



Green accounting in maintaining the economic stability of MSMEs amid the impact of the MBG program towards a golden Indonesia

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ABSTRACT

Background: Transformation towards a green economy is one of the main directions of national development in realizing the vision of Golden Indonesia 2045, with micro, small, and medium enterprises (MSMEs) as key actors in the economy. On the other hand, the implementation of the Free Nutritious Meal Program (MBG) has economic implications for MSMEs, especially changes in demand patterns and local business dynamics. This research aims to analyze the role of green accounting as a strategic instrument in maintaining the stability and sustainability of MSMEs in the midst of the impact of MBG policies. **Methods:** This study employs a literature review method using structured thematic analysis of secondary sources from academic databases and official publications, systematically categorizing and synthesizing studies on green accounting, MSME sustainability, and related policies to identify patterns, theoretical linkages, and research gaps, thereby constructing a conceptual framework connecting environmental accounting practices with economic resilience within Indonesia's policy context. **Findings:** The findings indicate that green accounting strengthens MSMEs' environmental responsibility, operational efficiency, and economic resilience amid the implementation of the Free Nutritious Meal (MBG) program, enabling better cost management, sustainability reporting, and competitiveness; however, its adoption remains constrained by limited financial and human resources, highlighting the need for institutional support, digital tools, and policy incentives to optimize its contribution to sustainable national development and the SDGs toward Indonesia Emas 2045. **Conclusion:** These findings confirm that green accounting not only functions as a recording tool for environmental accounting, but also as an adaptive mechanism that bridges the government's social policies with the economic resilience of MSMEs. **Novelty/Originality of this article:** This research contributes to the development of sustainable accounting studies by placing green accounting as a strategic foundation for strengthening MSMEs that are inclusive and in line with the sustainable development agenda towards a Golden Indonesia 2045.

KEYWORDS : economic stability; green accounting; Indonesia emas; MBG program; MSMEs.

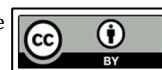
1. Introduction

Indonesia looks to 2045 through the Golden Indonesia vision, which is a long-term development agenda that emphasizes inclusive growth, green economic transformation, and resource resilience as the basis for achieving sustainable prosperity for future generations. In the RPJPN (National Long-Term Development Plan), RPJMN (National Medium-Term Development Plan), and other national planning documents, one of the 17

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directions of development is the application of the green economy to economic transformation. This transformation not only requires adjusting the industrial structure, but also improving the quality of human resources and strengthening the competitiveness of MSMEs as the dominant economic actor in Indonesia.

To achieve this vision, the role of micro, small, and medium enterprises (MSMEs) is very strategic. MSMEs play a crucial role in the national and social economic structure (D'Amico et al., 2016). MSMEs are recognized as one of the main pillars of the Indonesian economy (Maulita & Adham, 2020). MSMEs are not only a support for domestic economic resilience, but also the largest provider of jobs and a catalyst for community empowerment (OJK, 2025). According to the Ministry of Cooperatives and SMEs of the Republic of Indonesia (2025), the number of MSMEs will reach around 65.5 million units. MSMEs contribute 61.9% to the Gross Domestic Product (GDP) and absorb more than 119 million workers, or around 97% of the national workforce (OJK, 2025). The findings also show that MSMEs are the sector with the largest contribution to labor absorption in Indonesia. Although MSMEs have played a significant role in the economy, the transformation towards a green economy requires adjustments to business practices (Gadenne et al., 2009) especially in recording and reporting environmental costs. This adjustment is needed so that the growth of MSMEs remains sustainable without sacrificing environmental assets which are the main support for business sustainability (Hasibuan et al., 2024; Galib, 2024).

At the same time, national policies such as the Free Nutritious Meal Program (MBG) have a significant economic impact on local business actors (Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, 2025). In addition to providing health and education benefits, MBG opens up opportunities for MSMEs as food suppliers. However, this program also presents challenges in the form of changing demand patterns, dependence on large contracts, and potential disruptions if its implementation does not take into account the capacity of regional MSMEs. A number of studies on the effects of MBG multipliers show economic benefits, but also identify risks that need to be managed so that MSMEs maintain their economic position.

In this context, green accounting is an important instrument that can help MSMEs maintain the stability of their businesses in the midst of changes triggered by the MBG program. Green accounting provides a recording framework that allows MSMEs to measure, record, and report on the use of energy, water, raw materials, and various environmental costs systematically. With more transparent data, MSMEs can adjust production strategies, utilize green financing, and strengthen their position in the supply chain formed by programs such as MBG. Various studies show that the implementation of green accounting increases operational efficiency, regulatory compliance, and stakeholder trust. This approach does not require expensive technology, but rather improvements to the recording system and cost management. This makes green accounting have great potential to help MSMEs maintain stability, especially when facing changes in demand due to MBG (Krisna, 2024)

National planning currently emphasizes strengthening the economy, while the MBG program is beginning to show an influence on demand patterns at the local level. Therefore, the integration of national policies with the implementation of green accounting is a strategic step so that MSMEs remain stable and increase competitiveness towards a Golden Indonesia 2045. Green accounting plays a role in helping MSMEs adapt to changes in demand due to the MBG program while supporting the achievement of the Golden Indonesia 2045 vision through strengthening a sustainability-based economy.

