company. It is not only profit-oriented, which would only present financial information to internal and external users for decision-making in the future. The business now has a duty to the environment and the area in which it operates thanks to green accounting. From a global perspective, Green Accounting is better understood as [6]:

“Green Accounting is the process of recognizing, measuring value, recording, summarizing, reporting and disclosing information on objects, transactions, events or impacts of corporate economic, social and environmental activities on society and the environment and the corporation itself in an integrated accounting information reporting package that can be useful for users in economic and non-economic decision making.”

3 Method

This study employs a phenomenology qualitative approach. Phenomenological studies explain the meaning of life experiences for some people in relation to a concept or phenomenon. Phenomenologists investigate the structure of consciousness in human experiences [7]. Interviews, observation, documentation, and triangulation/combination of various data collection techniques and sources were used as data collection techniques in this study. Both internal and external parties served as research informants to gather data and information. The internal sources are the Manager, Assistant for waste management, Assistant for the environment, Head of Finance, HR & GA Division, and several field workers. Meanwhile, external parties, who are most likely to be directly impacted by the company's activities, come from the village secretary, the sub-district, as well as the local community as social control.

4 Results and Discussion

4.1 Planet, People, Profit: The Corporate Social Responsibility

To gain support from the community, the company must take into account the current circumstances where its value system is in line with the larger community system. Companies must, of course, fulfill their environmental responsibilities to earn the public's trust. The results of the interview with Stafen Tunliu as the Environmental Assistant reveal:

"We have made various efforts to be environmentally conscious, one of which is reforestation, provision of WWTP, educational contributions, proposals and for activities and electricity installation for residents around the company, and allowing the community to take solid waste from the production of liquid waste which is typically used as compost."

The interview indicates that the company is trying to gain legitimacy from the local community by following the value system in the community. According to the information provided by the company, the researcher also made an effort to get more details from other sources. Specifically, she spoke with members of the community, village officials, and staff members of the nearby sub-district office to find out how they had reacted to the company thus far in terms of the environment, society, and legality. Jasmita as Head of Governance states:

"In my opinion, the company is so far running well because it involved the surrounding community as workers, besides that, there is good communication with the village and subdistrict. The neighborhood has not voiced any criticism of the business operations. There was once mediation regarding waste, road infrastructure, and lighting, but it was settled and it turned out to be a misunderstanding. However, following mediation with the community and sub-district village, the company is committed to upholding its obligations in maintaining the local environment and contributing through donations of money to PHBI, PHBN, and educational initiatives in the form of school transportation facilities/infrastructure in the local area."

The second informant, Marlina, who lives close to the company, was interviewed. She describes her opinion of the company:

“I think the company is doing well right now.. My family and I benefited from the company's provision of electricity. Before this business was established, lamps could only be lit with candles because there was no electricity, but now that there is electricity, Alhamdulillah.”

Rosa, the third informant, who resides in the mess created by the company, stated:

“The company can be said to be good overall because of the various contributions it has made to us, including the provision of a car to pick up school children so that the 28 families involved no longer have to struggle to think about that.”

The following informant, Win Julianto, the village secretary, relayed several matters:

“The company has legitimately attempted to fulfill its social and environmental responsibilities. For instance, yesterday during the covid, the company donated goods and cleaning supplies like trash cans, penguin purchases, hand sanitizer, hand soap, and others. Additionally, work has started to repair the company's road infrastructure.”

The aforementioned views concur with Jannah dan Muid (2014) [8] who asserts that the business works to make sure that all stakeholders view its operations as legitimate. The company has fulfilled its obligations in Environmental Management Effort and Environmental Monitoring Efforts (UKL-UPL). The company is aware that all business and development endeavors will have both positive and negative effects.

4.2 Green Accounting in the Company: Identifying Environmental Costs

FSK identified three different types of waste: solid, liquid, and hazardous and toxic waste. In his capacity as a Field Assistant, Agustinadi explained this to researchers in the following ways:

“The waste generated by FSK from the remaining waste from the production process in the form of solid, liquid and hazardous and toxic waste. The solid waste consists of empty fruit bunches, shells, and fiber.”

FSK has used a separate system known as the Wastewater Treatment Plant, (WWTP) which consists of holding ponds for liquid waste treatment. Corporate social responsibility takes the form of the WWTP system. If the business disregards this, it will result in environmental pollution, and if the company's waste management process does not follow the rules, the costs it will have to pay will be higher as a result of the impact. Costs associated with waste management are unavoidable, as Limanto Wijaya, Head of Finance, stated in the interview that follows:

“The Draft Budget is typically used by this company to determine waste management costs.” However, there are a few steps that each station needs to take to identify environmental accounting before calculating the cost of waste management: first, the analysis of waste management-related transactions first; second, the correct account name or account is then determined from those transactions; third, the identified transactions are adjusted to the account number; fourth, recording the transactions according to the incident date after the identified transactions have been adjusted to the account number; fifth, keeping journals regularly and chronologically, according to when transactions occur is the first step in recording transactions.”

