

ANALYSIS OF THE IMPACT OF GREEN ACCOUNTING IMPLEMENTATION ON THE PROFITABILITY OF PAK UDIN'S FRIED MEATBALL FACTORY IN JATI BARU VILLAGE, PAGAR MERBAU DISTRICT, DELI SERDANG REGENCY, NORTH SUMATRA

Siti Ramadhani Saragih ^{a*)}, Yenni Samri Juliati Nasution ^{a*)}, Muhammad Lathief Ilhamy Nasution ^{a*)}

^{a*)} State Islamic University of North Sumatra Medan, Medan, Indonesia

^{*)}Corresponding Author: sitisaragih10@gmail.com

Article history: received 21 May 2025; revised 02 June 2025; accepted 15 June 2025

DOI: <https://doi.org/10.33751/jhss.v9i2.12101>

Abstract. This study aims to examine the application of Green Accounting in waste management by Pak Udin Fried Meatball Factory located in Jati Baru Village, Pagar Merbau District, Deli Serdang Regency, North Sumatra. The main focus of this research is to assess how the application of green accounting affects operational costs and its impact on business profitability. The method used is a qualitative descriptive approach with primary data sources obtained through field observations, interviews, documentation, and direct surveys at the factory site. The results showed that the application of Green Accounting at the factory was still not maximized. Solid waste management has been carried out by utilizing the remaining production pulp as animal feed and compost. However, liquid waste has not been handled optimally due to limited facilities, namely only two inadequate storage ponds, which have the potential to pollute the surrounding environment during heavy rains. In addition, there is no specific cost recording for the construction of waste treatment facilities, which makes it difficult to assess its effect on profitability. This study makes an important contribution in enriching the literature on Green Accounting, especially in the home industry sector, as well as offering practical insights for small businesses in implementing environment-based accounting.

Keywords: green accounting; operating profit; waste management

I. INTRODUCTION

Small and Medium Enterprises (smes) are defined as productive businesses owned and managed by individuals or business units operating in various fields, each with its own characteristics (Hafsah, 2020). The lack of awareness of smes towards the application of Green Accounting has the potential to harm the smes themselves. Environmental impacts arising from human activities to meet daily needs are a significant problem. It is common knowledge that human actions have a major impact on the environment. Unwise management of natural resources can result in serious environmental problems. The sector cannot separate its development from the environmental challenges it poses (Setiawan, Nasution, & Syafina, 2023).

In an effort to increase productivity and efficiency, some waste treatment plants often ignore the fact that these actions can negatively impact environmental quality, such as reducing water quality, causing air pollution, and causing soil degradation. (Nuravida & Icha, 2023) says that one of the causes of declining water quality and soil function is production waste, and to prevent environmental pollution by waste, safety factors must be considered before reaching the disposal stage. The reality of environmental pollution problems and the

demands of society require companies to be able to manage their business processes in order to determine the right policies to ensure business sustainability, because over time, consumers are becoming increasingly critical of company products that are not environmentally friendly. Therefore, demand for environmentally friendly products should be a priority for sustainable sector development. This sector applies various strategies to maintain its business ventures (Dewi et al., 2020).

In facing various problems, especially environmental problems, management activities cannot be separated from waste problems, especially factory production waste. People often throw waste directly into the river, causing environmental pollution and emitting unpleasant odors. Waste contains a high load and pollutant content. Suspended solids and dissolved substances in untreated waste undergo physical, chemical, and biological changes, resulting in toxins or environmental pollutants. This is due to the lack of application of green accounting in this sector (Hindriani, Siregar, Idayu, & Husni, 2024).

Among the many sectors that move and produce waste, one of them is the fried meatball factory sector. One of the smallscale fried meatball industries is the Pak Udin Fried Meatball Factory located in Jati Baru Village, Pagar Merbau District, Deli Serdang Regency, North Sumatra. The

establishment of an industry, especially the fried meatball processing industry, in the middle of a community environment requires attention to waste production. Waste is the remaining raw materials used in production, which if not managed properly can have a negative impact on the environment (Annisa et. al., 2023). Waste from the production of fried meatballs is in the form of leftover fish meat, flour, unused seasonings, used dough water, used cooking oil that cannot be used anymore, and others. The application of Green Accounting has a long-term positive impact that can increase company revenue and eliminate liabilities (Aziz & Kholmi, 2024). Liquid waste produced by Pak Udin's Fried Meatball Factory, located in Jati Baru Village, Pagar Merbau District, Deli Serdang Regency, North Sumatra, is in the form of water used for meatball dough that does not clot and the remaining fried meatball dough that is damaged or fails production, causing an unpleasant odor in the community. Most fried meatball factories discharge their waste into water bodies so that the pollution caused can be in the form of organic (odor) and inorganic (odor and color) pollution.