In recent years, the concept of sustainability has become increasingly central to economic discourse, particularly in relation to development strategies in emerging economies. Sustainability-oriented development emphasizes the balance between economic growth, environmental preservation, and social well-being (Kusumawardhany, 2022). This approach is considered essential in addressing global challenges such as climate change, environmental degradation, and economic inequality. Consequently, countries are encouraged to redesign their economic systems in a way that promotes long-term resilience rather than short-term growth.

Indonesia, as a developing country with abundant natural resources and a large population, faces complex challenges in aligning economic development with environmental sustainability. Rapid industrialization and economic expansion have contributed significantly to national income and employment creation. However, these developments have also increased pressure on natural resources and the environment. Therefore, integrating sustainability principles into economic planning has become a strategic necessity rather than an optional policy choice. This integration is strongly reflected in Indonesia's long-term development agenda, particularly in the Golden Indonesia 2045 vision.

Micro, Small, and Medium Enterprises (MSMEs) play a critical role in achieving sustainable economic development due to their significant contribution to gross domestic product and employment absorption. MSMEs are deeply embedded within local communities and often rely directly on local resources for their operations (Herlindawati et al., 2022). Despite their strategic importance, many MSMEs still operate using conventional business models that focus primarily on financial performance without adequately considering environmental impacts. This condition exposes MSMEs to various risks, including rising operational costs, regulatory pressures, and declining competitiveness in increasingly sustainability-conscious markets.

One of the main obstacles faced by MSMEs in adopting sustainable business practices is the lack of appropriate managerial and accounting tools (Anh & Nhat, 2024). Environmental management is often perceived as an additional burden that increases costs without providing immediate financial benefits. As a result, environmental considerations are frequently excluded from financial decision-making processes. This separation between financial and environmental management limits the ability of MSMEs to achieve long-term economic stability. In this context, green accounting emerges as an important approach that bridges the gap between environmental responsibility and economic performance.

Green accounting provides a framework that allows businesses to identify, measure, and report environmental costs as part of their accounting systems (Prasetyo & Purwanti, 2021). By incorporating environmental aspects into financial records, MSMEs can gain a more comprehensive understanding of their cost structures and resource utilization. This information is crucial for improving efficiency, reducing waste, and minimizing unnecessary expenditures. Moreover, green accounting enables MSMEs to evaluate the economic consequences of environmental impacts, thereby supporting more informed and sustainable decision-making.

The relevance of green accounting is further amplified by the implementation of government programs such as the Free Nutritious Meal Program (MBG). This program not only aims to improve public nutrition and health outcomes but also influences economic activities at the local level, particularly among MSMEs involved in food production and distribution. Participation in such programs requires MSMEs to meet higher standards related to quality, hygiene, and sustainability (Food and Drug Supervisory Agency, 2023). Without proper accounting mechanisms, these requirements may impose financial pressures that threaten business continuity.

Therefore, understanding the role of green accounting in maintaining the economic stability of MSMEs amid the impact of the MBG program is highly relevant. The integration of green accounting practices can help MSMEs adapt to policy changes, manage operational risks, and enhance their competitiveness. Ultimately, this approach supports the broader objective of achieving sustainable and inclusive economic growth in line with the Golden Indonesia 2045 vision.

Beyond its macroeconomic aspirations, the vision of Golden Indonesia 2045 reflects a paradigm shift toward a development model that balances economic growth with environmental sustainability and social inclusion. This paradigm is increasingly relevant in the context of global economic uncertainty, climate change, and resource scarcity, which require countries to adopt adaptive and resilient economic systems. Indonesia, as one of the world's largest emerging economies, faces the challenge of ensuring that economic expansion does not come at the expense of environmental degradation. In this regard, the

green economy framework serves as a strategic response that integrates ecological considerations into economic planning and business operations.

MSMEs occupy a central position in this transformation due to their dominance in Indonesia's economic structure and their close interaction with local communities and natural resources. However, many MSMEs still operate with traditional business models that prioritize short-term profitability over long-term sustainability. Limited access to capital, technology, and knowledge often constrains their ability to adopt environmentally responsible practices. Consequently, the integration of sustainability principles into MSME operations must be supported by practical and accessible tools, one of which is green accounting. Green accounting offers a systematic approach that enables MSMEs to recognize, measure, and manage environmental costs alongside conventional financial costs, thereby improving decision-making quality.

