

The Challenge and Opportunity of Practice and Disclosure  
Sustainability in Central Java SMEs



INFO ARTICLE

ABSTRACT

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*Sustainability practices and disclosures for business organizations with large capacities can have a positive impact on the company's image and increase company profits. In contrast to SMEs with limited business capacity such as Batik SMEs in Central Java, they have less awareness of sustainable practices and disclosures. SMEs as business actors also have an impact on their business activities on Environmental, Social and Governance. The aim of this research is to analyze how ESG challenges and opportunities are practices and disclosures by Batik Bayat SMEs and Batik Lasem SMEs to describe the journey of UKM towards sustainable development. The analysis was carried out using the Simplified ESG Disclosure Guide (SEDG) for SMEs. This research uses a qualitative approach with in-depth investigation methods. The findings of this research are that there are many opportunities and challenges for Batik Lasem SMEs and Batik Bayat SMEs in sustainability practices and disclosure.*

**1. INTRODUCTION**

Companies in the current era of globalization and technological progress no longer only look at the sustainability aspect from the perspective of improving the company's economy, but must also look at the environmental and social aspects. Companies around the world are noted to be shifting from short-term goals of maximizing profits to achieving long-term

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sustainable environmental, social and governance (ESG) goals (Zhao et al., 2018). This is because companies are aware that the negative impact on ecological integrity, social justice and economic stability is influenced by the company's own greedy behavior (Laine et al., 2021; Lako, 2018). Lako (2018) further stated that when the series of impacts that companies have on the environment, social and economy becomes clear, companies are increasingly being asked to be responsible for the impacts of using environmental and social resources. The company's responsibility takes the form of continuous disclosure which is not only related to the environment, but also economic and social. This is because companies that are committed to Environmental, Social, and Governance (ESG) disclosure can overcome possible obstacles and attract investment now and in future to strengthen the basic pillars of the business and increase market share and profit growth and owner's equity value (Chen et al., 2023; Lako, 2018).

Increasing ESG disclosure is not only carried out by companies that have large capacity, but also companies that have limited capacity such as SMEs. SMEs as business actors also have an impact on their business activities, one of which has an impact on social and environmental impacts. According to Auemsuvarn (2019) and Putri et al (2023), if SMEs cannot ensure that the environment is protected from damage, this will have an impact on disrupting the SME economy itself which will ultimately have an impact on the country's economy. SMEs can have a sustainable competitive advantage by having unique characteristics and continuing to adapt to current developments (Auemsuvarn, 2019; Nugroho et al., 2023). SMEs must also be able to adapt to developments in the current business world which are increasingly rapid and rapid, one of which is sustainability.

All companies from various fields must be able to develop economically and not ignore environmental and social quality, one of which is SMEs. Currently, business actors such as SMEs also increasingly need to pay serious attention to the social community and environment in which they operate (Lilis et al., 2022). Furthermore, according to Auemsuvarn (2019) and Auliana & Alhazami (2023) that SMEs are business actors who play an important role in a country's economy and their business development continues to increase by developing creative and innovative ideas to face business competition, so the sustainability practices of

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SMEs are very important. need to be analyzed and expressed. Although the important role of SMEs in the economy and social structure has been recognized by the political, academic and professional communities, there is still little research related to sustainability in SMEs (Martins et al., 2022). Based on this, Martins et al (2022), further stated that more in-depth research is urgent regarding the sustainability agenda for SMEs, because a good ESG rating will strengthen the company's position (Tan & Zhu, 2022).

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SMEs as business actors in carrying out their business activities also have a direct impact on the environment and one of them is Batik SMEs. Batik SMEs continues to grow, especially those in Central Java Province such as Bayat Batik SMEs and Batik Lasem SMEs. Batik SMEs such as Batik Bayat SMEs and Batik Lasem SMEs have the potential for a large environmental impact through waste such as gas waste from heating fumes, liquid waste containing chemical dyes and solid waste originating from wax waste. This is in line with what was stated by Kurniawan et al (2014), that the batik industry causes impacts in the form of organic liquid waste with large volumes, thick colors, strong odors and has temperature, acidity (pH), Biochemical Oxygen Demand (BOD), high Chemical Oxygen Demand (COD), Total Suspended Solid (TSS). Apart from environmental impacts, the importance of sustainability practices and disclosures by Batik Bayat SMEs and Batik Lasem SMEs is because these two batik SMEs have exported overseas and should be able to manage sustainability practices and disclosures. Therefore, issues related to sustainability practices and disclosures in the Batik industry are important. According to Martins et al (2022) even though SMEs are economic drivers and play an important role in managing global social and environmental resources, SMEs tend to have limited capacity.

