

ESG Integration in Green Accounting for Furniture SMEs: A Model for Measuring Social and Environmental Impact to Support Business Sustainability

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ABSTRACT

This article aims to develop a model for measuring social and environmental impact based on ESG in green accounting practices for furniture SMEs. Sustainability issues encourage business players to evaluate performance not just through profit, but also through environmental, social, and governance responsibility. Although ESG has been widely applied in large companies, its implementation in SMEs is still limited due to low sustainability literacy, limited record-keeping, and the lack of simple instruments. This study uses a qualitative descriptive approach through literature review of scientific articles, sustainable finance regulations, and institutional data related to SMEs and the furniture industry. The study results show that green accounting can serve as a basis for ESG implementation operations because it can identify energy use, raw materials, production waste, workplace safety, and business governance practices. This article offers an ESG measurement model consisting of environmental, social, and governance indicators that can be recorded monthly by furniture SMEs. The model is expected to help SMEs improve cost efficiency, business transparency, reputation, access to financing, and long-term sustainability.

1. INTRODUCTION

Business sustainability has become a main focus in managing modern businesses. Companies and entrepreneurs are no longer just judged by their ability to make a profit, but also by how well they manage environmental impact, social responsibility, and good governance. This shift in focus comes alongside growing attention from stakeholders to climate change risks, resource efficiency, business transparency, and the quality of relationships between businesses and communities. In this context, Environmental, Social, and Governance (ESG) has become an important framework for assessing whether an organization can conduct economic activities responsibly and sustainably (Darsono et al., 2024).

In Indonesia, the sustainability agenda is also strengthened through sustainable finance policies. The Financial Services Authority positions sustainable finance as a comprehensive support from the financial services sector to create economic growth that aligns economic, social, and environmental interests (Otoritas Jasa Keuangan, 2024). This policy shows that the principle of sustainability is not just relevant for big companies, but also for the wider business ecosystem, including micro, small, and medium enterprises. However, implementing ESG in SMEs still faces structural challenges because some SME players don't have proper record-keeping systems, don't understand sustainability indicators, and still see environmental activities as an extra cost.

SMEs hold a strategic position in Indonesia's economy. Data often used by the government show that the number of SMEs reaches around 64.2 million business units, contributing about 61.07% to the Gross Domestic Product, absorbing around 117 million workers or 97% of the total workforce, and accounting for 60.4% of total investment (Kementerian Keuangan Republik Indonesia, 2024). Besides that, the recording data from the Ministry of MSMEs up to December 31, 2024, published by Kadin, shows that around 30.18

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million MSME units have been registered, not including the agriculture and fisheries sectors, with the manufacturing industry sector reaching 4,164,542 business units (Kamar Dagang dan Industri Indonesia, 2025). The data shows that strengthening sustainability in SMEs can have a wide impact on the national economy and people's welfare.

One MSME sector that is relevant to look at from an ESG perspective is furniture. Furniture production is directly related to the use of raw materials like wood, aluminum, iron, glass, fabric, foam, paint, glue, electricity, and water. This process can produce solid waste, dust, leftover paint, material scraps, as well as safety risks at work. On the other hand, the furniture industry also makes an important economic contribution. The Ministry of Industry recorded that the furniture industry grew by 2.07% in 2024, while Indonesia's furniture export value from January to November 2024 reached USD 1.47 billion. This situation shows both an opportunity and a need to strengthen the competitiveness of the furniture industry through more efficient and sustainable production practices (Kementerian Perindustrian Republik Indonesia, 2025).

The problem that arises is that most furniture SMEs are still focused on basic financial transaction recording, like sales, material purchases, salary payments, and profits. Environmental impacts such as energy consumption, waste volume, waste management costs, and the use of eco-friendly materials are not always recorded as business information. Similarly, social aspects like workplace safety, employee training, customer satisfaction, and relationships with the surrounding community are often not documented. As a result, SME owners find it difficult to assess whether their business activities have been efficient, safe, and socially and environmentally responsible.