In parallel, the implementation of the Free Nutritious Meal Program (MBG) introduces a new economic landscape for MSMEs, particularly those operating in the food and beverage sector. While the program creates opportunities through government procurement and supply chains, it also reshapes market demand and intensifies competition. MSMEs that fail to adapt to these changes risk experiencing declining revenues and operational instability. Therefore, the intersection between green accounting practices and public policy initiatives such as MBG becomes a critical area of analysis. Understanding how green accounting can function as an adaptive mechanism allows MSMEs to remain economically stable while contributing to broader national development goals in Golden Indonesia 2045 and in the future.

Besides the points we talked about earlier, including sustainability in small and medium businesses shows a bigger change happening around the world where companies are becoming more careful about protecting the environment. Many countries are now focusing more on being responsible with the environment as they plan their economies, especially because of climate change and the lack of natural resources. In this regard, MSMEs are expected to help the economy grow and also take part in efforts to protect the environment. This dual responsibility brings both opportunities and challenges, particularly for small and medium-sized businesses that have limited resources and capabilities (United Nations Development Programme Indonesia, 2023; Ministry of National Development Planning, 2024).

As more people become aware of environmental issues, their choices in the market have changed a lot. More and more people are starting to pick products that are good for the environment and made in a way that doesn't harm the planet. Because customers are changing how they buy things, small and medium businesses need to change how they make products and run their companies to stay ahead. Green accounting helps during this change by giving important information that makes sustainable choices easier and makes things more clear.

The part that government policies play in influencing how businesses operate is very important and shouldn't be ignored. Policies like the MBG program influence demand and also set new standards and expectations for MSMEs. These include rules about how good the product has to be, keeping it clean, and making sure it's good for the environment. Therefore, small and medium-sized enterprises need suitable tools and frameworks to deal with these changes effectively. Green accounting provides a practical method that allows small and medium-sized businesses to meet policy standards while keeping their operations efficient and profitable (Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, 2025; Galib et al., 2024).

Another key point is how more and more people are working together, like government groups, banks, and schools, to achieve common goals. Working together can help share knowledge and give support to small businesses in using green accounting methods. Without enough support, many small businesses might struggle to use new systems and technologies, which could make it harder for them to keep up with changes in the economy (Nguyen et al., 2023; Hasibuan et al., 2024).

2. Methods

2.1 Research design

This research uses a literature study approach, which involves a series of organized steps like reading, making notes, analyzing, and gathering information from different existing sources of literature. This method is based on four main qualities that set it apart from other types of research. In this kind of research, the person studying looks at already existing texts or numbers, and they don't need to know much about the subject they're studying. The information used in this study is already prepared for use because all the needed details are found in books and online resources, so there's no need to go out and collect data directly from the field. Moreover, the information used comes from other people's research or studies instead of being collected directly. The study can adapt easily since it isn't limited by time or place, which means it can look at data from different times and areas.

2.2 Data collection techniques

The data collection process involved looking through and checking a wide range of journals, books, and documents, both in printed form and online, that were related to the research topic. Information was gathered from various academic databases and official sources, such as Google Scholar and official documents published by international organizations and government agencies. To make sure the gathered information is relevant and covers all important points, certain keywords were used, like green accounting, sustainability for small businesses, economic stability, managing environmental costs, and public policies based on nutrition.

2.3 Data analysis approach

To ensure analytical rigor and improve the quality of the findings, the study used a structured thematic analysis approach. The chosen books were grouped into different main topics. These topics covered the basic ideas behind green accounting, real examples of how it's used in small businesses, and research on how government programs affect the economy. This organized way of grouping things helps us understand better how environmental accounting connects with bigger economic and social factors.

2.4 Data synthesis

The process of putting things together involved looking at the results from different studies to find common themes, matching ideas from theories, and noting where more research is needed. This method helps in understanding green accounting as both an innovative accounting practice and a strategic management tool that can help build the economic resilience of small and medium-sized enterprises by linking environmental accounting practices with their economic resilience. By combining these various perspectives, the study makes sure that its findings are based on existing research while still being very relevant to today's socio-economic situation in Indonesia, especially within the context of the Free Nutritious Meal (MBG) program.

3. Results and Discussion

3.1 Green accounting concept

Using green accounting changes how businesses see and deal with environmental issues. Having a deep knowledge of ecological issues is not just a routine task anymore; it has become a key guide in making important decisions about policies, especially those that

affect the environment for years to come. Ginsberg & Bloom (2004) suggest that how a company positions itself when adopting these practices can be looked at using a matrix. This matrix connects how serious the environmental issues are with the choices a company makes in its strategy. This matrix shows that using green accounting depends a lot on how motivated a company is to compete and how committed the management is. These ideas are grouped into four different approaches: Lean Green, Defensive Green, Shaded Green, and Extreme Green.