Based on the background and presentation of several findings and facts above, researchers are interested in finding out how sustainability practices and disclosures in Batik SMEs, especially Batik Bayat SMEs and Batik Lasem SMEs support sustainability. This research aims to analyze how ESG challenges and opportunities are practiced and expressed by Batik Bayat SMEs and Batik Lasem SMEs to describe the journey of SMEs towards sustainable development. The analysis was carried out using the Simplified ESG Disclosure Guide (SEDG) for SMEs in Supply Chains to see to what extent the indicators related to practices

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and disclosures that Batik Bayat SMEs and Batik Lasem SMEs have implemented unconsciously in their business, as well as how much environmental and social impact is produced by Batik Bayat SMEs and Batik Lasem SMEs.

## **2. LITERATURE REVIEW AND HYPOTHESIS**

### **Stakeholders theory**

Stakeholders theory according to Freeman states that the true success of a company lies in the satisfaction of all its stakeholders, not just shareholders. Stakeholders include individuals or groups who benefit or are harmed by the company's actions (Freeman, 1994). Herold (2018) further stated that stakeholders are those who have a stock in an organization and have something at risk, and they usually include internal stakeholders as well as external stakeholders (shareholders, suppliers, customers, non-profit organizations). Government, business associations or government authorities. Stakeholders claim the right to intervene in business, this is reflected in their expectations of the company. Therefore, companies must pursue two goals, the first is to generate income, and the second is to maintain good relations with the environment and stakeholders on which it depends (Galant, 2017).

Stakeholder theory is relevant to companies that seek to help protect the environment, seek to improve social welfare and community relations, and often embrace governance practices that maximize value (Peng & Isa, 2020). Peng & Isa (2020) further stated that satisfied and happy employees will be more motivated in their work; satisfied customers will foster loyalty, satisfied suppliers will provide discounts, and so on, which in turn will improve the company's reputation, and lead to better financial performance and sustainability.

Based on stakeholder theory, it can be concluded that company policies to take the initiative to implement ESG can protect profits and increase shareholder value. Because when a company contributes to compensation for environmental and social losses caused by its economic activities, and the better the company is at managing relationships with all stakeholders, the more successful the company will be over time (Freeman, 1994; Galant, 2017; Herold, 2018; Peng & Isa, 2020).

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### Batik Bayat SMEs dan Batik Lasem SMEs

According to Law Number 20 of 2008, it is stated that SMEs is an independent productive business, developed by either individuals or business entities. This business is not a subsidiary or branch of a company, either directly or indirectly. Micro Business criteria include maximum assets of 50 million and turnover of 300 million. In line with what was stated by Francesco Perrini et al (2007) and Martins et al (2022) that SMEs have special characteristics that differentiate them from larger SMEs, where SMEs tend to be managed by owners and are personalized, independent, and carry out many tasks, limited to cash, based on personal relationships and informality, clustered within local production systems, closely connected to local communities, and have limited access to financial resources. As business actors, SMEs also need to pay serious attention to the community, social and environment in which they operate (Lilis et al., 2022). However, according to Das et al (2020) that the use of sustainability management tools and frameworks is still poorly practiced and disclosed in most SMEs, considering that these tools and frameworks are basically designed for large companies and do not meet the specific needs of SMEs. Likewise, Batik Bayat SMEs and Batik Lasem SMEs still do not fully implement sustainability, so it is a challenge and opportunity for them to implement ESG practices and disclosures.

Batik Bayat SMEs is one of the icons in the field of batik crafts in Bayat District, Klaten Regency, Central Java Province. The typical pattern of Batik Bayat is sogan brown and the earth is ukel and grinsing which are combined. Meanwhile, the motifs are taken from classic Solo Batik motifs such as sido motifs, cement motifs and others, where the dyes used also use natural dyes. Batik Bayat crafts have been marketed not only in Klaten Regency but also outside the city and even abroad such as Malaysia, Thailand and India.

Batik Lasem SMEs is a SMEs that operates in the field of batik crafts located in Lasem District, Rembang Regency, Central Java. One of the superior products from Batik Lasem is hand-written batik made from natural dyes. Lasem hand-written batik has a special pattern with a red chicken blood color which is said to be very difficult for batik makers from any region to imitate. The uniqueness of Batik Lasem also lies in its motif which is a

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combination of Chinese cultural influences, local culture of the northern coastal communities of Central Java and the culture of the Solo and Yogyakarta palaces.

