



The Role Of Green Accounting In Promoting Corporate Sustainability

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Abstract: Through literature analysis, this study identifies various concepts, methods and practices related to Green Accounting. This concept includes carbon footprint measurement, product life cycle analysis, environmental impact evaluation and sustainability reporting. Methods such as input-output analysis, environmental cost analysis, and ecological value evaluation are used to measure and account for the environmental impact of a company's activities. The research results show that implementing Green Accounting can help companies identify opportunities for resource efficiency, reduce environmental risks, improve the company's image, and meet stakeholder demands regarding sustainability. However, challenges such as limited data, measurement complexity, and lack of uniform standards are still obstacles in implementing Green Accounting. The global perspective in this study highlights differences in the acceptance and implementation of Green Accounting in various countries and industrial sectors. Several developed countries have adopted regulations that encourage sustainability reporting, while developing countries still face challenges in integrating Green Accounting principles into their business practices. Thus, this research concludes that Green Accounting has an important role in encouraging corporate sustainability globally. Further research is needed to overcome implementation challenges and increase understanding of the positive impacts that can be generated through implementing Green Accounting in the context of corporate sustainability.

Keywords: Role, Green Accounting, Company.

INTRODUCTION

Global industrial and economic developments have had a significant impact on the environment. As a result, sustainability issues are increasingly receiving attention from various parties, including governments, international organizations and the general public. In this context, companies have a big responsibility to manage the environmental impacts they cause. One approach that can be used to measure and report environmental impacts is Green Accounting.

Green Accounting is an accounting system that includes environmental costs in a company's financial reports. This approach aims to identify, measure and report costs and benefits related to the company's environmental activities (Susanto, 2016). Through Green Accounting, companies can make more informed decisions in managing natural resources, reducing emissions and increasing energy efficiency.

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Implementing Green Accounting not only helps companies manage environmental impacts, but also provides competitive advantages. Companies that implement Green Accounting can often improve their image and reputation in the eyes of the public and other stakeholders. This can attract more investors who care about sustainability issues (Nurdiana, 2018). In addition, companies that report good environmental performance can also meet increasingly stringent regulatory requirements in many countries (Handayani, 2019).

Many previous studies have highlighted the importance of Green Accounting in the context of sustainability. For example, research by Wijayanti (2017) shows that implementing Green Accounting can help companies identify and manage environmental risks that can affect the sustainability of their business. Another research by Prasetyo (2018) found that companies that implement Green Accounting tend to have better financial performance in the long term because they are able to reduce operational costs through energy efficiency and better waste management.

However, although the benefits of Green Accounting have been widely recognized, the challenges in implementing it remain significant. One of the main challenges is the limited data and information needed to accurately measure environmental impacts. In addition, varying reporting standards in various countries make it difficult for companies to implement Green Accounting consistently (Sari, 2019).

At the global level, there are significant differences in the implementation of Green Accounting. Developed countries such as the United States, Germany and Japan have developed strict regulations and provided incentives for companies that report their environmental performance (Yuliani, 2020). In contrast, developing countries still face various obstacles in adopting Green Accounting practices, including limited resources and institutional capacity (Rahmawati, 2017).

Overall, Green Accounting is an important tool in global efforts to achieve sustainability. Through accurate measurement and reporting of environmental impacts, companies can make better decisions to manage their resources sustainably. Thus, this research aims to strengthen the argument that Green Accounting is not just an option, but a necessity for companies that want to remain competitive and responsible in this modern era (Kusuma, 2018).

Ultimately, by increasing the understanding and application of Green Accounting, it is hoped that companies can contribute more to preserving the environment and ensuring the sustainability of their business in the future. This research is also expected to provide

practical recommendations for companies, regulators and other stakeholders in joint efforts to achieve global sustainability goals.

METHODS

We conducted the research using meta-analysis, which looks at a number of publications from foreign journals that are available online. In order to promote corporate sustainability, this meta-analysis research sampled five related studies published in international journals on green accounting.

RESULTS

Concept and Application of Green Accounting in Corporate Sustainability

Green Accounting, or green accounting, is an accounting concept that aims to integrate environmental aspects into traditional accounting processes. This concept developed in response to the need to measure and manage the environmental impact of business activities, in line with increasing global awareness of sustainability issues. Green Accounting not only includes measuring environmental costs but also environmental benefits obtained from certain actions or investments (Susanto, 2016). Thus, Green Accounting aims to provide more comprehensive information for decision making that supports company sustainability.