In the Lean Green strategy, companies try to be good members of society but often don't share a lot about their eco-friendly actions on a big scale. The main reason for this is to improve efficiency within the company. As Hansen & Mowen (2007) pointed out, businesses use green accounting measures to find where they are wasting resources and make better use of what they have. Unlike the Defensive Green strategy, which is reactive, green accounting acts as a protective measure to help the industry survive during intense criticism from environmental activists. The dedication grows stronger in the Shaded Green and Extreme Green strategies, as ecological values are completely included in the company's way of thinking. Schaltegger & Burritt (2017) argue that in an extreme green model, green accounting forms the basis of a structured environmental management system, helping to deal with growing business risks and support long-term sustainability.

In practice, green accounting has both internal and external functions that work together. Inside the company, it helps control the environment by setting rules. This allows managers to better estimate costs and make smarter choices when planning big projects and managing everyday expenses. Astuti (2012) highlights that the effectiveness of environmental accounting relies on the ability of accounting data to reduce the harmful effects of a company's operations. On the outside, it functions as a tool to provide transparency and meet the information needs of stakeholders, such as investors who are more focused on Environmental, Social, and Governance (ESG) factors. However, as noted by Lako (2018), combining financial, social, and environmental accounting into a single reporting system is still difficult, especially for smaller organizations that have less access to financial resources.

The growing demand for corporate responsibility regarding environmental impacts has contributed to the development of green accounting. Companies are no longer assessed solely based on financial performance, but also on their ability to manage environmental and social impacts. This shift encourages businesses, including small and medium-sized enterprises (MSMEs), to adopt more transparent and comprehensive accounting practices. Green accounting enables companies to identify, measure, and disclose environmental costs, thereby facilitating a better understanding of long-term environmental impacts. Schaltegger & Burritt (2017) state that integrating environmental aspects into accounting systems supports more informed decision-making by considering both financial and environmental outcomes.

Furthermore, the implementation of green accounting promotes environmentally sustainable business practices. By recognizing environmental costs, such as waste management, energy consumption, and resource utilization, companies can improve production efficiency and reduce unnecessary expenses. This contributes not only to environmental protection but also to enhanced financial performance over time. Hansen & Mowen (2007) emphasize that effective environmental cost management can provide a competitive advantage, particularly for MSMEs operating in highly competitive markets. Therefore, green accounting functions not only as a compliance mechanism but also as a strategic approach to achieving long-term business sustainability.

3.2 Application of green accounting to MSMEs

The use of green accounting changes how businesses see and deal with environmental issues. A deep knowledge of ecological problems is not just a routine task anymore; it has become a key guide in making important decisions about policies, especially those that affect the environment in the long run. Ginsberg & Bloom (2004) suggest that how a

company positions itself when adopting these practices can be understood using a matrix. This matrix connects the seriousness of environmental issues with the decisions a company makes in its overall strategy. This matrix shows that adopting green accounting is mostly influenced by how competitive a company is and how much the management is committed to it. These factors fall into four different strategies: Lean Green, Defensive Green, Shaded Green, and Extreme Green.

In the Lean Green strategy, companies work to be responsible members of society but often don't share much information about their efforts to protect the environment on a large scale. The main reason for this is to improve efficiency from within; as Hansen & Mowen (2007) point out, companies use green accounting measures to spot places where resources are wasted and make better use of them. In contrast, the Defensive Green strategy is reactive, and green accounting acts as a shield to help the industry survive when it faces strong criticism from environmental activists. The commitment grows stronger in the Shaded Green and Extreme Green strategies, as ecological values are completely included in the business approach. Schaltegger & Burritt (2017) argue that in an extreme green model, green accounting is the base of a structured environmental management system designed to deal with increasing business risks and support long-term sustainability.

In terms of function, green accounting plays both internal and external roles that support each other. Inside the company, it acts as a way to keep the environment under control. It helps managers make better guesses about costs and make smarter choices when it comes to planning big expenses and managing everyday operating costs. (Astuti 2012) says that the effectiveness of environmental accounting relies on how well accounting data can reduce the harmful effects of a company's actions. Outside, it works as a tool to provide transparency and meet the information needs of stakeholders, like investors who are now placing more importance on Environmental, Social, and Governance (ESG) factors. However, as noted by Lako (2018), combining financial, social, and environmental accounting into a single reporting system is still difficult, especially for smaller organizations that have less access to financial resources.