Green accounting can be an approach that bridges those needs. Green accounting integrates environmental aspects into the process of identifying, measuring, recording, and reporting business costs and benefits. Through green accounting, expenses for electricity, water, wasted raw materials, waste, personal protective equipment, and environmental management can be viewed as managerial information useful for decision-making. In this way, green accounting can serve as a practical foundation for MSMEs in implementing ESG because ESG requires data that can be recorded, measured, and evaluated regularly.

Theoretically, this study is based on Stakeholder Theory, Legitimacy Theory, and the Triple Bottom Line. Stakeholder Theory explains that organizations are responsible to various parties affected by business activities, such as owners, employees, customers, suppliers, the community, the government, and the environment (Freeman, 1984). Legitimacy Theory explains that organizations need to gain social acceptance through activities that align with society's values and norms (Suchman, 1995). Meanwhile, the Triple Bottom Line emphasizes a balance between profit, people, and the planet as the basis of sustainability (Elkington, 1997). These three theories support the idea that furniture SMEs need to integrate economic, social, and environmental aspects into their business management system.

Based on that explanation, the problem statement of this article is how urgent it is to implement ESG in green accounting practices for furniture SMEs, what the relationship is between green accounting and ESG in supporting the sustainability of furniture SMEs, and what simple models of social and environmental impact measurement can be applied. The purpose of this article is to analyze the importance of integrating ESG in furniture SMEs, explain the role of green accounting as the basis for ESG implementation, and formulate a practical ESG measurement model based on green accounting for furniture SMEs.

2. METHODS

This study uses a qualitative descriptive approach with a literature study method and limited empirical validation. This approach was chosen because the article aims to formulate a conceptual model for ESG measurement based on green accounting, rather than testing statistical relationships between variables. A literature study is used to build the conceptual foundation, while empirical validation is conducted to assess understanding, relevance, data availability, and the feasibility of applying the indicators. Empirical data were obtained through semi-structured interviews with SME furniture players. Informants were purposively selected based on criteria: owning or managing a furniture business, being directly involved in the production or business management process, understanding raw material use, knowing how to manage production waste, and having experience in recording business costs.

Data sources consist of academic sources and institutional sources. Academic sources include journal articles on green accounting, environmental accounting, sustainability reporting, ESG disclosure, and MSME sustainability. Institutional sources include publications from the Financial Services Authority, Ministry of Finance, Ministry of Industry, Indonesian Chamber of Commerce, as well as other supporting sources relevant to MSME and furniture industry data.

The research steps were carried out through several stages. First, the researcher identified the main concepts related to ESG, green accounting, sustainability reporting, and MSME sustainability. Second, the collected literature was classified based on the three ESG dimensions: environmental, social, and governance. Third, the researcher synthesized the literature to formulate initial indicators that could be used in an ESG measurement model based on green accounting. Fourth, these initial indicators were organized into a simple checklist tailored to the characteristics of furniture MSMEs. Fifth, the checklist was empirically validated through semi-structured interviews and trials with furniture MSME actors. The interview data were analyzed through data reduction, categorization, and synthesis of findings. The reduction process is done in four stages, namely transcribing the interview results, selecting relevant data, coding, and grouping themes. The validity of the data is also strengthened by confirming with the informants. This confirmation is done to make sure that the researcher's interpretation of the interview results matches what the informants actually meant.

3. RESULTS AND DISCUSSIONS

The Urgency of Integrating ESG In Furniture SMEs

The study shows that ESG is important to implement in furniture SMEs because this sector creates economic, social, and environmental impacts at the same time. Economically, furniture SMEs add value through production, sales, and employment. Socially, furniture businesses involve workers, customers, suppliers, and the surrounding community. Environmentally, the furniture production process uses raw materials and energy and produces waste. Therefore, the sustainability of furniture SMEs can't just be seen from profit alone, but also from the business's ability to manage social and environmental risks.

On the environmental side, furniture SMEs face issues with the use of raw materials and production waste. Wood offcuts, aluminum, iron, fabric, foam, glass, packaging, sawdust, and leftover paint can be sources of waste as well as potential pollution if not managed. Keeping track of waste is important because unmeasured waste is hard to control. On the other hand, recorded waste can be evaluated to be resold, recycled, used as additives, or reduced through improvements in production patterns.