Currently, small and medium-sized enterprises (SMEs) still focus on the company's profit margins, less aware of the environmental impacts that affect business sustainability. The lack of knowledge regarding environmental costs is because SMEs have not been able to identify these costs or apply Green Accounting concepts in their operations (Puspita & Surendra, 2020). SMEs also have an environmental impact through the production of waste, which can sometimes pollute and damage the environment. Businesses require significant focus to manage the waste they generate. Waste management entails operational and internal costs. This management requires a separate cost known as environmental cost or Green Cost, which is the economic and noneconomic impact resulting from business activities related to the environment. Because they are often hidden within cost centers and lack clear recognition or reporting, internal environmental costs are among the challenging manufacturing costs to identify directly (Imanina Burhany & Suwondo, 2020).

The purpose of implementing green accounting is to encourage environmental activities from a cost and benefit or impact perspective. It is undeniable that the production process of a company produces a fairly large amount of waste. If the factory does not dispose of the waste properly, it will eventually cause environmental pollution. In addition to introducing green accounting, it is also important to introduce environmental performance in companies. The performance of a company, specifically its financial performance and the operating profit it generates, determines its valuation. The reason for using profit as a parameter to measure financial performance is that profit is important and essential for business sustainability. To maximize profits, some companies ignore the impact of their operations, including their impact on the environment and surrounding communities (Safitri Sembiring, Laila, & Wahyuni Lubis, 2023).

Consumers, employees, and the surrounding community question the disclosure of environmental costs in the financial statements, which then forms positive and negative opinions.

Based on reports from the owner of the fried meatball factory, the absence of financial reporting in the application of green accounting raises concerns, because factory management does not realize the impact on business profits caused by the cost of expenses due to waste management at the Fried Meatball Factory. Therefore, the main focus of this research is to describe the process of applying Green Accounting in handling the waste management of Pak Udin's Fried Meatball Factory in Jati Baru Village, both solid waste and liquid waste. This research reveals that the Green Accounting applied is still partial, which only handles solid waste in the form of leftover fish meat, flour and unused dough by selling it as poultry feed and compost. However, the fried meatball factory has not fully handled the liquid waste it produces. This liquid waste has an unpleasant odor and if not treated can cause diseases such as diarrhea if consumed using well water polluted by the waste stream. Furthermore, it is necessary to know the impact of expenses incurred by Green Accounting in the management of fried meatball factory waste on the business profits of Pak Udin's Fried Meatball Factory in Jati Baru Village generated. Finally, it is necessary to emphasize the importance of financial reporting to determine whether the application of Green Accounting in the management of Fried Meatball Factory waste in Jati Baru Village has provided benefits or not.

According to the United States Environmental Protection Agency (US EPA), green accounting is an important feature that describes environmental costs from the perspective perceived by a country's stakeholders. It can encourage the identification of ways to reduce or avoid costs in an effort to improve environmental quality. Decades after its inception, green accounting is increasingly associated with increasing economic value and environmental protection. Various business, government, and social organizations use the data and information presented in green accounting as a basis for decision-making (Annisa, 2024).

Green Accounting is accounting that seeks to incorporate environmental benefits and costs into economic decision making. In defining Green Accounting, several aspects have been considered, such as insurance, taxation, regulation, and external financial information (Hamidi, 2020). Green Accounting is interconnected with the basic functions of management accounting, namely planning and data collection, reporting. In planning, Green Accounting utilizes forecasting analysis to measure future impacts on the environment, such as in the life cycle (Fannya et al., 2024).

The green accounting calculation formula uses the calculation of environmental costs, among others:

$$\text{Total Environmental Cost} = \text{Prevention Cost} + \text{Detection Cost} + \text{Internal Cost of Failure} + \text{External Cost of Failure}.$$

The application of green accounting plays an important role in business and organizational life. Its importance lies in its function and role in green accounting. Green accounting serves as an information system in the operational system, which allows companies to manage and analyze costs associated with environmental protection (Handoko & Santoso, 2023). In addition, the benefits derived from this system serve as a driving force for environmental protection measures and

contribute to effective decision-making. Control authorities or corporate units should utilize green accounting as a management tool. In contrast, the external function includes activities such as disclosure, where the company shares accounting data derived from its environmental protection measures. This ensures transparency and accountability regarding the company's environmental initiatives.