Besides that, the growth of green accounting is connected to the greater need for companies to take responsibility for their impact on the environment. In recent years, companies are not judged just by how much money they make, but also by how well they handle their impact on the environment and society. This change motivates businesses, including small and medium-sized ones, to use accounting methods that are more detailed and honest. Green accounting is a method that helps businesses find, calculate, and share the costs related to the environment. This makes it easier for companies to see how their actions affect the environment over time. Schaltegger & Burritt (2017) say that including environmental factors in accounting systems helps businesses make more balanced decisions that take into account both financial and environmental results.

Using green accounting also helps support the idea of running a business in a sustainable way. By understanding the costs related to the environment, like handling waste, using energy, and consuming resources, businesses can create better ways to make products and cut down on extra spending. This contributes to protecting the environment and also makes the finances better in the long run. Hansen & Mowen (2007) point out that managing costs in an environmentally friendly way can give a business an edge, especially for small companies in tough competitive markets. So, green accounting isn't just about following rules; it's also a smart strategy that helps businesses become more sustainable.

Besides that, new technologies help make it easier to put green accounting practices into action. Using digital accounting systems helps businesses keep track of and study environmental data in a more precise and effective way. These tools help businesses keep an eye on how much resources they use, follow where waste comes from, and check how well their eco-friendly efforts are working. Nguyen and their team in 2023 explain that digital tools can make complicated accounting tasks easier, helping small businesses with green accounting, especially those that don't have a lot of money or resources. So, digitalization plays a key role in helping speed up the use of accounting methods that are better for the environment.

Even though green accounting has many advantages, it still runs into a number of difficulties when it comes to being put into practice. Many businesses, especially small and medium-sized ones, do not have enough understanding or awareness about environmental accounting ideas. Limited financial resources and lack of technical skills also prevent the use of more advanced accounting systems. Lako (2018) points out that small businesses might struggle to include environmental factors in their financial reports if they don't have enough support from institutions. So, working together between the government, schools, and banks is really important to offer training, help with money, and support for skills. Building stronger support systems will help make green accounting work well and support the long-term success of a business.

3.3 Discussion

The Free Nutritious Meal Program (MBG) is a key part of Indonesia's new socioeconomic plan. Its goal is to improve the nutrition of students across the country in a planned and organized way, as stated by the Ministry of Education and Culture in 2025. (Tanziha, 2025). The main goal is to improve human capital over the long term, but when it starts being put into action, it causes a major change in the economic environment around schools. In the past, small local businesses have been the main source of food for students; but offering free, uniform meals might make it harder for these small vendors to compete. (Ananda Dwi et al., 2025). This sudden drop in demand causes local traders to see much lower daily sales because they depend on students spending money. In this important change, green accounting does more than just keep records; it becomes a key strategy for small and medium enterprises to keep their economy stable while moving towards the sustainable development goals set out in the Golden Indonesia 2045 vision (United Nations Development Programme Indonesia, 2023).

In this situation, the important part of green accounting is how it helps find "efficiency leaks" in the production process. When income is going down, being the cheapest option is the only way to stay in business. Green accounting enables small and medium-sized enterprises (MSMEs) to include environmental impacts, like high energy use, poor water efficiency, and improper waste management, into their official business costs. By carefully tracking daily electricity and resource usage, small and medium businesses can identify which parts of their operations are costing them the most money. For example, switching to energy-saving machines or putting in place ways to save water can lead to real savings in costs that help make up for the money lost from the MBG program. Raharjo (2020) argues that being transparent in how companies report their environmental impact helps cut costs and increases how responsible businesses are, which makes smaller companies better able to handle changes in government policies, as noted by Galib et al. (2024).

In addition, using green accounting helps improve public health standards, which works well with the MBG program. Small and medium-sized businesses that use accounting methods focused on sustainability are more likely to follow strict rules for food safety and cleanliness (Galib et al., 2024). The MBG program wants to create a healthy "Golden Generation," so it's important that the local food businesses, like MSMEs, also follow strict safety standards. By making sure that any secondary or new food products are rich in nutrients and safe from harmful substances (BPOM, 2023), small and medium enterprises (MSMEs) shift from being competitors of the MBG program to becoming partners in the country's health initiatives. This proactive commitment to safety and sustainability standards enables MSMEs to position themselves as "Environmentally Friendly Entities," a label that is becoming more important in a market where environmental awareness is very high.

From a wider view of marketing and money management, green accounting opens the way to green financing and chances for ethical investments. Galib (2024) says that small businesses with written sustainability plans are seen as less risky by banks and financial companies that focus on ESG factors like environment, social impact, and governance. Having access to capital is very important for small and medium businesses that want to

expand their product offerings or improve their technology to remain competitive under the MBG policy. By shifting from handling issues as they happen to using data to plan ahead, small businesses can use green accounting to show they are trustworthy and sustainable to people outside the company, like investors and government agencies.