### Practice and Disclosure SEDG for SMEs

Simplified ESG Disclosure Guide or SEDG is a guide that helps SMEs prepare to disclose Environmental, Social and Governance (ESG) data to their stakeholders in line with international standards. The aim of SEDG is to provide an overview for SMEs as data creators to be able to provide simple and standardized disclosures so that they can be tracked and reported to stakeholders (Capital Markets Malaysia & Securities Commission Malaysia, 2023). SEDG disclosure consists of 3 pillars and 15 topics. Pillar 1 is the Environment which consists of topics Emissions, Energy, Water, Waste and Materials. Pillar 2 is the Social which consists of the topics Human Rights and Labour Standards, Employee Management, Diversity, Equity and Inclusion, Occupational Health and Safety, and Community Engagement. Pillar 3 is the Governance which consists of topics Governance Structure, Policy Commitments, Risk Management and Reporting, Anti-Corruption and Customer Privacy.

As time passes, natural resources become increasingly depleted, and environmental changes occur more rapidly; as a result, international legal bodies and most developed countries continually raise questions regarding sustainability. In the last decade, sustainability disclosure has attracted the interest of many international organizations seeking to realize a sustainable green economy (Ellili, 2022). Furthermore, Herold (2018) said that more and more companies are disclosing information related to sustainability because it is a response to global challenges and climate change. ESG disclosure increases transparency, reduces information asymmetry and increases investment efficiency, especially for companies that provide products and not services, their ESG disclosure reflects their social innovation (Ellili, 2022; Shen, 2023).

It was concluded that the Simplified ESG Disclosure Guide (SEDG) for SMEs is appropriate to use as a disclosure guide for SMEs, especially Batik Bayat SMEs and Batik Lasem SMEs where both SMEs are companies that provide products, not services. Batik Bayat SMEs and Batik Lasem SMEs as companies with limited resources will find it difficult

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and a challenge to be able to carry out overall ESG practices and disclosure, but they can do something simple by disclosing ESG on social media, where this is also an opportunity promotion for Batik Bayat SMEs and Batik Lasem SMEs.

### 3. RESEARCH METHODS

This research uses a qualitative approach with phenomenological analysis, which is an approach to qualitative data analysis that aims to understand individuals' subjective experiences in dealing with certain phenomena or events. An in-depth analysis was carried out regarding environmentally friendly industrial management practices and sustainable reporting. Qualitative research is research where the type of data used is generally text, writing, phrases, groups of words or sentences that clarify events or happenings. Data collection was carried out using several qualitative data collection techniques, namely, 1) interviews, 2) observations, and 3) documentation studies. The process of analyzing and interpreting data in this research was carried out by coding, reducing data, presenting data and drawing conclusions. Moleong (2013) states that qualitative research methodology is research that produces descriptive data, either in the form of spoken or written words from people or observed behavior. Participants in this research were 6 SME owners, namely 3 Batik Lasem SMEs owners and 3 Bayat Batik SMEs. The cities of Lasem and Bayat were chosen because their batik industry shows uniqueness in making batik with very distinctive hand-written batik models by the local wisdom of each region. Apart from that, there are also differences between the two, where Lasem batik still uses chemical dyes, while Bayat batik uses natural dyes.

### 4. RESULTS AND DISCUSSION

This research analyzes Batik Bayat SMEs and Batik Lasem SMEs in Central Java using the Simplified ESG Disclosure Guide (ESDG) for SMEs in Supply Chains as a guide. The interview results show the real implementation and management of the Environment, Social and Government (ESG) concept.

IFAC as the world's leading accounting body recommends actions by companies and asset owners to improve reporting on the Sustainable Development Goals (SDGs) as an effort to achieve the goals. This strongly supports the national goals set by the Indonesian

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government, by 2030. These recommendations are detailed in the report, Disclosure of Sustainable Development Goals (SDGD).

The SDGD recommendations offer a new approach for businesses and other organizations to address sustainable development issues that aligns with three of the most influential and popular reporting frameworks. They seek to establish best practices for corporate reporting on the SDGs and enable more effective and standardized reporting and transparency on climate change, social and other environmental impacts. The Sustainable Development Goals (SDGs) are to demonstrate accountability for damage to environmental values and its governance as well as the negative impacts they cause. This is in line with Smith et al (2022), that the SDGs are a call to action for governments, companies and society to rebalance the relationship between the economy, environment and society.