On the social dimension, furniture SMEs need to pay attention to the safety and well-being of their workers. The interview results show that the social aspect is relatively easy for MSME actors to recognize because it is directly related to daily production activities. Indicators like the number of workers, wage systems, use of personal protective equipment, work guidance, and involvement of local labor are considered relevant to apply. Work risks can come from using cutting machines, welding tools, chemicals, dust, and physical workload. Social indicators don't have to be complicated, but can start with recording the number of workers, availability of protective gear, work accident incidents, skill training, customer complaints, and forms of social contributions to the surrounding environment. This information can help business owners understand the quality of their relationship with the people involved in their activity chain.

In terms of governance, the main challenge for SMEs is record management. Many SMEs still mix personal and business finances, don't have production SOPs, haven't properly recorded raw material stocks, or don't have complete business legality. In fact, good governance will boost trust from customers, suppliers, the government, and financial institutions. From an ESG perspective, governance is fundamental because messy record-keeping makes it hard to verify environmental and social data.

Green Accounting as The Basis for ESG Operations

Green accounting has a strategic role as the foundation for ESG operations. ESG needs indicators, and indicators need data. That data can only be obtained if SMEs have a consistent recording system. At the beginning, recording doesn't have to be done with a complex system. SMEs can use a cash book, spreadsheet, or simple recording apps to track electricity, water, raw materials, waste volume, waste transportation costs, purchases of personal protective equipment, and worker training costs.

Research by Latifah & Soewarno, (2023) Research by Latifah & Soewarno (2023) shows that environmental accounting strategies affect the sustainability performance of SMEs, and waste management acts as a mediator. This finding emphasizes that environmental recording will be more beneficial if followed by real management actions. Indriastuti & Mutamimah, (2023) also found that green accounting and financial performance can boost the sustainable performance of SMEs. So, green accounting isn't just about environmental compliance, but it can also be a tool for cost efficiency and improving business performance.

In the practice of furniture SMEs, green accounting can change the way business owners view costs. Electricity costs are not just seen as a monthly bill, but also as an indicator of machine efficiency. Raw material costs are not just understood as production costs, but also as a measure of how effectively materials are used. Waste is not just considered leftover production, but also as information about wastefulness,

potential additional income, or environmental risks. With this mindset, green accounting helps SMEs make more rational and long-term-oriented decisions.

Conceptual Model of Green Accounting-based ESG Measurement

The conceptual model proposed in this article places green accounting as the initial foundation. Green accounting generates operational data and environmental costs, which are then used to measure ESG indicators. ESG measurement provides information on social and environmental impacts. This information then becomes the basis for improving business processes, cost efficiency, reputation enhancement, and the sustainability of furniture SMEs. This relationship is shown in the figure 1.



Figure 1. Conceptual framework for integrating green accounting and ESG in furniture SMEs

Figure 1 shows that the sustainability of furniture SMEs does not appear instantly, but through a structured measurement process. Green accounting serves as a recording system that provides data on resource usage, environmental costs, and social activities. This data is then classified into ESG dimensions. Once measured, SMEs can see the social and environmental impacts generated by their business activities. The measurement results become the basis for enhancing business sustainability through efficiency, social legitimacy, access to financing, and market competitiveness.

ESG Measurement Indicators for Furniture SMEs

To make the model practical, ESG indicators need to be simplified. Indicators that are too complex will be difficult for SMEs to use. Therefore, the proposed indicators should meet three criteria: easy to record, have data sources available to SMEs, and be relevant to the characteristics of furniture production. Table 1 presents ESG measurement indicators based on green accounting that can be used by furniture SMEs.