This adoption helps support many different Sustainable Development Goals (SDGs) in a smart and thoughtful way. This approach directly supports SDG 8 (Decent Work and Economic Growth) by helping to keep local jobs through better business efficiency, and it also supports SDG 12 (Responsible Consumption and Production) by reducing material waste. By looking at activities that use a lot of carbon, like sending raw materials over long distances, small businesses can make their supply chains more local and efficient in terms of carbon use, which helps with SDG 13, which is about taking action to fight climate change. (United Nations Development Programme Indonesia, 2023). Hasibuan and others in 2022 pointed out that even recording small amounts of fuel and material waste can add up to big contributions to the nation's climate impact when you look at it all together. Even though there are still problems like not enough knowledge about using digital tools and not enough money, moving towards a "Green Digitalization" is really important. (Hasibuan & Ratnasari, 2025) Using simpler digital accounting tools, as proposed by Nguyen et al. (2023) and Galib (2024), helps small and medium-sized enterprises (MSMEs) track their environmental costs more accurately without spending too much. This supports them in staying as the main driving force of a sustainable and fair Indonesian economy by 2045.

In the end, moving towards green accounting helps small and medium businesses change from being at risk in the market to becoming smart, sustainable companies. By taking environmental costs into account, improving managerial responsibility, and matching national nutrition objectives, small and medium-sized enterprises can effectively deal with the challenges of the MBG program. (Widasari et al., 2025; Hasibuan & Ratnasari, 2025) This change in strategy makes sure that local businesses and people are not left out as the country moves towards becoming a Golden Indonesia, and instead, they play an important role in making the nation strong and environmentally friendly.

Besides making things more efficient and saving money, using green accounting also helps small businesses improve how well they manage their internal operations. By keeping track of environmental costs in an organized way, business owners can create a clearer plan for managing and running their business. This organized method helps businesses to find possible risks and chances, letting small and medium enterprises act more quickly when there are changes outside their control, like updates to the MBG program (Raharjo, 2020; Galib et al., 2024).

Another important effect of green accounting is that it helps make businesses more open and responsible. Sharing clear information about how a business handles the environment and its money can make it more trustworthy to people who care about it, like investors, customers, and government groups. This growing trust can lead to more chances to work together, get support, and grow in the market. In the long run, transparency becomes a valuable tool that helps a business stay strong and continue operating successfully (Lako, 2018; Schaltegger & Burritt, 2017).

In the context of digital transformation, using easy-to-use digital accounting tools can greatly help small businesses implement green accounting practices. Digital tools help record data more precisely, make it easier to track, and allow quicker analysis of the costs related to the environment. Even though starting to use new technology might need some money up front, the good things it brings in the long run, like making work faster and helping make better choices, can be worth the cost. So, helping small and medium businesses become more digitally literate is a key part of making their business practices more sustainable (Nguyen et al., 2023; Hasibuan & Ratnasari, 2025).

Green accounting can also act as a way to teach people, like business owners and workers in small companies, about why taking care of the environment is important. By including environmental factors in their everyday business operations, small and medium-sized businesses can slowly develop a sustainable culture inside their companies. This

change in culture is very important for making sure that sustainability efforts last a long time (Astuti, 2012; Pentiana, 2019).

From a policy point of view, the government has an important role in pushing MSMEs to use green accounting. Incentives like tax breaks, subsidies, and easier access to green financing can encourage small and medium-sized businesses to adopt eco-friendly practices. Training programs and technical support can also help address gaps in knowledge and limited resources. A good policy environment is important for making green accounting have the best possible effect on the stability and ability to compete with small and medium businesses (Ministry of National Development Planning, 2024; United Nations Development Programme Indonesia, 2023).

Besides what was mentioned earlier, using green accounting in small and medium sized businesses also shows a bigger change in how these companies are dealing with global sustainability issues. In many countries, economic growth is becoming more connected to taking care of the environment because people are worried more about climate change, running out of resources, and damage to ecosystems. In this situation, MSMEs are not seen just as businesses that help the economy, but also as people who help protect the environment. This dual role brings both chances and challenges, especially for small businesses that usually have less money and fewer tech tools to work with. So, moving towards green accounting is not just a smart business move, but also something essential to stay up to date in a world that's always changing (Schaltegger & Burritt, 2017; United Nations Development Programme Indonesia, 2023).

Changing how customers act has a big impact on how small and medium businesses create their products and manage their operations. Today's shoppers are more aware of environmental issues and often choose items that are made in a way that takes care of the planet and treats people fairly. This change in what customers want means small businesses need to change how they offer value to stay ahead. Green accounting helps with this change by giving clear and honest information about the environmental costs and effects. This information can be used to make products better and improve how sustainable they are. Because of this, small and medium-sized businesses are more able to meet what customers expect in the market and improve how they are seen as companies that care about the environment (Lako, 2018; Nguyen et al., 2023).