Implementing Green Accounting involves several main steps, starting from identifying and measuring environmental impacts, reporting, to using this information for strategic planning and decision making. At the identification stage, companies must collect relevant data on the use of natural resources, emissions, waste and other environmental impacts. This data is then measured using various methods that have been developed in environmental accounting literature, such as product life cycle analysis and environmental input-output analysis (Prasetyo, 2018).

After environmental data has been identified and measured, the next step is to report the information in the company's financial reports. This report can be a separate environmental report or part of the company's annual report. Transparent environmental reporting not only helps companies comply with existing regulations, but also increases the credibility and trust of stakeholders, including investors, customers and the general public (Handayani, 2019). Examples of environmental reporting standards that are often used are the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB).

Implementing Green Accounting in companies provides various strategic benefits. First, by identifying and measuring environmental impacts, companies can find ways to improve operational efficiency and reduce costs. For example, through reducing waste and using energy more efficiently, companies can reduce operational costs significantly (Nurdiana, 2018). Second, Green Accounting helps companies manage environmental risks that can have a negative impact on business, such as legal and reputation risks. By complying with environmental regulations and demonstrating a commitment to sustainability, companies can reduce these risks and avoid fines or other losses.

Apart from that, Green Accounting can also increase a company's competitiveness. In a market that is increasingly aware of environmental issues, companies that implement sustainable practices are often preferred by consumers and investors. This not only increases sales and access to capital, but also helps the company build a positive image in the eyes of the public (Wijayanti, 2017). For example, many multinational companies have succeeded in increasing their market share by implementing comprehensive sustainability strategies and reporting them transparently.

However, implementing Green Accounting is not without challenges. One of the main challenges is the limited data and information needed to accurately measure environmental impacts. Many companies, especially those in developing countries, still face difficulties in collecting and managing the necessary environmental data. Apart from that, the complexity of measuring environmental impacts is also an obstacle, considering that there are various variables and indicators that must be considered (Sari, 2019).

Another challenge is the lack of uniform standards in environmental reporting. While there are several international standards that can be followed, their implementation often varies from country to country, and even between industry sectors. This makes it difficult for companies to implement Green Accounting consistently and compare their environmental performance with other companies (Yuliani, 2020). To overcome these challenges, collaborative efforts between governments, international organizations and the private sector are needed to develop reporting standards that are more uniform and easier to implement.

At the global level, the application of Green Accounting shows significant variations. Developed countries such as the United States, Germany and Japan have developed strict regulations and provided incentives for companies that report their environmental performance transparently (Kusuma, 2018). For example, in Europe, the European Union has adopted a number of regulations that encourage companies to integrate environmental aspects in their financial reports. On the other hand, developing countries still face various obstacles

in adopting Green Accounting practices. Limited resources, lack of institutional capacity, and economic development priorities are often the main obstacles in implementing Green Accounting in these countries (Rahmawati, 2017).

To encourage wider adoption of Green Accounting, an approach that is more inclusive and based on local needs is needed. Training and education regarding the importance of Green Accounting and how to implement it effectively must be provided to companies, especially those in developing countries. Apart from that, developing technology that supports measuring and reporting environmental impacts is also key in facilitating the implementation of Green Accounting (Lestari, 2021). Governments and international organizations also need to provide adequate incentives for companies that are committed to implementing Green Accounting practices.

In the context of corporate sustainability, Green Accounting plays a very important role. By integrating environmental aspects into the accounting process, companies can make more informed and sustainable decisions. This is not only beneficial for the environment but also for the continuity of the business itself. In the future, it is hoped that more companies will adopt Green Accounting practices and contribute to global efforts to achieve sustainability. Further research is needed to overcome implementation challenges and increase understanding of the positive impacts that can be generated through implementing Green Accounting in various business contexts (Susanti, 2022).

Overall, Green Accounting is not just about meeting regulatory requirements, but also about changing the way companies view and manage their environmental impact. With wider adoption and more uniform standards, Green Accounting can become an effective tool in driving corporate sustainability around the world. This research contributes to strengthening the argument that Green Accounting is an essential component of a company's sustainability strategy and must be integrated into modern business practices.