Table 1. ESG Measurement Indicators Based on Green Accounting in Furniture SMEs

Dimensions	Indicators	Simple Measures	Data Sources
Environmental	Electricity Consumption	kWh or monthly electricity cost	Electricity Bill
Environmental	Water Consumption	m ³ or monthly water cost	Water Bill/Usage Records
Environmental	Production Waste	Kg of wood, aluminum, steel, fabric, or glass waste	Production Records
Environmental	Waste Utilization	Percentage of waste sold, recycled, or reused	Waste Records
Environmental	Raw Material Efficiency	Ratio of materials used to materials wasted	Inventory Cards/Purchase Invoices
Social	Number of Employees	Number of permanent and daily workers	Employee Records
Social	Occupational Safety	Number of workplace accidents per period	Workplace Incident Records
Social	Personal Protective Equipment (PPE)	Availability and quantity of PPE provided	Equipment Records
Social	Employee Training	Training or mentoring hours per year	Attendance Lists/Documentation
Social	Customer Satisfaction	Number of complaints or customer satisfaction score	Customer Forms/Message Records

Governance	Business Legality	Availability of Business Identification Number (NIB) or business license	Legal Documents
Governance	Financial Recordkeeping	Availability of cash books, sales records, and purchase records	Cash Books/Accounting Applications
Governance	Financial Separation	Availability of separate business accounts or financial records	Bank Accounts/Cash Records
Governance	Production SOP	Availability of written work procedures	SOP Documents
Governance	Tax Compliance	Availability of Taxpayer Identification Number (NPWP) and tax reporting	Tax Documents

Table 1 shows that ESG indicators for furniture SMEs can be built from data that's actually already available in daily business activities. Electricity bills, material purchase receipts, production records, employee data, legal documents, and cash books can be turned into sustainability information. So, measuring ESG doesn't always require an expensive system. What you need is disciplined record-keeping and the ability to organize data into environmental, social, and governance dimensions.

Implementation Challenges in Furniture SMEs

The first challenge is limited literacy. Many MSME players are not familiar with terms like ESG, green accounting, or sustainability reporting. However, some ESG practices are actually already being done indirectly, like saving electricity, reusing leftover materials, maintaining product quality, and building good relationships with customers. Therefore, ESG education for MSMEs should start not with technical terms, but with practices that are close to daily business activities.

The second challenge is the limitation of record-keeping. ESG requires consistent data, while many SMEs still don't have structured bookkeeping. If personal and business finances are still mixed, production costs, environmental costs, and social costs are hard to calculate. Therefore, the initial stage of ESG implementation needs to focus on fixing basic records, like cash books, material stock cards, worker lists, waste records, and legal document archives.

The third challenge is the perception of cost. SMEs often think that eco-friendly practices require a big investment. In fact, implementing ESG can start with low-cost activities, like separating waste, selling leftover materials that still have value, maintaining machines for energy efficiency, using basic protective gear, and keeping track of customer complaints. These small practices can lead to cost savings and reduce business risks.

The fourth challenge is the lack of a simple reporting standard. Research (Setyaningsih et al., 2024) shows that SMEs face financial, knowledge, technology, organizational, policy, regulatory, and socio-environmental obstacles when preparing sustainability reports. Therefore, the measurement model offered in this article is not aimed at producing complex formal sustainability reports, but rather simple reports that can be used as an internal evaluation tool and for communication with stakeholders.

Implications for Business Sustainability

Integrating ESG into green accounting has several implications for the sustainability of furniture SMEs. First, measuring ESG can boost cost efficiency. When SMEs track energy use, raw materials, and waste, business owners can spot sources of waste. Efficient use of materials and energy will affect production costs and business margins.

Second, measuring ESG can boost reputation and social legitimacy. From the perspective of Legitimacy Theory, a business needs social acceptance to keep operating. Furniture SMEs that maintain environmental cleanliness, worker safety, product quality, and transaction honesty will find it easier to gain trust from customers and the surrounding community. That trust becomes an important intangible asset for business sustainability.

Third, ESG can strengthen access to financing. Financial institutions are increasingly paying attention to sustainability aspects in their funding. SMEs that have orderly records, business legality, and clear operational data will find it easier to show business viability. Even though making a formal ESG report is not required yet, simple ESG record-keeping can serve as proof that the business is managed responsibly.

