Volume 4 Number 2 (2026)
July-December 2026
Page:2583-2594

Journal of Creative Power and Ambition (JCPA)
https://edujavare.com/index.php/jcpa
E-ISSN: 3031-4054
DOI: 10.70610/jcpa.v4i02.1981

Green Accounting And Social Development Goals (Sdg's): Kitchenham Systematic Literature Review (SLR) Approach

Ravika Mutiara Savitrah[1], Makkiyah[2]
[12] Universitas Islam Negeri Kiai Haji Achmad Siddiq Jember, Indonesia
Email: ravikamutiaras@uinkhas.ac.id, makkiyah25012003@gmail.com

Article history Submitted: 2026/08/19; Revised: 2026/08/22; Accepted: 2026/08/24;

Abstract

The rapid development of the industry will be followed by various haunting social impacts. Currently, environmental issues that cause climate change are a major challenge that needs to be addressed systemically. This is what encourages the emergence of a new paradigm in accounting known as green accounting (GA). The concept of GA emphasizes every company to not only be profit-oriented but also must prioritize the balance of the triple bottom line, namely profit, people, planet. The emergence of GA is in line with the goals of the social development goals (SDG's), namely the global sustainable development agenda to realize the welfare of society by prioritizing the preservation of the earth, in this case the environment. This research aims to provide an overview of the development and application of GA in companies and explain how GA contributes to realizing the goals of the SDG's. This research is a qualitative study using the kitchenham systematic literature review (SLR) approach where the literature used comes from Scopus indexed articles from 2017-2023 obtained through google scholar, science direct, emerald, springer, Scopus, and so on. The literature was selected by entering several keywords that have been determined by the researcher. Based on the results of the systematic literature review that has been carried out, the concept of GA has developed in various types of applications in various industries. Familiar types of GA applications are CSR implementation, CSR reporting, and sustainability reporting. In addition, currently, the application of GA is starting to develop more specifically reporting carbon gas emissions and the greenhouse effect in certain industries. In addition to contributing to accelerating the achievement of the SDG's program, various forms of GA implementation also have a positive impact on the company's financial performance.

Keywords Green Accounting; Social Development Goal's (SDG's); SLR approach; systematic review

INTRODUCTION

Environmental issues and global warming are becoming increasingly serious problems in many countries. This is evidenced by the rise of pollution, seasons, and increasingly erratic weather. Many people say that business activities and company operations are one of the biggest contributors to environmental damage. (Chircop et al., 2025) In response to these events, the largest companies in America signed a Statement of Corporate Purpose by the Business Roundtable (BRT) in 2019 which contains the company's commitment to carry out business activities and company operations with sustainability principles and pay attention to sustainability issues, especially the environment. They are committed to running a more sustainable business and to consider important sustainability issues such as the environment. (Chircop et al., 2025)

In carrying out sustainability commitments, companies must apply the triple bottom line concept, namely profit, people, planet. (Murni & Malik, 2022) (Rounaghi, 2019) calls it the three pillars of environmental, social, and economic sustainability. These three things are interconnected with each other so that companies no longer only focus on high profits but are also able to provide value to the company's environment and social. Green Accounting (GA) is a very broad accounting paradigm. Through GA, environmental management accounting information and reports can be produced which can be used as a decision-making tool by management. (Rounaghi, 2019) This approach combines production data, analysis, and use of financial information by the company's environment so that a balance can be created between financial performance, the environment, and organizational culture in providing the information needed for decision makers and added value to the company. (Bayne et al., 2019; Rounaghi, 2019; Sadiku et al., 2021)

Sustainability is one of the most important and most urgent new SDGs because it is considered the right way to address climate change and environmental problems. (Gonzalez & Peña-Vinces, 2023) This has encouraged the emergence of various ways, tools and processes that are applied in various companies as a form of contribution to environmental awareness. To encourage this, the application of GA is very important for various companies so that companies can not only operate well but also balance the environmental and social aspects of their production processes. (Agarwal, 2018) A new development pact called the 2030 Agenda for Sustainable Development (the SDGs) encourages improvements that move towards sustainable development based on equality and human rights to enhance social, economic, and environmental progress. To ensure that no one is left behind, the SDGs are implemented using universal, integrated, and inclusive principles. The Millennium Development Goals (MDGs), which were completed in 2015, were replaced by the Sustainable

Development Goals (SDGs), which have 17 goals and 169 targets (https://sdgs.bappenas.go.id).