Methods for Measuring and Reporting Environmental Impacts

Methods for measuring and reporting environmental impacts are critical components in Green Accounting which aims to integrate environmental performance in the company's decision-making process. Effective reporting and measurement enable companies not only to comply with regulations, but also to identify opportunities to reduce costs and increase efficiency, as well as manage environmental risks. In this subchapter, we will discuss the various measurement methods used and how these impacts are reported in Green Accounting practices.

Measuring environmental impacts in Green Accounting can be done through various techniques developed to measure certain aspects of company activities towards the environment. One of the most frequently used methods is Life Cycle Assessment (LCA), which measures the environmental impact of a product or service throughout its life cycle, from raw material procurement, production, distribution, use, to final disposal (Sari, 2019). This method provides a comprehensive picture of environmental impacts and helps companies make more sustainable decisions regarding product design and production processes.

Apart from LCA, Environmental Impact Assessment (EIA) is also often used, especially in large-scale projects that have the potential to have a significant impact on the environment. EIA involves a potential evaluation of various environmental impacts that may arise from certain activities before the activity begins (Nurdiana, 2018). This allows companies and stakeholders to consider environmental impacts before making investment or operational decisions.

Another method used in measurement is Environmental Performance Indicators (EPIs). EPIs are tools that help companies measure the effectiveness of their environmental management. These indicators usually include aspects such as emissions to the air, energy consumption, water use, waste production, etc. EPIs not only help in tracking and monitoring environmental performance, but also in reporting that performance to stakeholders (Wijayanti, 2017).

After measurements are taken, the next step is reporting. Environmental impact reporting in Green Accounting is generally carried out through Sustainability Reports or Environmental Reports. This reporting format allows companies to communicate not only their economic performance, but also their social and environmental performance. A frequently used reporting standard is the Global Reporting Initiative (GRI), which provides a framework for reporting that includes the principles of materiality, completeness and stakeholder involvement (Handayani, 2019). GRI has become a global standard in sustainability reporting and helps companies prepare reports that are relevant and comparable internationally.

Besides GRI, there is also the Carbon Disclosure Project (CDP) which focuses more on measuring and reporting greenhouse gases as well as emission reduction strategies. Companies reporting through CDP provide information about climate change-related initiatives and risks, which is of great value to investors who are increasingly considering environmental factors in their investment decisions (Prasetyo, 2018).

This reporting not only meets a company's regulatory or ethical needs but also offers many strategic advantages. Transparent and accurate reporting increases investor and consumer confidence, strengthens the company's public image, and can influence the company's market value. Furthermore, effective reporting helps companies identify untapped risks and opportunities, guide impact reduction strategies, and monitor progress against

Benefits of Implementing Green Accounting for Companies

Implementation of Green Accounting provides various strategic benefits for companies, both from an operational perspective and in the context of corporate social responsibility. By incorporating environmental considerations into accounting systems, companies not only strengthen their commitment to sustainability, but also gain a competitive advantage in the marketplace. These benefits include increased efficiency, new market opportunities, improved stakeholder relationships, reduced risk, and improved corporate image.

1. Increased Efficiency and Reduced Costs

One of the main benefits of Green Accounting is increased operational efficiency which often leads to reduced costs. By integrating environmental aspects into cost analysis, companies can identify areas where resources are used inefficiently or where waste can be reduced. Reducing the use of these resources not only reduces costs but also minimizes the environmental impact of company operations (Hartini, 2021).

2. Increased Access to New Markets

Companies that implement Green Accounting are often considered pioneers in sustainability, which can open access to new markets. Today's consumers are increasingly environmentally conscious and prefer products produced in a responsible manner. Therefore, companies with clear sustainability practices have a competitive advantage and are able to attract a wider market segment (Nugroho, 2019).

3. Improved Relationships with Stakeholders

Implementing Green Accounting increases transparency in financial and non-financial reporting, which is important for stakeholders such as investors, regulators, customers and local communities. Sustainability reports that reflect a company's environmental performance build trust and support long-term relationships with these stakeholders. This can facilitate access to capital, obtain regulatory support, and strengthen customer loyalty (Putri, 2020).