Fourth, ESG can improve supply chain readiness. The furniture industry has export market opportunities, but the global market is increasingly paying attention to the origin of raw materials, product quality, and responsible production practices. Furniture SMEs that have been keeping track of raw materials, waste, workplace safety, and governance from the start will be better prepared to meet customer, business partner, and market standards.

Literature Synthesis as The Basis for Choosing Indicators

The selection of ESG indicators in this article wasn't done abstractly; instead, it was derived from literature findings on environmental accounting, sustainability reporting, and SME characteristics. Green accounting literature emphasizes the importance of recording environmental costs because these costs are often hidden within general production expenses. For furniture SMEs, environmental costs can appear in the form of wasted raw materials, unused production leftovers, inefficient energy use, water used in the finishing process, as well as cleaning and waste transportation costs. If these costs aren't recorded, business owners will have a hard time understanding the link between production practices and financial efficiency.

ESG literature on SMEs also shows that business size, resource limitations, and administrative capacity affect the quality of sustainability disclosures. Therefore, the indicators designed for furniture SMEs must meet three criteria. First, the indicators should be easy for business owners and administrative staff to understand. Second, the indicators should be measurable with documents that are already available, like purchase receipts, electricity bills, stock records, cash books, salary payment proofs, and customer complaint lists. Third, the indicators should provide information that can be directly used to improve business decisions.

The literature review shows that green accounting acts as a link between operational data and ESG measurement. Green accounting provides information on costs and environmental impacts. ESG then organizes this data into the environmental, social, and governance dimensions. The sustainability of SMEs can be assessed through changes in business practices, such as reduced waste, improved workplace safety, orderly bookkeeping, and better business reputation. A summary of the literature that forms the basis for selecting indicators is presented in Table 2.

Table 2. Literature Synthesis for the Development of an ESG Model Based on Green Accounting

Literature Sources	Research Focus	Main Findings	Relevance for furniture SMEs
Freeman, (1984)	Stakeholder Theory	Businesses need to pay attention to the interests of those affected by their activities.	Social and governance indicators need to cover workers, customers, suppliers, the government, and the surrounding community.
Suchman, (1995)	Legitimacy Theory	Organizations need social acceptance to keep running.	Waste recording, workplace safety, and business compliance form the basis of social legitimacy for SMEs.
Elkington, (1997)	Triple Bottom Line	Business success needs to balance profit, people, and the planet.	The ESG model needs to link economic efficiency, worker protection, and environmental management.
Gray, (2010)	Sustainability accounting	Sustainability accounting needs to show the organization's connection to social and environmental impacts.	Green accounting data can be used to assess the broader impact of furniture production.
Latifah & Soewarno, (2023)	Environmental accounting dan waste management in SMEs	Environmental accounting strategies are related to the sustainability performance of SMEs through waste management.	Production waste needs to be a main indicator in measuring the environmental impact in furniture SMEs.
Indriastuti & Mutamimah, (2023)	Green accounting and sustainable performance UMKM	Green accounting supports sustainable performance by strengthening financial performance.	Recording environmental costs needs to be linked to cost efficiency and business performance.
Setyaningsih et al., (2024)	Sustainability reporting in SMEs	UMKM menghadapi hambatan keuangan, pengetahuan, teknologi, organisasi, regulasi, dan sosial-lingkungan.	Instrumen ESG untuk UMKM harus sederhana, murah, dan bertahap.
Cardoni & Kiseleva, (2025)	Communication ESG in SMEs	The quality of ESG disclosure is influenced by business size, resources, and communication strategy.	Simple ESG reporting can start with a checklist and a short narrative based on business data.

Table 2 shows that ESG indicators for furniture SMEs need to combine theoretical and practical dimensions. On the theoretical side, indicators should be able to meet stakeholder needs, build legitimacy, and balance profit, people, and planet. On the practical side, indicators should be simple enough to record so they don't add too much administrative burden for SME operators.

Operationalization of Environmental Costs in Green Accounting

One of the main contributions of green accounting is helping business owners recognize environmental costs that have so far not been seen as separate items. In a furniture business, environmental costs are often spread across various accounts, such as raw material costs, electricity costs, machine maintenance costs, cleaning costs, transportation costs, and work equipment costs. If all of these costs are just recorded as general expenses, the business owner won't be able to tell which parts are related to resource waste or environmental impact.