According to Professional Accountants (PA), Green Accounting is defined as the process of identifying, ranking, measuring, qualifying and incorporating environmental costs into business decisions. Decisions are supported by environmental cost and performance data provided by green accounting. To support corporate decisionmaking, Green Accounting records production costs, inventory, and activity costs (Sodik, Wahju Wulandari, 2020).

Green accounting collects costs, production, inventory, waste, and performance data for planning, evaluation, and control purposes. Therefore, green accounting is a multifaceted strategy that can transfer data from cost accounting to improve material efficiency, minimize environmental risks and impacts, and reduce environmental protection costs (Febriyana, Tri Anika, Armadhani, & Yovita R.Pandin, 2023). Of course, the application of green accounting greatly affects the profitability of the company. KBBI online dictionary defines profit as the excess arising from the difference between the higher selling price and the purchase price or production cost.

According to (Priatna, 2020), a company makes a profit from the difference between the production cost or purchase price and the selling price to consumers. Operational profitability that matches the business activity is very important. For example, in the food sector, the main profit comes from product sales, not other sources of income. Operational profitability is an important measure to assess a company's efficiency in generating profits. If companies do not reach their profit targets or experience a decline, they can thoroughly evaluate their performance and the causes.

The application of Green Accounting to fried meatball factory waste is the main focus of the discussion. Waste is a by-product of an activity that contains hazardous or toxic materials that can damage the environment, human health, and other living things. Waste usually contains degradable organic compounds, volatile compounds, toxic heavy metals, solid particles, nutrients, and harmful microorganisms. Liquid waste is a mixture of water with dissolved or suspended pollutants from domestic activities (homes, offices, shops) and is often mixed with groundwater.

Liquid waste contains suspended and dissolved solids that undergo physical, chemical, and biological changes, leading to the production of toxic substances or the growth of bacteria. In this case, these bacteria can become pathogenic and endanger human health. In addition, the wastewater of the fried meatball industry emits unpleasant odors and pollutes water sources, causing serious environmental pollution problems. Discharging this wastewater into the river without treatment will cause unpleasant odors and river pollution. Leftover fried meatball batter, frying residue, and unused pieces of meat spoil quickly

and emit an unpleasant odor. If not disposed of immediately, the odor will start 12 hours after processing.

II. METHODS

The type of research used was descriptive qualitative research with a case study approach. This approach was chosen because it allows researchers to explore in depth the application of Green Accounting in the fried meatball industry. The selection of the fried meatball factory as the research location because it is the only fried meatball factory in Jati Baru Village, Pagar Merbau District, Deli Serdang Regency, North Sumatra. The selection of the factory location also considers the availability of data and accessibility for researchers. In addition, the relevance of this factory lies in its significant contribution to the regional economy, which is able to utilize around 50 kg to 120 kg of fish meat per day for the production of fried meatballs.

The informant in this study is the owner of the fried meatball factory who has in-depth knowledge of the factory's operations and policies implemented, including those related to waste management. In addition, involving two factory workers will provide diverse perspectives on the production process and waste management at the fried meatball factory. Two residents who live around the bakso goreng factory were also included, as they have educational backgrounds or experience in the environmental field.

The data collection technique used in this research is observation, which is the collection of data for writing research results by making direct observations at the research site. Interviews were conducted by compiling questions to be asked directly to relevant resource persons, using voice recordings as guidelines and examining and studying the necessary information through published scientific articles and relevant literature to support data analysis and interpretation. Documentation studies involved collecting data obtained from documents, including written documents and images.

III. RESULTS AND DISCUSSION

In an interview conducted on December 13, 2024 with the owner of the fried meatball factory who has extensive knowledge of the factory's operations and waste management policies, he stated, "We have implemented a number of measures to manage solid waste, such as selling the dregs from processing fried meatballs for poultry feed and for feed for privately owned catfish farms. In addition, we also use the dregs from making fried meatballs as organic compost. Sometimes, if the quality of the pulp is still suitable for use, this pulp will be processed again into flour to make new meatballs. However, we realize the need to improve the handling of liquid waste, as it is still untreated due to limited resources."