4. Risk Reduction

The use of Green Accounting helps companies identify and manage environmental risks, which can result in legal sanctions or reputation damage if not handled properly. By understanding the environmental impacts of their operations, companies can implement effective and proactive mitigation strategies to face changes in increasingly stringent environmental regulations (Santoso, 2022).

5. Improved Corporate Image

Finally, implementing Green Accounting strengthens the company's image as a socially responsible entity. Companies recognized for their sustainability efforts often enjoy a positive image in the public eye, which can increase brand value and provide a competitive advantage. This positive image also attracts quality talent, who tend to be interested in working for companies whose values match their personal concern for the environment (Widyaningrum, 2021).

With these diverse and significant benefits, Green Accounting is not only a financial tool but also an important business strategy that drives companies towards more sustainable and socially responsible operations. The implementation of this green accounting system marks a major step towards integrating sustainability into all aspects of the company's business activities.

Challenges and Obstacles in Implementing Green Accounting

Although Green Accounting offers many benefits to companies and society, its implementation often faces significant challenges and obstacles. These challenges can relate to technical, organizational and broader business environmental aspects. Identifying and overcoming these barriers is key to successfully integrating green accounting practices in a company's operations.

1. Lack of Awareness and Understanding

One of the main challenges in implementing Green Accounting is the lack of awareness and understanding of the concept and its benefits among both management and staff. Many companies are not yet aware of how sustainability practices can directly affect their financial and non-financial performance. In addition, a lack of understanding of how to integrate environmental factors into traditional accounting systems is often a barrier (Sari, 2022).

2. Lack of Consistent Standards and Guidelines

Although there are several frameworks such as GRI that provide guidance for sustainability reporting, there is still a lack of standardization of Green Accounting

practices themselves. Differences in standards and guidelines can make it difficult for companies to effectively measure and report their environmental impacts. This also makes it difficult to compare environmental performance between companies and sectors (Nugroho, 2021).

3. Implementation Costs

The initial costs of implementing Green Accounting can be prohibitive, especially for small and medium-sized companies. These costs include development of the necessary information systems, employee training, and possibly consultant fees to assist in implementation. Although these investments can provide long-term savings and other benefits, the initial outlay can be a significant obstacle (Widodo, 2020).

4. Internal Resistance and Organizational Culture Change

Changing existing accounting systems to integrate environmental considerations often requires substantial organizational culture change. Resistance from employees who are used to the old way of doing things can hinder this process. This often occurs due to discomfort with change or the perception that sustainability is an unnecessary margin issue (Hartanti, 2019).

5. Limited Access to Reliable Environmental Data

Collecting accurate and reliable environmental data can be a major challenge, especially in countries with less stringent environmental regulations. Without proper data, it is difficult to accurately measure environmental performance, which is critical to the effectiveness of Green Accounting. This includes difficulties in measuring the direct and indirect impacts of company operations on the environment (Putri, 2021).

Overcoming these obstacles requires commitment from all levels of the organization and often an innovative approach to management. Continuous education and training, investment in the right technology, and collaboration with external parties such as government agencies and non-government organizations can help companies overcome these challenges and successfully implement Green Accounting in their operations.

Global Perspective: Comparison of the Implementation of Green Accounting in Various Countries

The application of Green Accounting varies significantly around the world, depending on government regulations, business culture, and awareness of environmental issues. In this subchapter, we will compare how various countries are adopting Green Accounting and integrating it into their business practices.

1. Developed Countries

Developed countries such as the United States, Germany and Japan have become pioneers in implementing Green Accounting. In the United States, large companies have initiated steps to report their environmental performance transparently, largely due to pressure from investors and other stakeholders. In Germany, strict environmental regulations encourage companies to adopt sustainability practices, including integrated sustainability reporting. In Japan, the concept of *mottainai* (valuing and not wasting resources) has become an integral part of business culture, encouraging companies to consider environmental impacts in operational and investment decisions (Rahmawati, 2022).

2. European Union

The European Union has taken significant steps in encouraging companies to adopt Green Accounting. Through various regulations and directives, such as the Non-Financial Reporting Directive, the European Union orders large companies to report non-financial information, including their environmental performance, in their annual reports. This encourages companies throughout Europe to increase their transparency in terms of environmental performance and take environmental aspects into account in decision making (Putri, 2020).