In relation to achieving the SDGs, the role of SMEs can contribute to the 17 goals in the SDGs, as explained in the UNDESA – Report on MSMEs and the Sustainable Development Goals. However, what is most closely related is eradicating poverty (SDG 1) and ensuring livelihoods and economic growth (SDG 8) (UNDESA, 2019). Individual SMEs have the potential to adopt actions in their business practices to contribute to the goal. They can set and enforce strict policies and practices that do not discriminate against the poor. SMEs can also recruit, train, and employ local community members, including those living in poverty, and integrate them into the SME value chain.

This research describes in depth how Batik Bayat SMEs and Batik Lasem SMEs carry out activities relevant to environmental, social and governance implementation. Batik Bayat itself is the name of a batik product typical of the Bayat area. Batik Bayat has its own distinctive batik motif compared to other batik industries. The motifs of the Batik Bayat include the parang liris, gajah birowo, baboon angram and mukti wirasat. This typical Batik Bayat motif is dominated by brown or soga coloring which is very identical to the coloring of Batik Surakarta. Batik Bayat has advantages both in terms of motifs and the creation of new creations and its natural colors (Putri & Sabardila, 2023).

Batik Bayat production is carried out using a home industry model. Batik has become a daily work and habit that can unite and support the Bayat community, especially Jarum

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village. Written batik made by hand requires a relatively long time so it can be classified as expensive (Putri & Sabardila, 2023). Several Bayat natural batik business owners have also penetrated the international market, there are several orders coming in from Japanese people.

Batik Lasem is very famous because of its characteristics as batik beautiful coastline with bold coloring, especially the red color. A special characteristic of Batik Lasem that you will not find in any other batik is its red color which is known as the color of abang getih pithik or the color of chicken blood. This color is made from noni root and jiruk root plus Lasem water which has a unique mineral content. This color cannot even be created in a laboratory. Apart from being beautiful, Batik is also strong. The more you wash it, the more the color comes out. The red color has been recognized as the best red color that cannot be imitated in other batik centers (Fitinline, 2013).

This batik from Lasem, Rembang Regency, is characterized by a combination of Javanese batik motifs and Chinese patterns, the result of cultural acculturation since the end of the 14th century AD when the fleet under the leadership of Admiral Cheng Ho stopped in the archipelago. In 2022, Batik Lasem makers received environmentally friendly textile training and tried to print motifs such as Peony, Lung-lungan and Ringgit Gunung on white viscose rayon fabric using natural indigofera dye. The result is high quality batik cloth with a sinuous motif in an elegant blue color. Various efforts have been made by both the government and the private sector so that traditional batik in this area plays an important role in the local economy, and encourages its growth (APR, 2022).

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#### 4.1 Environment Disclosures

Batik SMEs awareness in processing waste as an aspect of environmental protection. Table 1 is a summary of interviews with 6 participants regarding their business practices and efforts to maintain a healthy business environment. The results of interviews with batik owners show that Batik Bayat SMEs and Batik Lasem SMEs are still not aware of the importance of waste management, this can be seen from the use of batik dyes which still use chemical dyes and from interviews with them we found that Mr. Rudi, Mrs. Winarti and Mr. Samsul conveyed that in the industry They stated that there was some waste in their batik, namely:

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Title

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1. Waste gas from heating smoke: Liquid waste contains acids, oils, detergents. Waste gas from heating fumes and wax vapor.
2. When dyeing there is liquid waste containing dye, Turkish solution Red Oil (TRO), diazo salts, caustic soda (NaOH), waste gas from heating fumes Solid waste in the form of wax impurities. Liquid waste contains starch and soda ash.

Table 1: Environmental Considerations in The Batik Business

ENVIRONMENTAL DISCLOSURES						PARTICIPANTS					
Code	Level	Topic	Topic Description	Indicator	Units	RDI	WNL	SSL	TWE	TNE	ODE
ESG-01.1	Issue	Climate	GHG emissions	Total Scope 1 GHG emissions	kg CO <sub>2</sub> e						
ESG-01.2	Issue	Climate	GHG emissions	Scope 2 GHG emissions	kg CO <sub>2</sub> e						
ESG-02.1	Issue	Energy	Energy consumption	Renewable fuel sources	kg/kWh/years	Waste from the batik making process is disposed off in an open area, and cannot be processed	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.
ESG-03.1	Issue	Energy	Energy consumption	Non-renewable fuel sources	kg/kWh/years	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.
ESG-04.1	Issue	Energy	Energy consumption	Electricity	kg/kWh/years	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.	The waste is in the form of leaves and wood as natural dye, which can be processed into fertilizer. Some Pak Sindo general agencies in various districts are doing this.
ESG-05.1	Issue	Water	Water usage	Water usage	liters	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself
ESG-05.2	Issue	Water	Water usage	Water usage	liters	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself
ESG-05.3	Issue	Water	Water usage	Water usage	liters	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself	They use water to wash the cloth, also to wash the dye and for the dye itself
ESG-06.1	Issue	Waste	Waste management	Waste management	kg	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment	Waste from the batik making process is disposed off in the gutter itself, but the dirt flows into the surrounding environment