Besides that, government actions like the MBG program help a lot in setting the conditions under which small businesses operate. These rules affect how much people want certain products and also set new guidelines for keeping things clean, making sure products are good quality, and following environmental laws. So, small and medium-sized businesses need to adjust fast to these changing rules in order to stay competitive in the market. Green accounting helps companies create a structured way to match their internal operations with what is required by external policies. This ensures that they follow the rules and run their business in a more efficient way. This alignment is important for staying competitive in a market that is influenced by policies (Ministry of National Development Planning, 2024; Galib et al., 2024).

Another key point is the growing teamwork among different groups like government agencies, banks, and schools. Working together builds a helpful environment that makes it easier for small businesses to share information, improve their skills, and get access to needed tools and support. Without enough support, many small businesses might have a hard time using new systems and technologies related to green accounting. So, working together with many different groups is really important in speeding up the use of better, more sustainable business practices. Training programs, financial support, and help with technical skills can help lower obstacles and make it easier for small businesses to adopt green accounting properly (Hasibuan & Ratnasari, 2025; United Nations Development Programme Indonesia, 2023).

4. Conclusions

This study shows that green accounting is a useful strategy for small and medium businesses. It helps them keep track of how their activities affect the environment and also helps them adjust to changes in the market, especially those related to the Free Nutritious Meal Program (MBG). By including environmental factors in their business choices, small and medium sized businesses can improve how well they run, use resources more wisely, and create more lasting and responsible practices. This method helps reach multiple Sustainable Development Goals (SDGs), especially SDG 8, SDG 12, and SDG 13, and also makes businesses more competitive, builds trust in the company, and opens up more chances to get green financing. Even though it's important, its use is still limited because of not enough money and a lack of knowledge about the technical side. This shows how important it is to have support from organizations, easy-to-use digital tools, and better understanding of environmental accounting.

In general, including green accounting in small and medium business operations shows a complete and flexible approach that matches economic results with social and environmental duties. Its successful application relies on strong collaboration between key stakeholders such as government bodies, financial institutions, and educational organizations to develop appropriate policies, allocate sufficient resources, and implement capacity building programs. As sustainability remains a key part of global and national plans for development, small businesses that use green accounting methods will be more ready to handle future challenges and take advantage of new opportunities. This contributes to making businesses stronger and also helps build an economy that is sustainable, fair, and competitive, which aligns with the vision of Golden Indonesia 2045.

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References

- Ananda Dwi, F., Jamaluddin, Sari, W. I. R., & Rachmaliana, L. (2025). Implementation of the free nutritious meal program in Indonesia. *Forum Ekonomi*, 27(1). <https://doi.org/10.30872/jfor.v27i1.4457>
- Anh, D. P., & Nhat, N. T. (2024). Factors affecting the decision to choose green accounting approach of small and medium enterprises. *International Journal of Advanced Multidisciplinary Research and Studies*. <https://www.multiresearchjournal.com/admin/uploads/archives/archive-1731670121.pdf>
- Astuti, W. (2012). Akuntansi lingkungan: Sebuah kajian teoretis. *Jurnal Akuntansi dan Keuangan*, 14(2), 85–94. <https://scholar.google.com/scholar?q=Astuti+Akuntansi+Lingkungan+Kajian+Teoretis>
- D'Amico, E., Coluccia, D., Fontana, S., & Solimene, S. (2016). Factors influencing corporate environmental disclosure. *Business Strategy and the Environment*, 25(3), 178–192. <https://doi.org/10.1002/bse.1865>
- Food and Drug Supervisory Agency of the Republic of Indonesia. (2023). *Food safety guidelines for the household food industry (IRTP)*. BPOM RI. Gadenne, D. L., Kennedy, J., & McKeiver, C. (2009). An empirical study of environmental awareness and practices in SMEs. *Journal of Business Ethics*, 84(1), 45–63. <https://link.springer.com/article/10.1007/s10551-008-9672-9>
- Galib, A., Wulandari, F. A., & Ariyandani, N. (2024). Behavioral aspects approaches in encouraging green accounting practices for MSMEs in West Sulawesi. *Economics and Business Journal (ECBIS)*, 3(1), 15–26. <https://ecbis.net/index.php/go/article/view/156>
- Ginsberg, J. M., & Bloom, P. N. (2004). Choosing the right green marketing strategy. *MIT Sloan Management Review*, 46(1), 79–84. <https://scholar.google.com/scholar?q=Ginsberg+Bloom+Choosing+the+Right+Green+Marketing+Strategy>
- Hansen, D. R., & Mowen, M. M. (2007). *Managerial accounting* (8th ed.). Thomson South-Western.
- Hasibuan, I. M., Erianto, R., & Sugianto. (2024). Contribution of the micro, small and medium enterprises (UMKM) sector to the Indonesian economy. *Proceeding of the International Seminar on Islamic Studies (INSIS)*, 5(1), 580–588. <https://doi.org/10.3059/insis.v0i1.18248>
- Hasibuan, A. A., & Ratnasari, A. M. (2025). Dampak penerapan green accounting terhadap aspek lingkungan dan finansial: Studi scoping review pada perusahaan di Indonesia. *Jurnalku*, 5(3), 251–271. <https://jurnalku.org/index.php/jurnalku/article/view/1672>
- Herlindawati, D., Kantun, S., & Widayani, A. (2022). Understanding and concern in the implementation of green accounting by batik fabric MSMEs. *Journal of Accounting and Finance*, 19(1), 22–32. <https://doi.org/10.29264/jakt.v19i1.10792>