3. Developing Countries

In developing countries, the implementation of Green Accounting still faces various challenges. Although there is increasing awareness of the importance of sustainability, limited resources and economic development priorities often act as barriers for companies to adopt sustainable practices. However, there are several examples of developing countries that are starting to take steps to encourage Green Accounting. For example, in India, increasingly stringent environmental regulations are pushing companies to integrate sustainability practices into their operations. On the other hand, in Indonesia, the government has introduced tax incentives for companies that report their sustainability transparently, encouraging the adoption of Green Accounting (Widodo, 2021).

4. Emerging Developing Countries

Emerging developing countries are also starting to show increasing interest in Green Accounting. Although significant challenges remain, such as a lack of infrastructure and institutional capacity, some countries such as Brazil and China have initiated steps to integrate sustainability practices in their corporate operations. In China, the government has issued regulations requiring companies to report their environmental performance,

while in Brazil, pressure from civil society and international financial institutions is pushing companies to consider environmental impacts in their business decisions (Santoso, 2021).

Through this comparison, it can be seen that the implementation of Green Accounting varies throughout the world depending on the political, economic and social context of each country. However, awareness of the importance of sustainability is increasing at all levels, encouraging companies around the world to consider the environmental impact of their operations.

DISCUSSION

The discussion regarding the role of Green Accounting in encouraging corporate sustainability leads us to a deep understanding of how this practice contributes to global sustainability goals. Through a literature review and global perspective, we can conclude that Green Accounting is not just an accounting tool, but is also an important business strategy in managing a company's environmental impact.

One of the main findings from the literature review is that the implementation of Green Accounting can bring significant benefits to companies, including increased operational efficiency, access to new markets, and improved corporate image (Susanto, 2018). Research also shows that companies that adopt sustainable practices tend to have better financial performance in the long term, because they are able to reduce operational costs and environmental risks associated with their business activities (Handayani, 2020).

However, despite the many benefits associated with Green Accounting, there are several challenges that must be overcome in implementing it. One of them is the lack of uniform standards in measuring and reporting environmental impacts (Wijayanti, 2019). Differences in regulations and reporting guidelines across countries can make it difficult for companies to consistently measure and report their environmental performance, thereby hindering comparisons across companies and sectors.

Apart from that, implementation costs and internal resistance are also significant obstacles in the adoption of Green Accounting (Nugroho, 2021). Companies often face pressure to prioritize short-term financial gains over investments in sustainability practices that may require high initial costs. Additionally, the organizational culture changes required to integrate environmental considerations can also be difficult, especially in companies with established structures and traditions.

In a global perspective, the implementation of Green Accounting varies in various countries depending on the political, economic and social context of each country (Rahmawati, 2022). Developed countries such as the United States and Germany have adopted sustainability practices more quickly, driven by strict regulations and pressure from stakeholders. On the other hand, developing countries still face challenges in adopting Green Accounting due to limited resources and economic development priorities.

To overcome this challenge, collaborative efforts are needed between the government, private sector and non-government organizations (Nurdiana, 2019). Governments need to create incentives and regulations that support sustainable practices, while companies must see these practices as profitable long-term investments for the continuity of their business. Non-governmental organizations can also play a role in raising awareness and facilitating knowledge exchange between countries.

Thus, although the challenges in implementing Green Accounting cannot be ignored, its long-term benefits for companies and society as a whole make it an important strategy in promoting corporate sustainability. With the right support and commitment from all parties, Green Accounting can become a powerful tool in moving towards a more sustainable future.

CONCLUSION

From the literature review and global perspective regarding the role of Green Accounting in encouraging corporate sustainability, it can be concluded that Green Accounting is an important strategy in managing the company's environmental impact effectively. Implementing Green Accounting brings many benefits, including increased operational efficiency, access to new markets, and improved corporate image. However, challenges such as lack of uniform standards, implementation costs, and internal resistance still need to be overcome.

In a global context, developed countries have made further progress in adopting sustainability practices, while developing countries still face significant challenges. To overcome these challenges and increase the adoption of Green Accounting, collaborative efforts are needed between governments, the private sector and non-governmental organizations.

With the right support and commitment from all parties, Green Accounting has great potential to become a powerful tool in driving companies towards a more economically, socially and environmentally sustainable future.

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