In Indonesia, one form of GA implementation that is widely practiced by companies is social responsibility activities and their reporting both in sustainability reports and annual reports. This is also supported by various government regulations, namely UU No. 40 of 2007 concerning the obligation of limited liability companies to carry out CSR activities and SEOJK No. 16 / SEOJK.04 / 2021 which requires every company to make and report sustainability reports every year. (Rudyanto & Management, 2021; Savitrah, 2022)

Based on the above background, the research aims to provide an overview of the development and application of GA in companies and explain how GA contributes to realizing the goals of the SDGG's. This research is a qualitative study using the kitchenham systematic literature review (SLR) approach where the literature used comes from scopus indexed articles from 2017-2023 obtained through google scholar, science direct, emerald, springer, scopus, and so on. The literature is selected by entering several keywords that have been determined by the researcher. Through this research, it is hoped that it can increase awareness from various parties ranging from companies, accountants, and the government in realizing GA ideally not only limited to fulfilling obligations so that the triple bottom line principle, the three pillars of sustainability, and the SGDS's, especially goals related to the environment can be achieved.

METHODS

This research is a qualitative study using the kitchenham systematic literature review (SLR) approach. (Savitrah, 2022) Data from Science Direct, Scopus, and Google Scholar are initially consulted for this study. The researcher starts by looking at Science Direct because it includes a "related articles" feature that makes it easier to find related papers (Trisakti School of Management & Rudyanto, 2021). Scientists looked at Science Direct at first because it offers a "related articles" feature that makes it simple to find relevant articles. (Gonzalez & Peña-Vinces, 2023)

Following a search in Science Direct, researchers used the publication years 2013–2022 to search Scopus, Emerald, and Springer for data. This study further searched Google Scholar for additional papers with a "custom range" of 2017–2022, reducing the probability of missing articles. To reduce the quantity of studies, researchers only chose Scopus-indexed papers. High quality research is that which is Scopus-indexed. As this literature analysis seeks to infer the advantages of mandated sustainability reporting, the quality of the research is crucial. Low-quality sources will make it more likely that incorrect conclusions will be reached. The method for choosing papers for this study was as follows:

The researcher's keywords for "green accounting," "social development," "SDGs," "climate change," "environmental accounting," "environmental management accounting," and "carbon disclosure" were used to start the search phase. The researcher reached a choice using NVIVO during the selection process, as well as manually by reading each article's abstract. The chosen articles were then subjected to a thorough analysis.

FINDINGS AND DISCUSSION

Identification of the Meaning of the Expression *Alon-Alon Waton Kelakon* and Its Internalization at Bappeda Jember in the Budgeting Stages.

In the mid of 1980, the companies had done so much work in the field of natural resources and environmental accounting. The united nation and world bank conducted some joint studies that had culminated in the publication of toward improved accounting for the environment. And the revision in1993, the united nations's system of national account (SNA) officially advocated the use of an environmental adjusted national income accounting or known as green accounting. And this accounting is one of important steps to develop the sustainable development. And in some European countries an japan already reported the national income such as conventional account and brand of green accounting.

Green accounting is an accounting system that put environmental costs of company's activities into financial statemen. In practice, green accounting has many forms such as measuring the amount of greenhouse gas emissions or even water usage, tracking the waste produced, and assessing the environmental impact of company's activities. (Rahman & Islam, 2023) The purpose of green accounting is to provide some information to both external and internal, related to company's production that is relevant to the environment. some studies defined environmental accounting in three distinctive contexts: management accounting, financial accounting, and national income accounting. (hosam. at.al, 2020).

(Cohen et al., 2023), who focused the need to link accounting with its green contribution, or environmental conservation and pollution prevention, is credited with originating the term "green accounting" (GA). In this regard, green accounting is included in corporate sustainability and in the coordination of environmental and social processes, in addition to being a social tool that enables reporting on qualitative and positive aspects of the environmental impact generated by organisations. (Saleh & Jawabreh, 2020; Scarpellini et al., 2020).

Four main goals of the information provided by green accounting are: (1) to demonstrate environmental wealth; (2) to represent temporary spaces for the existence and circulation of this type of wealth; (3) to plan potential venues to monitor the behaviour and circulation of environmental wealth using the quantitative and qualitative valuation; and (4) to indicate a prospective aspect. (Agarwal, 2018) Green accounting is a technological-scientific framework for a document that supports decision-making, to put it simply.An exploratory framework for a green accounting system. (Chircop et al., 2025; Sadiku et al., 2021)

Knowing this, businesses must create an internal environmental policy. (Murni & Malik, 2022; Rounaghi, 2019) According to (Gonzalez & Peña-Vinces, 2023), green accounting is typically seen as a tool to lessen the impact of an organization's environmental effect. According to (Bayne et al., 2019) green accounting will assist economic efficiency and advance an organization's potential for innovation and eco-efficiency.