- Krisna, A. E. (2024). Transformation of MSMEs through creative industries: Approaches to increase competitiveness and innovation. *Journal of Management Science Publications*, 3(4), 66–81. <https://doi.org/10.55606/jupiman.v3i3.4514>
- Kusumawardhany, S. I. (2022). Forms of social responsibility in tofu industry MSMEs in Kediri Regency. *Al-Muqarabah*, 2(1). <https://doi.org/10.30762/almuraqabah.v2i1.106>
- Lako, A. (2018). *Green accounting: Issues, theories, and applications*. Salemba Empat. <https://scholar.google.com/scholar?q=Andreas+Lako+Akuntansi+Hijau+Salemba+Empat>
- Maulita, & Adham, M. (2020). The level of concern and knowledge of MSMEs in implementing green accounting in Samarinda City. In *Proceedings of the 6th National Seminar on Applied Innovative Research (SENTRINOV)*, 6(2). <https://proceeding.isas.or.id/index.php/sentrinov/article/download/445/124/941>
- Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia. (2025). *Report on the implementation of the free nutritious meals program 2025*.
- Ministry of Cooperatives and SMEs of the Republic of Indonesia. (2025). *Statistics of Indonesian MSMEs in 2025*. Ministry of Cooperatives and SMEs.
- Ministry of Environment and Forestry of the Republic of Indonesia. (2023). *Guidelines for waste management based on the principle of reduce, reuse, recycle*. Ministry of Environment and Forestry.
- Ministry of National Development Planning/Bappenas. (2024). *Study on sustainable development and SDGs integration in the green economy 2024*. Bappenas.
- Ministry of National Development Planning/Bappenas. (2024, November 19). *Bappenas holds socialization of 2025–2045 RPJPN to ensure Golden Indonesia vision success*. Bappenas.
- Nguyen, T. M. P., Ha, H. H., & Tran, M. D. (2023). Determinants influencing the application of green accounting: The case of emerging market construction firms. *Corporate Governance and Organizational Behavior Review*, 7(2, Special Issue), 282–292. <https://doi.org/10.22495/cgobrv7i2sip7>
- Otoritas Jasa Keuangan. (2025). *Profile of Indonesia's banking industry 2025*. Financial Services Authority. <https://www.ojk.go.id>
- Pentiana, D. (2019). Understanding and concern to implementation of green accounting: A case study of SME tempe tofu in Bandar Lampung City. *Jurnal Ilmiah Esai*, 13(1). <https://doi.org/10.25181/esai.v13i1.1154>
- Prasetyo, A., & Purwanti, D. (2021). Analysis of green accounting implementation on corporate performance. *Proceeding Evolution*, 2(1), 170–177. <https://e-journal.upstegal.ac.id/index.php/per/article/view/364>
- Raharjo, S. (2020). Green accounting as a strategy to improve the environmental performance of MSMEs. *Journal of Accounting & Sustainability*, 4(2), 101–115. <https://doi.org/10.62281>
- Schaltegger, S., & Burritt, R. (2017). *Contemporary environmental accounting: Issues, concepts and practice*. Routledge. <https://scholar.google.com/scholar?q=Schaltegger+Burrirt+Contemporary+Environmental+Accounting>
- Tanziha, I. (2025). Impact of the free nutritious meal program on students' concentration and learning outcomes. *Journal of Nutrition, Poltekkes Aceh*. <https://ejournal.poltekkesaceh.ac.id/index.php/an/article/view/2737>
- United Nations Development Programme Indonesia. (2023). *Sustainable development goals report Indonesia 2023*. <https://www.undp.org/indonesia>
- Widasari, E., Ashari, M. H., & Kurniawan, U. (2025). Green accounting in sustainable business strategies: An empirical study of environmentally friendly startups in Indonesia. *Oikonomia: Journal of Management Economics and Accounting*. <https://jurnalhafasy.com/index.php/oikonomia/article/view/389>

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