The owner also added, "The liquid waste from the management of these fried meatballs flows into two ponds at the back of the factory, in which there are catfish that function as recycling. However, when it rains heavily, the ponds overflow and the excessive effluent flows directly into the local farmland."

One factory worker shared his views, "I think there should be better training and resource allocation for waste management. We often struggle with overflowing wastewater ponds during heavy rains, which poses an environmental risk."

Another worker said that involving the community in waste management is very important. According to him, "Local residents need to be invited to find solutions because they feel the environmental impact directly and can provide useful ideas."

From the interviews conducted, it appears that the bakso goreng factory already has measures in place to manage solid waste, such as selling the dregs from the processing of fried meatballs to feed poultry, or to feed privately owned catfish farms where the catfish will later be sold, and using it as organic fertilizer. However, there is a need to improve the handling of liquid waste due to limited resources. Factory workers emphasized the need for better training and resource allocation for waste management, particularly in addressing issues such as overflowing wastewater ponds during heavy rains, which pose environmental risks.

A response from an environmentallysavvy resident stated, "The impact is huge and alarming. Not only does it cause unpleasant odors that affect the quality of life of nearby residents, but it also contaminates water sources, causing serious health problems. In addition, agricultural land is polluted, which harms farmers and threatens food availability."

The following is the production and sales record and Profit and Loss Statement for December 2024:

Average use of fish meat is 85 kg/day, production for 25 working days/month.

Meat to wrap ratio: 1 kg of meat → 20 packs of meatballs
→ 85 kg × 20 = 1,700 packs/day

Total production/month: 1,700 × 25 = 42,500 packs

Selling price per pack: IDR 4,000

→ Revenue per month = 42,500 × 4,000 = IDR 170,000,000

Table 1. Income Statement as of December 2024

Description
SALES
Sales of Fried Meatballs (42,500 packs)
PRODUCTION COST
Fish Meat (85 kg x 25 days x Rp 25,000)
Flour, seasoning, oil, gas
Employee Salary (6 people)
Packaging and Labels
Electricity and water costs
Total Production Cost
GROSS PROFIT
OPERATIONAL COST
Transportation & Distribution
Administration & Other Expenses
Description
Production Equipment Depreciation
Total Operating Costs
Net Profit

This study found that there is no financial recording related to Green Accounting in waste management. This cost is mainly related to the purchase of materials to build a liquid waste shelter at Pak Udin's Fried Meatball Factory in Jati Baru Village, Pagar Merbau District, Deli Serdang Regency, North Sumatra. So another interview was conducted with the factory owner on December 19, 2024. The factory owner said, "At first, I felt that I didn't need to record special expenses because we were only a small business, and I thought that waste would not be a big problem. But over time, I realized that the cost of managing wastewater effluent is quite large and affects the profitability of the business, although the impact is not felt in the long run."

The factory owner mentioned that building a reservoir would incur costs such as the purchase of materials or even land acquisition for the pond construction site if the factory land is not sufficient. The reason for not recording expenses due to the application of Green.

Accounting was because the factory owners initially considered their business as a small industry, so they would not suffer significant losses due to waste problems. They also mentioned other reasons for not recording finances, namely that the fried meatball factory relied on other people's capital for its operations and the calculation method stated that debt arose due to dwindling raw materials. However, over time, the factory owners realized that the costs incurred in dealing with wastewater were considerable, so they felt at a disadvantage when constructing the wastewater reservoir. Although these expenses have a negative impact on the profitability of the Fried Meatball Factory in Jati Baru Village, Pagar Merbau Subdistrict, Deli Serdang Regency, North Sumatra, they do not have a long-term impact.

The impact on business profitability refers to the effect that various factors, such as expenditure on environmental management or the application of green accounting, have on a company's ability to generate profits. If environmental costs or other related expenses increase, this may reduce the company's profits in the short term. However, in the long term, the implementation of environmentally friendly practices and green accounting can improve the efficiency and image of the company, which in turn has the potential to increase profitability.

Therefore, the application of Green Accounting at Pak Udin's Fried Meatball Factory in Jati Baru Village, Pagar Merbau District, Deli Serdang Regency, North Sumatra is considered not optimal or inadequate. The implementation of Green Accounting in this fried meatball factory is considered inadequate because the management of liquid waste is not complete, causing environmental impacts on the surrounding community. These impacts include the unpleasant odor that is felt daily by residents around the fried meatball factory and the flow of waste from the production of fried meatballs to residents' rice fields when the pond overflows during the rainy season, causing significant inconvenience.