Communication of the procedures, actions, plans, and methods that lessen an organization's environmental effect is crucial for this reason. As per, such communication must be delivered through accounting recognition and be accompanied by an exhaustive or independent financial report. This would provide information on the financial quantification of the key components of green accounting, including the organization's environmental riches, which must be classified as assets, liabilities, patrimony, expenses, costs, and provisions. (Brooks & Schopohl, 2020)

There is currently a shift in perspective on the environmental effects of the industry's success, which has altered how for-profit organisations are perceived—from those responsible for designing products and procedures to those providing after-sales services. Therefore, management is accountable for any profit-making action related to environmental issues as well as the effectiveness of the activity of the institution that it oversees. A profit unit must assume social or environmental responsibility in addition to commercial obligation. The value of the corporate body will rise as environmental costs for maintaining shareholder wealth are disclosed. (Agarwal, 2018; Rounaghi, 2019)

In dealing with actual expenses incurred by the business firm, GA necessarily distinguishes environmental costs from other expenditures and offers a different perspective on giving financial information in this regard. Cost management is influenced by both internal and external influences to the company, on the one hand.

Although environmental satisfaction is the external element, it is challenging to cut expenses by identifying its factors with the intention of removing activities of no economic value (Golden et al., 2017). In other words, even while the firm does not want to stop environmental destruction, it manages and minimises the cost of such operations. Therefore, it is important to differentiate between environmental costs and choose the proper indicators. (Chircop et al., 2025; Eikeset et al., 2018; Rounaghi, 2019)

The adoption of GA methodologies yields the most notable advantages, even though environmental accounting might concentrate on environmental management accounting or financial accounting. This accounting method is centred on gathering, calculating, and assessing costs related to the usage of energy and tangible resources like wood, metal, or coal. (Agarwal, 2018; Brooks & Schopohl, 2020; Rounaghi, 2019) These expenses were typically classified as overhead under standard accounting procedures, but environmental management accounting enables accountants to apply activity-based cost concepts to link these expenses more precisely to specific projects or events. By identifying areas of synergy, decision-makers can lower the amount of waste materials at the programme or enterprise level by being able to precisely understand how these natural resources are utilised across numerous projects.

Sustainability reporting should be a part of environmental accounting because users of environmental reporting need to be aware of environmental performance (users of information want to know what the company has accomplished regarding its relationship with the environment and the community) and the disclosure of information about environmental costs to maximise shareholder wealth, which raises the firm's value. In the end, environmental (green) sustainability will boost corporate value, maximise shareholder wealth, promote sustainable business growth, and so forth. (Rudyanto & Management, 2021)

Implementation of Green Accounting

The companies' activities always get connected to the environment. It doesn't give negative impact in a short time, but it will damage in a long time if the companies don't take responsibility for the environmental protection. Green accounting is an ideal concept for environmental conservation. Study showed that the implementation of green accounting can provide some benefit such as identifying the environmental risk, managing resources sustainably, and transparency in financial statement. Tax carbon is one of the implementations of green accounting in Indonesia can improve the energy efficiency and support green technology innovation. The aim of carbon tax is to reduce the negative impact of climate change, greenhouse gas emissions, and encourage a shift to a low-carbon economy (Indarto & Ani, 2024)

Another research by (Rahman & Islam, 2023) also showed about the relationship between green accounting, energy efficiency, and environmental performance in Bangladeshi pharmaceutical and chemical companies. This research proved that the implementation of green accounting in Bangladeshi pharmaceutical and chemical companies gives positive impact and achieve higher level on environmental performance and energy efficiency. Implementing an energy efficiency can also support the efficient use of energy resources and that is one of step to achieve sustainable environmental performance.

The implementation of green accounting also helps the heavily polluting companies to maintain the sustainable development. And social responsibility information disclosure gives a positive correlation for the development capabilities of heavily polluting companies. (Dhar, 2022) The same research (Meidijati & Augustine, 2022) also explained that Green Accounting significantly has positive effect on economic, social, and governance (ESG). Green accounting can support ESG because it will give some information for the stakeholders and can encourage the company to increase value and performance. Green accounting also can support the company's awareness related to parties' concern for social and environmental.