Source: processed data, 2024

In the production process, waste management is carried out in a very traditional way, the three of them differ in their waste handling processes. Mr. Rudi said that waste is disposed of in its own ditch only in its own area, it cannot be processed. Mrs. Winarti and Mr. Samsul said that the waste was disposed of in the ditch itself, but the ditch flowed into the surrounding environment.

Apart from that, from the waste produced there is also energy, which is non-renewable fuel, namely materials that cannot be replaced, including NaOH, Turkish solution. Red Oil (TRO), diazo salts, caustic soda (NaOH), starch and soda ash, plasticine. Electricity is also used for activities in factories and offices, but it is only used for lighting production locations and offices.

In contrast to the Batik Lasem SMEs, based on the results of interviews, it is known that the Batik Bayat SMEs has taken concrete steps to reduce negative impacts on the environment. This is because the Batik Bayat SMEs are colored with natural dyes. The natural dyes used in the form of leaves and wood can be processed to make fertilizer for agriculture. However, some other waste is still not processed properly, such as Batik Lasem SMEs.

#### 4.2 Social Disclosures

Table 2: Social Considerations in The Batik Business

SOCIAL DISCLOSURES						PARTICIPANT					
Code	Level	Topic	Topic Description	Indicators	Units	RDL	WNL	SSL	SWB	TNB	DOB
SEDG-S1.1	Basic	Human rights and child labour	Child labour and forced	Number of child labour	number	0	0	0	0	0	0
SEDG-S1.1	Basic	Human rights and child labour	Child labour and forced	Nature of child labour	description	0	0	0	0	0	0
SEDG-S1.1	Basic	Human rights and child labour	Child labour and forced	Number of forced	number	0	0	0	0	0	0
SEDG-S1.1	Basic	Human rights and child labour	Child labour and forced	Nature of forced	description	0	0	0	0	0	0
SEDG-S2.1	Basic	Employee management	Employee training	Average hours of	hour	48	96	32	48	24	16
SEDG-S3.1	Basic	Diversity, equity and	Company's employees	Percentage of	percent	95% women	80% women	90% women	80% women	80% women	90% women
SEDG-S3.3	Basic	Diversity, equity and	Company's employees	Percentage of	percent	majority > 30 years	majority > 50 years	majority > 50 years	between 35-50 years	between 35-50 years	between 35-30 years
SEDG-S4.1	Basic	Occupational health and safety	Company's OHS	Number of fatalities	number	0	0	0	0	0	0
SEDG-S4.1	Basic	Occupational health and safety	Company's OHS	Number of injuries	number	1 of 40 employees	1 of 80 employees	1 of 40 employees	1 of 35 employees	1 of 15 employees	1 of 10 employees
SEDG-S5.3	Basic	Community engagement	Community investments	Total number of	MYR	20 million/year	30 million/year	3 million/year	15 million/year	5 million/year	1.5 million/year

Source: data processes, 2024

The implementation of sustainability by companies does not only focus on the environment but is also socially related. According to Ziolo et al., (2020), companies that state they are running a sustainable business model are more likely to carry out social and environmental activities than companies that state otherwise. Furthermore, Lako (2018) stated that the increasingly intensive implementation of Corporate Social Environmental Responsibility (TJSLP) and CSR by companies can be used as an investment strategy now

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and in the future to strengthen the basic pillars of business and increase market share and profit growth and owner's equity value. Based on the results of interviews related to social disclosures with Batik Lasem SMEs, it is known that:

1. In the batik industry, Mr. RDL, Mrs. WNL and Mr. SSL do not employ children in the batik industry, so there are no work accidents related to children working in their batik. The involvement of children is only an introduction to their families about how to manage the batik business. This is done as a first step to prepare the family as heirs to the business, so that Lasem batik can continue to be sustainable.
2. Training given to employees to be able to carry out their duties in the batik industry, such as sketching, canting, blocking, coloring. The training in the batik business of Mr. RDL, Mr. SSL and Ms. WNL is generally the same. They provide training internally and externally. Internal training means training provided by the owner himself or by his senior employees, while external training is carried out by involving them in official training that develops batik, as well as training from various external agencies.
3. The number of employees varies. Mr. RDL has 40 employees, Mrs. WNL has 80 people and Mr. SSL has 30 people. Of the number of employees, Mr. RDL is 95% female, Ms. WNL 80% is female, and Mr. SSL is 90% female.
4. Most of their batik workers are 59 years old. This is a concern for the three of them regarding the scarcity of employees who can make batik. So, the regeneration process is carried out to ensure the sustainability of the business.
5. Based on the health needs of the employees, the production process is maintained in such a way. Apart from that, this industry also does not use many modern tools which pose a big risk of work accidents. The tools used include canting, plasticine stoves, steamers, tools for drying and bleaching, tubs for dyeing. In the traditional batik industry, work accidents that occur include being poured with hot water, being exposed to hot wax/plasticine, and forgetting to turn off the stove. From work experience, only around 2-3% of accidents occur. And the owner directly handles and cares for workers who experience work accidents.
6. Mrs. WNL's batik business is often used as a place for school children, for other batik industries both from within and outside the region. Also received assignments from the

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government to attend various training courses run by the department. Mr. RDL's batik industry is also the same. Mr. RDL, as well as being a cooperative administrator, is often asked to be a speaker in several forums and in discussions about the development of Lasem batik. Several universities also use Mr. RDL's selected batik as research material. Pak Samsul's batik business is also often used by the government as a model. There is also a forum between batik makers, between provinces which is facilitated by Bank, which is part of its CSR, where the bank holds a meeting forum between inter-provincial batik makers. Mrs. WNL's batik business is a place for batik businesses from Bali to learn about Batik Lasem patterns.

As for the results of the interview with Batik Bayat, it is known that:

1. In the batik industry, Mr. SWB, Mrs. TNB and Mr. DDB do not employ children in the batik industry, so there are no work accidents related to children working in their batik. The involvement of children is only an introduction to their families about how to manage the batik business. This is done as an initial step to prepare the family as heirs to the business, so that Bayat natural batik can be sustainable.
2. Training given to employees to be able to carry out their duties in the batik industry, such as sketching, painting, blocking, coloring and for natural colored batik, namely mixing the natural dyes themselves. The training in the batik business of Mr. SWB, Mr. DDB and Ms. TNB is generally the same. They provide internal training, especially for new employees who have never done the job. According to the three of them, the ability to make batik is a talent inherited from their ancestors. Internal training emphasizes training in walling batik cloth that has been drawn and will be colored. Apart from that, there is also coloring practice, because in natural Batik Bayat, the natural dye is made and mixed by yourself from leaves and wood. External training is carried out by involving them in official training that develops batik, as well as training from various external agencies.
3. The number of employees varies. Mr. SWB has 48 employees, Mrs. TNB has 24 employees and Mr. DDB has 16 employees. Of the number of employees, Mr. SWB and Mrs. TNB, 80% are women, while Mr. DDB has a workforce of 90% women.
4. Most of their batik workers are between 35-50 years old. This is a concern for the three of them regarding the scarcity of employees who can make batik and efforts have been

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made to regenerate them. One way to carry out regeneration is by involving the owner's children in managing the business and placing them as employees. So, the regeneration process is carried out to ensure the sustainability of the business.

5. Based on the need for employee health, as a very important part of the batik business, it is hoped that batik business owners can guarantee the health of their employees. This industry also does not use many modern tools which pose a big risk of work accidents. The tools used include canting, plasticine stoves, steamers, tools for drying and bleaching, tubs for dyeing. In the traditional batik industry, work accidents that occur include being poured with hot water, being exposed to hot wax/plasticine, and forgetting to turn off the stove. From work experience, only around 1-2% of accidents occur. And the owner directly handles and cares for workers who experience work accidents.
6. Mr. SWB's batik business is often used as a place for school children, for other batik industries both from within and outside the region. Mr. SWB is also often invited by several organizations and universities to share his batik business experience.

#### **4.3 Governance Disclosures**

Hendro & Bowo Pranogyo (2023) state that companies that have initiatives towards good business management are the company's foundation for implementing ESG. Furthermore, Zhao et al (2018) stated that companies that implement ESG well will have an impact on improving the company's financial performance. The results of interviews with Batik Lasem SMEs show that the company's business governance structure is still very simple, because the owner of Batik Lasem SMEs and the manager still manages the batik business himself.