In addition, the application of Green Accounting is also considered inadequate in terms of business profits due to the lack of recording expenses caused by Green Accounting. As a result, the real impact or loss experienced by the Fried Meatball

Factory in Jati Baru Village, Pagar Merbau District, Deli Serdang Regency, North Sumatra is not visible. While the factory owner only feels the loss during the construction of the reservoir, the long-term negative impact is not visible. However, on the other hand, the application of Green Accounting to the solid waste of the fried meatball factory has a positive impact or can be said to be profitable because the factory gets additional profits or income from selling the remaining dregs of fried meatball processing as poultry feed and compost fertilizer.

The concept of Green Accounting in companies depends on the company's understanding of environmental issues. This understanding becomes a guide to formulate policies that protect the environment. Although there is no specific regulation for SMEs in Indonesia, the application of Green Accounting in private companies is regulated in Government Regulation No. 47 of 2012, which is a follow-up to the Limited Liability Company Law No. 40 of 2007. The law requires every company to be socially and environmentally responsible, especially if its activities involve natural resources.

Generally, SME entrepreneurs prioritize profits and ignore the environment. Therefore, it is important for SME entrepreneurs to understand green accounting, as this enables them to safeguard their operational environment and reduce the environmental problems they currently face. Some considerations for companies to implement green accounting as part of the company's accounting system include: (1) Reduce or eliminate costs related to environmental impacts. (2) Improving a company's environmental performance, which can affect human health and business success. (3) Help calculate product costs or prices more accurately, as well as meet customer demand for environmentally friendly products or services (Bagas, Riani, & Ekawati, 2023).

The implementation of environmentally friendly accounting does incur operational costs. When calculating business operating costs, SME economic actors separate business costs from personal expenses. It is important for entrepreneurs to understand how to distinguish personal funds from business funds. This is necessary to better understand the overall business costs and business profits earned. SME stakeholders do not consider environmental costs as part of business costs because they do not understand how to address them. This may be due to a lack of experience in managing environmental costs (Puspitasari & Rokhimah, 2020).

The goal of every company is to increase its business profits. However, nowadays, companies are not only required to maximize profits but also to be responsible for the environmental impacts arising from their operational activities. The best company is a company that achieves high operating profit balanced with environmental responsibility. While companies aim to maximize profits from an economic perspective, they also have a social responsibility to improve the quality of life and the environment.

Environmental costs can affect business profits because the benefits of these expenditures may only be felt in later years. The greater the environmental costs incurred by the company due to the implementation of Green Accounting, the greater the impact on the company. Environmental costs are expenses that

companies use to fulfill social and environmental responsibilities, as well as to prevent or repair environmental damage due to their operational activities.

In a company must also have financial statements that describe the company's income and expenses. Without these financial statements, the company does not know its profit and loss. For example, the Meatball Factory in Jati Baru Village has not made financial records of the revenue or business profits it earns, and expenses due to Green Accounting used for handling factory liquid waste, as well as business profits from the application of Green Accounting by reselling solid waste in the form of pulp from the production of fried meatballs for animal feed and compost.

Green Accounting can have a longterm positive impact or can be considered beneficial if the financial statements are managed properly. In addition to minimizing environmental problems caused by production waste, the application of Green Accounting can also make environmental management more cost-effective. The application of green accounting also aims to reduce environmental impact. Businesses are responsible for the pollution caused by their production processes in the past, present and future.

Successful implementation of green accounting not only requires accurately classifying all costs incurred by the company, but also the company's accounting data must be capable and accurate in minimizing the environmental impact caused by its activities. Seeing this phenomenon, it is our shared responsibility to contribute to the development of solutions for Small and Medium Enterprises (SMEs) in industrial areas that realize the importance of this issue. Consideration of sustainability in waste management is not only the responsibility of the government and all citizens, but it is also our responsibility to solve all the problems faced by the surrounding community, as well as academics and environmental practitioners to overcome this problem (Yulianti, Lasminingrat, & Setiadi, 2023)

Environmental costs are costs arising from human activities that affect the environment (Ningsih, Nurlaili, & Zuliansyah, 2022). These costs are divided into two types: (1) economic costs, which are costs measured in monetary units, such as medical costs and environmental maintenance costs. (2) noneconomic costs are costs that cannot be measured in money, such as loss of biodiversity or irreparable environmental damage. Environmental costs arise from various human activities, such as energy production, industry, agriculture, transportation, construction, and community activities. The impacts of environmental costs can damage the environment and human health, including air, water, and soil pollution, climate change, habitat destruction, and biodiversity loss.