The operationalization of green accounting can be done by separating conventional production costs and costs related to the environment. For example, leftover wood or aluminum can be recorded as raw material waste. The cost of transporting production leftovers can be recorded as waste management costs.

Purchasing masks, gloves, and eye protection can be recorded as work safety costs, which also support the social dimension of ESG. With this separation, SMEs get clearer information about costs related to sustainability.

For furniture SMEs, this operationalization doesn't need to immediately use a complex accounting system. At the initial stage, business owners can create a simple worksheet that includes the date, type of activity, amount of materials used, costs incurred, type of waste, and management actions. This data is then summarized each month. If done consistently, green accounting can become a tool for evaluating production, not just a reporting tool. An example of operationalizing environmental costs is shown in Table 3.

Table 3. Operationalization of Environmental Costs in Furniture SMEs

Business Activity	Costs/Impacts Recorded	ESG Dimension	Information Benefits
Cutting wood, aluminum, steel, or glass	Quantity of materials used, materials wasted, and residual material value.	Environmental	Identifies the level of raw material efficiency and opportunities for waste reduction.
Use of production machinery	Electricity consumption, machine maintenance costs, and machine operating hours.	Environmental	Identifies energy-intensive machines and preventive maintenance requirements.
Finishing, painting, and adhesive application	Use of chemicals, leftover paint, packaging waste, and workplace safety costs.	Environmental dan Social	Reduces hazardous waste risks and improves worker safety.
Production waste management	Waste disposal costs, revenue from waste sales, or reuse of leftover materials.	Environmental	Assesses whether waste represents a cost burden or a source of added value.
Worker protection	Purchase of Personal Protective Equipment (PPE), safety training, and workplace accident records.	Social	Enhances occupational safety and reduces the risk of production disruptions.
Business administration and legal compliance	Costs related to business licensing, taxes, bookkeeping, and SOP development.	Governance	Improves transparency, compliance, and stakeholder trust.

Table 3 emphasizes that green accounting is not separate from management accounting. Environmental data can be used to control costs, determine more accurate production costs, assess raw material productivity, and improve work processes. Therefore, measuring ESG is not just a moral obligation, but it can also provide economic benefits that are directly felt by SMEs.

Illustration of Simple ESG Score Recording and Calculation

To make the model easier to understand, this article provides an illustration of its application on a small-scale furniture MSME. This illustration is not empirical data but an example of instruments that business owners can use. The MSME is assumed to be producing tables, chairs, cabinets, and shelves using wood, aluminum, and other supporting components. Recording is done over one month using the most easily measurable priority indicators.

In the environmental dimension, SMEs record electricity consumption, the amount of raw material waste, and the percentage of waste that is reused. In the social dimension, SMEs record the use of personal protective equipment, workplace accidents, and customer complaints. In the governance dimension, SMEs record the availability of business legality, cash bookkeeping, and production SOPs. Each indicator is given a score from 0 to 3. A score of 0 means there is no recording or practice at all. A score of 1 means the practice exists but is not yet regular. A score of 2 means the practice is regular but has not been evaluated. A score of 3 means the practice is regular, documented, and used for improvement.

This scheme is intentionally made simple so that it can be applied by MSME players without external consultants. The goal is not to produce an ESG rating like public companies, but rather to provide an initial diagnostic tool. With this score, MSMEs can identify which dimension is the weakest and set improvement priorities. An example of the scoring instrument is presented in Table 5.

Table 4. Simple ESG Score Illustration for Furniture SMEs

Dimension	Priority Indicator	Score 0-3	Initial Interpretation
Environmental	Electricity consumption is recorded monthly	2	Regular recording has been implemented, but the data has not yet been used to compare efficiency across months.
Environmental	Raw material waste is sorted and weighed	1	Waste sorting has begun, but waste volumes are not yet recorded consistently.