There was a design program during the period 2000 to 2015, then from 2016 to 2030, the UN again launched a follow-up program, namely the Sustainable Development Goals (SDGs) (Irhamsyah et al., 2019). In the Sustainable Development Goals (SDGs) program, there are 16 programs. One of them at point 13 discusses climate change. Climate change and global warming are the most challenging environmental problems in various countries, including Indonesia. These problems make public concern raise regulations, namely about the environment. Green accounting emerges as one of the most important elements that contribute to improving the company's economic performance without ignoring the surrounding environmental conditions. Internally, the role of green accounting provides information for companies to reduce environmental costs that must be incurred. This will affect the policy that will be the basis for the company's existence in the future. In addition to this, green accounting aims to achieve sustainable growth and development, especially to maintain relationships between communities.

According to (Ikhsan, 2018) explains the opinion that green accounting seeks to improve environmental efficiency by evaluating projects by considering costs and benefits from an economic and business environment perspective to produce quantitative research on costs and environmental protection. In the application and development of green accounting, there are several objectives that are very significant to the environment:

1. Promotes entity accountability and increases environmental transparency.
2. Assist entities in setting strategies to address environmental issues. Environmental issues in the context of the entity's relationship with society and especially with activist or pressure groups on environmental issues.
3. Providing a more positive image results in the entity being able to obtain funds from groups and individuals, in line with the increasing ethical demands of investors.
4. Consumers are encouraged to buy green products, giving the entity a more competitive marketing advantage over non-disclosing entities.
5. Demonstrates the entity's commitment to environmental improvement efforts.
6. Prevention of negative public opinion so that companies operating in environmentally risky areas will receive challenges from the public.

The basis of green accounting is the concept of externalities, which is a special concept to examine the impact of economic activity that should be calculated and recorded in the financial statements. With green accounting, these costs can be considered as assets in the form of investments in environmental social responsibility programs. As a result, the company's profitability will not be affected by the cost of running environmentally friendly operations, instead the company's assets will increase, CSR costs can also be treated similarly, so that the provision of CSR from the company has a positive impact on the company in increasing the use of green accounting. Providing economic benefits for the company in the future including in terms of environmental costs so that the provision of CSR other environmentally friendly costs from the company in the long term will improve the image and good name for the Company, which in turn will bring positive economic benefits to the company (Lako, 2018).

According to (Hansen & Mowen, 2019) argues that environmental costs can be called environmental quality costs. It is the same as quality, environmental costs are costs that occur due to poor environmental quality or due to poor environmental quality that may occur. It has to do with the creation, detection, remediation, and prevention of environmental degradation. For many companies' environmental costs constitute a significant percentage of overall operating costs. This fact, coupled with ecoefficiency, emphasizes the importance of defining, measuring, and reporting environmental costs. There are four categories in the classification of environmental costs, including:

1. Environmental prevention costs are costs for activities undertaken to prevent matters related to the production of waste or garbage that cause environmental damage. Examples of prevention activities are determining pollution, designing procedures and products to measure or eliminate waste, training employees, education on environmental impacts, environmental risk audits, conducting field research, developing environmental management systems, and ISO 14001 certification.
2. Environmental detection costs are costs for activities undertaken to determine whether the company's products, processes, and other activities meet applicable environmental standards. Environmental standards and procedures followed by companies are defined in three ways:
    a. government regulations,
    b. voluntary standards (ISO 14001) developed by the International Standards Organization, and
    c. environmental policies developed by management. Examples of detection activities are auditing environmental activities, inspecting products and processes (for environmental friendliness), developing environmental performance measures, conducting pollution testing, verifying environmental performance, and measuring pollution levels.
3. Environmental internal failure costs are costs for activities that are performed due to the production of waste and garbage but are not discharged to the external environment. So internal failure costs are incurred to eliminate and treat waste and garbage as they are produced. Internal failure activities have one of two purposes, namely:
    a. To ensure that waste and garbage produced are not discharged into the external environment.
    b. To reduce the level of waste discharged so that the amount does not exceed environmental standards. Examples of internal failure activities are the operation of equipment to reduce or eliminate pollution,
    c. treatment and disposal of toxic wastes, and maintenance of pollution equipment.

Environmental external failure costs are costs for activities performed after releasing waste into the environment. External failure costs can be further divided into realized and unrealized categories. Realized external failure costs are the costs experienced and paid by the company. Unrealized external failure costs, or societal costs, are caused by the company but experienced and paid for by parties outside the company

CONCLUSION

budgeting process at Bappeda Jember Regency. Its implementation reflects a structured approach that follows detailed planning, execution, and evaluation stages. This principle emphasizes caution, honesty, and adherence to regulations established by the central government. Despite the challenges encountered in its implementation such as mismatches with timelines and limited human resources Bappeda Jember has successfully maintained both the punctuality and quality of its budgeting process through strong coordination and thorough evaluations. This principle has become an integral part of the institutional work culture, supporting the achievement of objectives through careful yet steady methods. The study demonstrates that alon-alon waton kelakon is not merely a philosophical expression, but also a practical guide that enables Bappeda Jember to carry out its budgeting functions effectively. Its application encourages a budgeting process that is structured, transparent, and rule-abiding, while also accommodating the dynamics of local values. Therefore, the internalization of this Javanese philosophy offers significant contributions to the development of budgeting systems especially those adopting more humanistic and spiritual perspectives rooted in local wisdom.