Understanding a company's financial performance is essential to measure how effectively financial resources are being used to achieve business objectives. Financial performance can be evaluated with indicators such as profitability, liquidity, solvency, and efficiency. (Chairunnisa, Wahyuni Lubis, Akuntansi Syariah, & Ekonomi dan Bisnis Islam, 2023) emphasizes the importance of effective cash management, risk management, receivables, and optimal

working capital to improve the company's financial performance. All these aspects should be part of a good financial strategy in order for the company to achieve its business goals. In business, financial performance measures a company's ability to manage its financial resources and generate profits from business activities (Chakra & Arsyana, 2023).

Environmental costs are undoubtedly a factor in the implementation of environmental management to address environmental burdens. Unfortunately, companies often view these environmental costs as a mere financial burden. On the other hand, companies believe that environmental costs will only reduce company profits. However, the allocation of environmental management costs demonstrates a company's consistent environmental commitment and builds trust in corporate social responsibility within society. These environmental costs can be considered as a long-term investment for the company. The funds allocated at this time can improve the company's reputation and strengthen stakeholders' trust in the company (Handoyo, Akram, & Nurabiah, 2022).

The purpose of Green Accounting is to reduce the cost of environmental and social impacts, thereby relieving the company of the burden of cost estimation at the beginning of production. Based on this information, environmental costs serve as an indicator of green accounting implementation. Environmental costs are costs incurred by companies due to their activities that cause environmental problems and affect environmental quality. Environmental costs are classified into four categories: environmental prevention costs, environmental detection costs, internal environmental failure costs, and external environmental failure costs. Therefore, the allocation of environmental costs is expected to provide benefits that motivate managers and subordinates to reduce pollution resulting from the production process (Muniroh, Nursasi, & Triani, 2023). Although allocating environmental costs increases company expenses in the short term, it can create a positive image and improve financial performance in the long term (Siregar, Rasyad, & Onasis, 2022).

There is a relationship between green accounting and financial performance. Several empirical studies show that the use of green accounting by companies has a positive impact on their financial performance. If a company utilizes green accounting and can demonstrate a good level of environmental protection, it will have a positive impact on the company's financial performance. Research has scientifically and empirically proven that environmental performance, and its positive impact, greatly affects a company's financial performance and market value. We can conclude that the implementation of environmental performance has a positive impact on the financial results of the company by improving its environmental performance.

(Hayaah, 2023) says that, green accounting not only affects financial performance but also contributes to the improvement of environmental protection and environmental health. Improved financial results occur because companies proactively comply with government policies and regulations,

as well as due to consumer demand for environmentally friendly products. Investors see not only the company's profits, but also how much the company cares about the environment. This positive image attracts investors' attention. If the company gets a good rating, investors will be more interested in investing, which in turn can increase company profits (Dianty & Nurrahim, 2020).

Reducing environmental costs can be done through pollution prevention and control, increasing the efficiency of resource use, and using environmentally friendly technology. Companies also need to consider environmental costs in business decisions by calculating environmental internalization costs, which include economic and noneconomic costs (Apriani, Nurwani, & Juliati, 2023). There are several reasons to strengthen the application of green accounting. Green accounting can significantly reduce environmental costs, although the costs associated with its implementation need to be considered. The sale of production waste can provide great benefits through proper environmental cost management and an in-depth understanding of environmental costs and performance in the product manufacturing process.

IV. CONCLUSION

Based on the research, the implementation of Green Accounting at the Fried Meatball Factory in Jati Baru Village, Pagar Merbau District, Deli Serdang Regency, North Sumatra, is still inadequate. Although there are efforts to manage solid waste, such as selling the pulp from the production of fried meatballs as poultry feed to compost, liquid waste management is still a big problem. The factory's reliance on only two wastewater storage ponds is insufficient to handle the daily volume of effluent, which causes overflows during rainfall and eventually discharges into water sources as well as surrounding farmlands. In addition, the lack of financial records related to Green Accounting expenditures still posed a challenge in assessing its impact on business profits. Factory owners initially underestimated the potential financial impact of waste management, considering their business small and not foreseeing significant losses. However, as the cost of effluent management increased, owners began to realize the financial burden it caused. Limitations of this study include the small sample size and focus on only one factory, which may limit the general applicability of the findings. Future research needs to address these limitations by looking for solutions to improve effluent management practices, such as through technological or policy advancements. In addition, involving a larger sample of fried meatball factories across multiple locations would provide a more complete understanding of the impact of Green Accounting on profitability across the sector.