Financial reporting and risk management for Batik Lasem SMEs is fully carried out and borne by the batik business owner. The risks faced are varied, including the risk of fluctuating prices for the fabric, marketing risk, production risk, and financial risk in the form of incorrect recording. Meanwhile, financial management is still very simple. For Mr. RDL's business, he uses the Excel system, as does Mrs. WNL's batik business. Meanwhile, Mr. SSL's batik business is still carried out by recording manually. This happened because their emphasis was on sustainability in their sales in the past and more energy was spent on

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marketing and efforts to make it known to the wider community, even Mr RDL's Batik Lasem business could reach overseas (Malaysia and Japan). The financial reporting that is prepared does not yet reach the balance sheet or cash flow, but only reaches the profit and loss calculation, which is very simple. Mr. SSL is more traditional, only recording sales manuals and costs, some have been recorded but there are also some which haven't been recorded because they feel they are not costs, even though there are expenses.

The Batik Bayat SMEs does not have much difference from the Batik Lasem SMEs where the governance structure is very simple because the director is also the owner. Mr. SWB, Mrs. TNB and Mr. DDB manage their own batik business, they are the owners and act as managers.

Financial reporting and risk management are fully carried out and borne by the batik business owner. The risks faced are varied, including the risk of fluctuating prices for the fabric, marketing risk, production risk and financial risk of misprinting. Meanwhile, financial management is still very simple. For Mr. SWB, Mrs. TNB, and Mr. DDB's business, it is still done manually. This happened because their emphasis was on sustainability in sales in the past and more energy was spent on marketing and efforts to make it known to the wider community, even for Pak SWB's Batik Lase, business to reach overseas (Japan). The financial reporting that is prepared does not yet reach the balance sheet or cash flow, but only reaches the profit and loss calculation, which is very simple. Mrs. TNB and Mr. DDB are more traditional, only recording sales manuals and costs, some of which have been recorded but some things have not been recorded because they feel that they are not costs, even though there are expenses.

Table 3: Governance practice in The Batik Business

GOVERNANCE DISCLOSURES					PARTICIPANTS						
Code	Level	Topic	Topic Description	Indicators	Units	pk. ruli	pk. Wicak	pk. samsul	pk. samsul bayat	pk. Tati bayat	pk. dolo bayat
HEBG-G11	Strat	Governance structure	Company governance structure	Number of directors	number						
HEBG-G11	Strat	Policy consistency	Company policy consistency	List of company policies	file	Policy are made by the owner and conveyed verbally to employees	Policy are made by the owner and conveyed verbally to employees	Policy are made by the owner and conveyed verbally to employees	Policy are made by the owner and conveyed verbally to employees	Policy are made by the owner and conveyed verbally to employees	Policy are made by the owner and conveyed verbally to employees
HEBG-G11	Strat	Risk management and reporting	Report company's risk	Type of risk identified	number	Financial reports are all very simple and have not been audited.	Financial reports are all very simple and have not been audited.	Financial reports are all very simple and have not been audited.	Financial reports are all very simple and have not been audited.	Financial reports are all very simple and have not been audited.	Financial reports are all very simple and have not been audited.
HEBG-G41	Strat	Anti-corruption	Incident of anti-corruption	Number of confirmed incidents of corruption	number						
HEBG-G41	Strat	Anti-corruption	Incident of anti-corruption	Number of confirmed incidents of corruption	number	There is no find, because the management is also the owner of the business	There is no find, because the management is also the owner of the business	There is no find, because the management is also the owner of the business	There is no find, because the management is also the owner of the business	There is no find, because the management is also the owner of the business	There is no find, because the management is also the owner of the business

Source: data processes, 2024

### Challenges and Opportunities

Based on the business processes that occur in Batik Lasem SMEs and Batik Bayat SMEs, operational implementation can be part of the ESG implementation process in Batik SMEs. From the description presented in detail in the discussion, there are many things that need to be explored more deeply so that Batik Lasem SMEs and Batik Bayat SMEs can implement ESG in more detail. from the focus group discussion can be described as follows:

Batik SMEs' responses regarding the challenges in implementing ESG:

1. For the batik industry, green entrepreneurship is one way to answer the challenges of environmental sustainability and reduce negative impacts on the environment generated from its business activities. This is consistent with Gatut & Aryanto (2010), what needs to be pursued to encourage green entrepreneurship is a positive attitude from the batik entrepreneur owner and a sense of trust that employees and other people will feel the positive impact and can change environmentally friendly behaviour. This is closely related to self-actualization, personal abilities improvement, and concern for the preservation of culture as well as humans and the surrounding environment (Gatut & Aryanto, 2010).



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2. For environmentally friendly business owners, it is a must have strong ethical values underlying their adoption of green entrepreneurship (Gifford & Sussman, 2012).
  3. Use resources wisely and employ environmentally friendly manufacturing techniques in an effort to encourage development green industry (Indrayani & Triwiswara, 2020).