FSK company has identified costs at each station, particularly in waste management, and has implemented environmental accounting, which entails adding waste management costs to

the overall financial report. These expenses include salaries and benefits, as well as material, equipment, and other costs like fuel and transportation.

FSK has also carried out the identification stage, where all waste management costs are included in a particular account group with Account Number 83.12007.000 named "Waste Control" because Waste management expenses are brought on by factory operations and are then shown in the income statement of the company. Essentially, the use of environmental accounting addresses any potential flaws in current accounting procedures. The issue right now is that there is no standard to compel the entity to use natural resources, especially when handling waste, which leads to variability in the recording systems in every company that produces waste through its operations, including FSK.

4.3 Green Accounting in the Company: Recognition of Environmental Costs

Fajar Saudara Kusuma company recognized that all expenses were recorded as expenses if they were used for the company's waste management operations. In the interview, Limanto Wijaya, the head of finance, stated the following:

"The costs incurred for waste management, in this case, have been recorded as expenses because the company did so before the transaction, or what is known as the accrual basis in accounting for salaries and wages as proof that the business directly records and records the costs associated with the transaction, as opposed to other costs that are recorded and recorded on a cash basis, i.e. recording and recording costs after cash is issued."

Based on the findings of the researcher interviews, costs associated with waste or environmental management will have a separate account, specifically by charging these costs with the account name "Environmental Control," classified into a general cost account, and displayed on the balance sheet.

4.4 Green Accounting in the Company: Measurement of Environmental Costs

Based on the expenses incurred and deducted from the budget's actualization in the previous period, FSK measures the costs of environmental management in rupiah units. The following was said by Limanto Wijaya, the head of finance, as follows:

"When calculating costs, the company either uses historical costs or the actualization of costs incurred in the previous period".

According to the findings of the interviews conducted by the researchers, FSK Sebawi Mill has successfully completed the measurement stages by calculating the costs associated with environmental accounting for his position in waste management.

4.5 Green Accounting in the Company: Presentation of Environmental Costs

The presentation of environmental cost is stated by the Head of the Finance Division, Limanto Wijaya:

"To present costs for waste management, the company goes through various stages. Fajar Saudara Kusuma Sebawi Mill company is still listed in the Balance Sheet report, but we do not prepare or present the costs; rather, the central company handles these tasks. Only up to the general ledger stage do we do it in our particular business."

This information leads to the conclusion that the business offers information along with general and administrative costs.

5 Conclusion

Application of green accounting in waste management at FSK has five stages of environmental accounting treatment including identification, recognition, measurement, presentation, and disclosure. Three of the five stages, identification, recognition, and measurement, have been completed by the company; however, presentation and disclosure have not been completed by FSK because this company only keeps track of transactions through the general ledger. Finally, for the balance sheet, income statement, and notes on financial statements prepared by the central company, FSK also disclosed the existing environmental accounting information so that it could function as an environmental management tool and a communication tool with the community.

References

- [1] M. Taqi, A. S. Rusydiana, N. Kustiningsih, and I. Firmansyah, "Environmental Accounting: A Scientometric using Biblioshiny," *Int. J. Energy Econ. Policy*, vol. 11, no. 3, pp. 369–380, 2021.
- [2] A. Shakkour, H. Alaodat, E. Alqisi, and A. Alghazawi, "The Role of Environmental Accounting in Sustainable Development Empirical Study," *Journal of Applied Finance & Banking*, vol. 8, pp. 1792–6599, 2018.
- [3] R. Burritt and K. Christ, "Industry 4.0 and environmental accounting: a new revolution?," *Asian J. Sustain. Soc. Responsib.*, vol. 1, no. 1, pp. 23–38, 2016.
- [4] A. Tanc and K. Gokoglan, "The Impact Of Environmental Accounting On Strategic Management Accounting: A Research On Manufacturing Companies," *International Journal Of Economics And Financial Issues*, vol. 5, no. 2, pp. 566–573, 2015.
- [5] G. National *et al.*, "Environmental Management Accounting (EMA): Memposisikan kembali biaya lingkungan sebagai informasi strategis bagi manajemen," *Balance. Nuevos Sistemas de Comunicación e Información*, vol. 1, no. 2, pp. 2013–2015, 2019.
- [6] A. Lako, *Ecological Crisis And Urgency Of Green Accounting. Accounting*. 2017.
- [7] R. Rasid, H. Djafar, and B. Santoso, "Alfred Schutz's perspective in phenomenology approach: Concepts, characteristics, methods and examples," *International Journal of Educational Research & Social Sciences*, vol. 2, no. 1, pp. 190–201, 2021.
- [8] R. Jannah and D. Muid, "Analisis Faktor-Faktor yang Mempengaruhi Carbon Emission Disclosure Pada Perusahaan di Indonesia (Studi Empiris pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Periode 2010-2012)," *Diponegoro Journal of Accounting*, vol. 3, no. 2, pp. 1000–1010, 2014.