REFERENCES

- [1] Annisa, N. (2024). The Role Of Green Accounting In Realizing Sustainable Development Principles Introduction. 7(2), 189-198. <https://doi.org/10.32662/Gaj.V7i2.3449>

- [2] Annisa Rizka Amanda, Hendra Harmain, W. S. (2023). The Effect Of Environmental Performance, Company Size And Islamic Governance Score On Islamic Social Reporting (Isr) Disclosure In Companies Listed On The Indonesian Sharia Stock Index. *Journal Of Accounting Management (Jumsi)*, Viii(I), 1-19.
- [3] Apriani, A., Nurwani, N., & Juliati, Y. S. (2023). Analysis Of The Application Of Environmental Management Accounting In Environmental Cost Disclosure Based On Islamic Perspective. *Scientific Journal Of Islamic Economics*, 9 (2), 2374. <https://doi.org/10.29040/Jiei.V9i2.9510>
- [4] Aziz, Z. R., & Kholmi, M. (2024). The Effect Of Green Accounting And Corporate Social Responsibility On Profitability. *Journal Of Accounting Economics And Management*, 23 (1), 54. <https://doi.org/10.19184/Jeam.V23i1.43456>
- [5] Bagas, M. A., Riani, N., & Ekawati, F. (2023). Green Accounting Management In Environmental Cost Efficiency Study At Pt. Coca Cola Bottling Indonesia Tanjung Bintang. *Journal Of Interdisciplinary Science And Education*, 3(1), 55–68.
- [6] Chairunnisa, L., Wahyuni Lubis, A., Sharia Accounting, P., & Islamic Economics And Business, F. (2023). Analysis Of The Readiness Of Small And Medium Enterprises In Preparing Financial Statements In Accordance With Sak Emkm On The Financial Statements Of Umkm Rose Laundry. *Journal Of Applied Management And Finance (Mankeu)*, 12(04), 1235–1245.
- [7] Chakra, A., & Arsyana, W. (2023). Analysis Of The Application Of Green Accounting To Profitability At Pr. Charoen Pokphand Indonesia. *Jl. Semolowaru No*, 2(3), 87–99.
- [8] Dewi, R. A., Lestari, R., & Rosdiana, Y. (2019). Analysis Of Implementation Of Environmental Management Accounting In Improving Product Innovation (Case Study At Pt X). *Accounting Proceedings*, 5(2), 197–205.
- [9] Dianty, A., & Nurrahim, G. (2020). The Effect Of Implementing Green Accounting And Environmental Performance On Financial Performance. *E-Profit*, 2(02), 1–11.
- [10] Fannya Mutiara Sari, Annisa Ari Suci, Mufita Dea Ananta, & Maria Yovita R. Pandin. (2024). The Effect Of Green Accounting And Environmental Performance On Financial Performance In Chemical Sector Companies Listed On The Indonesia Stock Exchange For The 2021-2023 Period. *Profit: Journal Of Management, Business And Accounting*, 3 (3), 159-170. <https://doi.org/10.58192/Profit.V3i3.2308>
- [11] Febriyana, N., Tri Anika, R., Armadhani, V., & Yovita R. Pandin, M. (2023). The Application Of Green Accounting To The Profitability Of Tofu Msmes In Surabaya. *Profit: Journal Of Management, Business And Accounting*, 2(3).
- [12] Hafisah, M.. J. (2004). Efforts To Develop Businesses, Micro, Small, And Medium Msmes. *Infoskop Journal*, 1 (Efforts Umkm Development), 1.
- [13] Hamidi. (2019). Analysis Of The Application Of Green Accounting To The Company's Financial Performance. *International Encyclopedia Of Environmental Politics*, 6 (2), 238-239. <https://doi.org/10.4324/9781315561103-15>
- [14] Handoko, J., & Santoso, V. (2023). The Effect Of Green Accounting And Environmental Performance On Financial Performance With Social Responsibility As Mediation. *Nominal Barometer Of Accounting And Management Research*, 12 (1), 84-101. <https://doi.org/10.21831/Nominal.V12I1.56571>
- [15] Handoyo, F., Akram, A., & Nurabiah, N. (2022). The Effect Of Environmental Performance And Environmental Disclosure On Company Profitability (Study Of Mining Companies Listed On The Idx In 2017-2021). *Axiom Accounting Research Journal*, 21 (2), 107- 117. <https://doi.org/10.29303/Aksioma.V21I2.169>
- [16] Hayaah, A. N. (2023). The Effect Of Green Accounting Implementation, And Environmental Performance On Financial Performance In Manufacturing Companies On The Indonesia Stock Exchange. *Journal Of Scientific Accounting Studies, Faculty Of Economics Untan (Kiafe)*, 1(2), 121– 140.
- [17] Hindriani, R., Siregar, D. K., Idayu, R., & Husni, M. (2024). Application Of Green Accounting And Material Flow Cost Accounting To Sustainable Development. 4, 845–854.
- [18] Imanina Burhany, D., & Suwondo, S. (2020). Environmental Cost Analysis To Determine The Effectiveness And Efficiency Of Environmental Activity Control. *Journal Of Accounting*, 317–322.
- [19] Muniroh, M., Nursasi, E., & Triani, T. (2023). The Effect Of Green Accounting Implementation And Environmental Performance On Sustainable Development With Profitability As A Moderating Variabe. Access: *Journal Of Public & Business Administration Science*, 5 (2), 28-39. <https://doi.org/10.58535/Jasm.V5i2.42>
- [20] Ningsih, N. W., Nurlaili, N., & Zuliansyah, A. (2022). Environmental Accounting And Corporate Financial Performance In Sharia Economics. *Scientific Journal Of Islamic Economics*, 8 (3), 3349. <https://doi.org/10.29040/Jiei.V8i3.5466>
- [21] Nuravida, F. R., & Icha, M. (2023). Occupational Safety And Health (K3) Risk Management In Inorganic Waste Processing. *Journal Of Lentera Public Health*, 2(2), 88–89.
- [22] Priatna, H. (2016). Measurement Of Company Performance With Profitability Ratios. *Scientific Journal Of Accounting (Accurate)*, 7(2), 44–53.
- [23] Puspita, D. A., & Surendra, A. (2019). Analysis Of Green Accounting Application (Empirical Study On Sme Sawmill U.D Mega Cipta In Pilangsari Village,