REFERENCES

Agarwal, V. (2018). A Study On The Importance Of Green Accounting. 4(5), 206–210.

Bayne, L., Purchase, S., & Tarca, A. (2019). Power And Environmental Reporting-Practice In Business Networks. Accounting, Auditing & Accountability Journal, 32(2), 632–657. Https://Doi.Org/10.1108/Aaaj-07-2016-2629

Brooks, C., & Schopohl, L. (2020). Green Accounting And Finance: Advancing Research On Environmental Disclosure, Value Impacts And Management Control Systems Forthcoming, British Accounting Review. 2019.

Chircop, J., Tarsalewska, M., & Trzeciakiewicz, A. (2025). Learning To Be Green : Accounting Comparability And Environmental Violations. The British Accounting Review, 57(5), 101240. Https://Doi.Org/10.1016/J.Bar.2023.101240

Cohen, S., Kadach, I., & Ormazabal, G. (2023). Institutional Investors, Climate Disclosure, And Carbon Emissions. Journal Of Accounting And Economics, 76(2–3), 101640. Https://Doi.Org/10.1016/J.Jacceco.2023.101640

Dhar, B. (2022). Can Green Accounting Save The Environment? Oajrc Environmental Science, 3(1), 1–2. Https://Doi.Org/10.26855/Oajrces.2022.03.001

Eikeset, A. M., Mazzarella, A. B., Davíðsdóttir, B., Klinger, D. H., Levin, S. A., Rovenskaya, E., & Stenseth, N. C. (2018). What Is Blue Growth? The Semantics Of "Sustainable Development" Of Marine Environments. Marine Policy, 87, 177–179. Https://Doi.Org/10.1016/J.Marpol.2017.10.019

Gonzalez, P. C., & Peña-Vinces, J. (2023). A Framework For A Green Accounting System-Exploratory Study In A Developing Country Context, Colombia. Environment, Development And Sustainability, 25(9), 9517–9541. Https://Doi.Org/10.1007/S10668-022-02445-W

Hansen & Mowen. (2019). Akuntansi Manajerial (8th Ed.). Salemba Empat.

Indarto, B. A., & Ani, D. A. (2024). The Role Of Green Accounting Through The Implementation Of Carbon Tax As A Climate Change Mitigation Instrument In Indonesia. 08(01), 73–83. Https://Doi.Org/10.33062/Ajb.V8i01.24

Meidijati, & Augustine, Y. (2022). The Effect Of Tax Accounting, Green Accounting, And Carbon Accounting On Environmental, Social, And Governance Performance: Moderated By Green Intellectual Capital Meidijati. Technium Social Sciences Journal, 31, 371–387. Https://Doi.Org/10.47577/Tssj.V31i1.6446

Murni, & Malik, I. (2022). Green Accounting Analysis Based On Triple Bottom Line Theory For Sustainability Development Goals In Districts Bireuen. 2015–2019. Https://Doi.Org/10.55299/Ijec.V1i2.181

Rahman, M. M., & Islam, M. E. (2023). The Impact Of Green Accounting On Environmental Performance: Mediating Effects Of Energy Efficiency [Preprint]. In Review.

Rounaghi, M. M. (2019). Economic Analysis Of Using Green Accounting And Environmental Accounting To Identify Environmental Costs And Sustainability Indicators. International Journal Of Ethics And Systems, 4(35), 504–512. Https://Doi.Org/10.1108/Ijoes-03-2019-0056

Rudyanto, A., & Management, T. S. Of. (2021). Is Mandatory Sustainability Report Still Beneficial ? Is Mandatory Sustainability Report Still Beneficial ? 18(2). Https://Doi.Org/10.21002/Jaki.2021.08

Sadiku, M. T., Ashaolu, T. J., Adekunte, M. S., & Musa, S. M. (2021). Green Accounting: A Primer. International Journal Of Scientific Advances, 2(1). Https://Doi.Org/10.51542/Ijscia.V2i1.10

Savitrah, R. M. (2022). Tanggung Jawab Sosial Perusahaan Dan Keputusan Finansial Perusahaan: Pendekatan Kitchenham Systematic Literature Review (Slr). Jurnal

Unej, 16(2).