Dimension	Priority Indicator	Score 0-3	Initial Interpretation
Environmental	Residual materials are reused or sold	2	Some waste has generated added value, but its percentage has not yet been calculated.
Social	Personal Protective Equipment (PPE) is available and used by workers	2	PPE is available, but compliance with its use has not been evaluated regularly.
Social	Workplace accidents are recorded	1	Records are not yet formalized and still depend on the business owner's memory.
Social	Customer complaints are documented	2	Complaints received through chat or telephone are addressed, but no monthly summary has been prepared.
Governance	Business legal documentation is available	3	Legal documentation has been obtained and can be used for partnerships or financing purposes.
Governance	Cash inflow and outflow bookkeeping is available	2	Financial records are available, but not all environmental cost items are recorded separately.
Governance	Written production SOPs are available	1	Work procedures exist informally but have not yet been fully documented.

Based on the illustration in Table 4, the environmental score is obtained from the average of 2, 1, and 2, which is 1.67. The social score is obtained from the average of 2, 1, and 2, which is 1.67. The governance score is obtained from the average of 3, 2, and 1, which is 2.00. Using the simple ESG score formula explained earlier, the overall ESG score is 1.78. This value indicates that the MSMEs already have basic ESG practices in place, but still need improvements in waste recording, work accident recording, and production SOP documentation.

The interpretation of scores needs to be done carefully. Simple ESG scores are not meant to rigidly compare one MSME with another, since business characteristics can differ. The scores are more appropriately used as an internal monitoring tool over time. If next month's score goes up, it means the MSME has made improvements. If the score goes down, the business owner can quickly trace the cause. That way, this model serves as an organizational learning tool for furniture MSMEs.

A Simple Sustainability Report Draft for Furniture SMEs

After the ESG indicators and scores are recorded, the next step is to prepare a simple sustainability report. This report doesn't have to be as thick as those of large companies. For furniture SMEs, the report can be made as a one- to three-page summary that includes the business profile, a summary of production activities, environmental indicators, social indicators, governance indicators, issues faced, and improvement plans. The report can be updated every semester or every year.

A simple sustainability report has several benefits. First, it helps business owners see the development of their business more comprehensively. Second, the report can be used as supporting documents when applying for financing, joining MSME development programs, or collaborating with buyers who require responsible business practices. Third, the report can increase transparency with employees and customers. Fourth, the report serves as a learning archive to improve production processes in the next period.

The suggested report structure consists of five parts. The first part is a brief profile of the MSME, including the business name, location, type of product, number of employees, and production capacity. The second part is a summary of environmental indicators, such as energy consumption, raw material usage, and production waste. The third part is a summary of social indicators, like workplace safety, training, and customer complaints. The fourth part is a summary of governance, including legality, bookkeeping, and SOPs. The fifth part is an action plan for improvements for the next period.

Action plans need to be realistic in order to be carried out. For example, if the main issue is too much wood waste, the action plan could involve improving cutting patterns, turning leftover wood into small products, or collaborating with collectors. If the main issue is workplace safety, the action plan could include providing PPE, putting up instruction boards, and recording work incidents. If the main issue is management, the action plan could involve separating business and personal accounts or creating simple SOPs.

Table 5. Simple Sustainability Report Format for Small Furniture SMEs

Report Section	Minimum Content	Data Source	Frequency
Business Profile	Business name, product type, location, number of employees, and production capacity.	Business administrative records	Tahunan

Report Section	Minimum Content	Data Source	Frequency
Environmental Summary	Electricity consumption, water consumption, raw materials, production waste, and waste utilization.	Utility bills, invoices, inventory records, waste records	Bulanan/semesteran
Social Summary	Personal Protective Equipment (PPE), training, workplace accidents, customer complaints, and social activities.	Employee records, incident reports, customer summaries	Bulanan/semesteran
Governance Summary	Business legal compliance, bookkeeping, Standard Operating Procedures (SOPs), tax compliance, and separation of business finances.	Legal documents, cash books, SOP documents, tax records	Semi-annual/Annual
Improvement Plan	Key issues, improvement targets, implementation schedule, and responsible persons.	ESG indicator evaluation results	Semi-annual/Annual

The format in Table 5 can be used as an initial document before SMEs prepare a more formal report. In the context of vocational accounting, this format can also serve as learning material for students to understand how green accounting concepts are applied to real business units. Students not only learn to record financial transactions but also connect the recording with social impact, environmental impact, and business sustainability.