- Banaran, Kalijambe, Sragen Regency). *Journal Of Research And Scientific Studies*, 17(2), 2085–2215
- [24] Puspitasari, D., & Rokhimah, Z. P. (2018). Understanding And Concern In Implementing Green Accounting In Tempe Smes In Krobokan Village, West Semarang District. *Accurate Journal Of Scientific Accounting*, 9(3), 116–131.
- [25] Safitri Sembiring, A., Laila, N., & Wahyuni Lubis, A. (2023). Analysis Of Cost Of Goods Sold And Profit Contribution To Sales Volume At Perum Bulog Divre North Sumatra. *Iltizam Journal Of Shariah Economics Research*, 7 (1), 109-123. <https://doi.org/10.30631/iltizam.V7i1.1841>
- [26] Setiawan, H., Nasution, Y. S. J., & Syafina, L. (2023). The Effect Of Accounting Knowledge, Business Experience, Work Motivation, And Business Scale On Perceptions Of The Use Of Accounting Information In Msme Actors (Case Study Of Msmes In Ujung Padang District, Simalungun Regency). *Ekombis Review: Scientific Journal Of Economics And Business*, 11 (2), 2007-2022. <https://doi.org/10.37676/ekombis.V11i2.6820>
- [27] Siregar, I. F., Rasyad, R., & Onasis, D. (2022). The Role Of The Analysis Enviromental Accounting Oil Campany In Indonesia Stock Exchange Alignment Based On Global Reporting Initiative Standard (Gri) Analysis Of The Role Of Environmental Accounting In Oil And Gas Companies In Indonesia Stock Exchange (Idx) And Its Alignment With Global Reporting Initiative Standard (Gri). *Management Studies And Entrepreneurship Journal*, 3(1), 1–12.
- [28] Sodik, Wahju Wulandari, M. I. N. S. (2019). Green Accounting In Realizing Green Technology. *Sustainability (Switzerland)*, 11(1), 1–14.
- [29] Yulianti, M., Lasminingrat, A., & Setiadi, H. (2023). Green Accounting On Environmental Sustainability Through Waste Management In Msmes Industry Centre Tahu Cibuntu. *Journal Of Business And Management Research*, 16 (1), 1-6.