Conceptual and Practical Contributions to Vocational Accounting

This article has a conceptual contribution because it connects green accounting, ESG, and the sustainability of furniture SMEs within a single measurement framework. Until now, ESG has often been understood as a concept only relevant for large or publicly listed companies. This article shows that ESG can be simplified into operational indicators suitable for the capacity of SMEs. This simplification is important so that ESG does not just remain a normative discourse but can become a management tool used in everyday business activities.

The practical contribution of this article lies in the development of indicators, scoring schemes, and a simple sustainability report format. MSME actors can use this model to start recording sustainability without needing an expensive information system. Local governments, cooperatives, MSME support institutions, and financing agencies can use this model as an initial assessment tool to see the sustainability readiness of furniture MSMEs. In this way, the model can serve as a bridge between the needs of sustainability policies and the administrative realities of MSMEs in the field.

For vocational accounting education, this article gives an example that accounting not only plays a role in preparing financial statements but also in measuring social and environmental impact. Vocational students need to be equipped with the skills to record operational data, identify environmental costs, create simple ESG indicators, and make sustainability reports that can be used by SMEs. These competencies align with the industry's growing demand for accounting graduates who understand sustainable business practices.

The developed model also opens up opportunities for further research. The next studies can test this model empirically on furniture SMEs in certain areas, compare ESG scores across different types of furniture businesses, or examine the impact of green accounting on cost efficiency and business performance. Quantitative research can also be conducted using SEM-PLS to test the relationships between green accounting, ESG measurement, environmental performance, social performance, governance quality, and sustainability performance. With empirical testing, this conceptual model can be developed into a more valid and reliable instrument.

4. CONCLUSION

Implementing ESG in furniture SMEs is a strategic necessity to meet the demands of business sustainability. Even though ESG is often associated with big companies, the principles of environmental, social, and governance can be applied simply by SMEs through green accounting practices. Green accounting helps SMEs record and measure energy consumption, raw material usage, production waste, workplace safety, customer satisfaction, business legality, and financial bookkeeping. Interviews and checklist trials show that furniture SMEs don't fully understand the term ESG formally, but they have carried out some practices that align with sustainability principles. These practices include using leftover wood, hiring local workers, keeping receipts, recording business expenses, and handling business legality.

This article concludes that green accounting serves as the foundation for ESG measurement because it provides operational data that can be used to assess social and environmental impacts. The proposed model consists of three main dimensions: environmental, social, and governance, with indicators that are easy to

record using simple data sources like electricity bills, purchase receipts, production records, employee data, cash books, and legal documents. This model can be used as a monthly checklist and a basis for preparing simple sustainability reports for furniture SMEs.

Practical advice for furniture MSMEs is to start applying ESG from the easiest record-keeping areas, such as electricity consumption, raw material usage, production waste, workplace accidents, customer complaints, and cash bookkeeping. Advice for the government, universities, and MSME support institutions is to provide simple ESG guidelines based on green accounting that fit the characteristics of MSMEs. Future research can test this model empirically using primary data from furniture MSMEs through surveys, case studies, or SEM-PLS methods so that its academic and practical contributions become stronger.

The practical implication of that conclusion is the need for step-by-step guidance. MSME players don't need to immediately prepare complex sustainability reports but can start with recording energy, raw materials, waste, workplace safety, legality, and bookkeeping. MSME mentors, vocational universities, and financial institutions can help by providing simple recording formats, training, and regular evaluations.

The limitation of this article is that the model developed is still conceptual and based on a literature study. Therefore, future research is suggested to conduct field tests on furniture SMEs so that the indicators developed can be validated based on empirical conditions. Field testing is also important to find out which indicators are the easiest to implement, which require guidance, and how the relationship is between a simple ESG score and cost efficiency as well as business sustainability.

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