Opportunities for batik SMEs when they can implement ESG:

There is a megatrend that has developed in the last decade or so, namely human awareness to be friendlier to the environment and the damage caused by many consumer products on the market, both to consumers themselves and the environment, making consumers look for alternative products that are more environmentally friendly. This is an opportunity for batik SMEs to market their products to a market that is fanatical about environmentally friendly products (Nurtjahjadi, 2020). Apart from that, it also encourages sustainable behaviour related to its products, including recycling products, buying organic products, using green transportation, having an anti-materialistic view, and donating or doing charity in a sustainable manner (sustainable charities) (Peterson et al., 2021). This will also expand marketing overseas because there is a lot of awareness about environmentally friendly products abroad.

## 5. CONCLUSION AND SUGGESTIONS

Based on the results of the discussion above, the challenges and opportunities faced by Batik Lasem SMEs and Batik Bayat SMEs business owners can be summarized as follows:

Opportunity:

1. Many opportunities can be achieved by Batik Lasem SMEs and Batik Bayat SMEs. There are characteristics inherent in the condition of each batik, so that it can be used as promotional material. Batik Lasem SMEs has the characteristics of batik from 3 countries with distinctive patterns and colors, while for Batik Bayat its uniqueness is in its natural colors and ancient motifs. If they can market it well, several domestic and even foreign batik lovers will look for their products.
2. Opportunities for the younger generation to learn batik, so that it will increase the sustainability of batik itself. Batik as Indonesia's cultural heritage is an opportunity

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to be developed and known more internationally, especially now that batik has been recognized by Unesco.

Challenge:

1. The current shortage of labor is a problem that needs to be resolved. The current generation is less interested in continuing to make batik, because they are more interested in other fields that are considered more modern by society. The solution that can be done is to conduct training for new batik makers.
2. The owners of Batik Lasem SMEs and Batik Bayat SMEs do not yet realize the importance of business and financial management based on correct accounting standards. These challenges cause SMEs to have difficulty producing the information needed for faster decision making for both internal and external parties.
3. Awareness regarding waste management is still quite low, where batik SMEs are not yet aware of the dangers of environmental pollution and the importance of protecting the environment. Apart from that, batik SMEs owners also feel that funds for investment in waste management are still considered a waste. These challenges mean that SMEs cannot be fully declared environmentally friendly, so SMEs need to be aware that the importance of protecting the environment can have an impact on business sustainability and increasing profits.
4. The participants used in this research were limited to Batik Lasem SMEs and Batik Bayat SMEs. Suggestions for further research are to expand the scope of SMEs to other industrial fields, so that they can fully reflect the company's concern for the Environment, Social and Government (ESG), especially in SMEs.

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The Challenge and Opportunity of Practice and Disclosure  
Sustainability in Central Java SMEs



INFO ARTICLE

ABSTRACT

**Article History:**

Article Received  
Article Revised  
Article Published

**Keyword:**

challenge and opportunity<sup>1</sup>,  
practice and disclosure<sup>2</sup>,  
sustainability<sup>3</sup>, SEDG<sup>4</sup>, SMEs<sup>5</sup>

*Sustainability practices and disclosures for business organizations with large capacities can have a positive impact on the company's image and increase company profits. In contrast to SMEs with limited business capacity such as Batik SMEs in Central Java, Indonesia, they have less awareness of sustainable practices and disclosures. SMEs as business actors also have an impact on their business activities on Environmental, Social and Governance (ESG). This research aims to analyze how ESG challenges and opportunities are practices and disclosures by Batik Bayat SMEs and Batik Lasem SMEs to describe the journey of SMEs towards sustainable development. The analysis was carried out using the Simplified ESG Disclosure Guide (SEDG) for SMEs. This research uses a qualitative approach with in-depth investigation methods. The findings of this research are that there are many opportunities and challenges for Batik Lasem SMEs and Batik Bayat SMEs in sustainability practices and disclosure. The results indicate that ESG practises are dearth in Batik SMEs in Central Java, Indonesia, especially in the context of environmental and social disclosures.*

1. INTRODUCTION

Companies in the current era of globalization and technological progress no longer only look at the sustainability aspect from the perspective of improving the company's economy, but must also look at the environmental and social aspects. Companies around the world are noted to be shifting from short-term goals of maximizing profits to achieving long-term

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sustainable environmental, social and governance (ESG) goals (Zhao et al., 2018). This is because companies are aware that the negative impact on ecological integrity, social justice and economic stability is influenced by the company's own greedy behavior (Laine et al., 2021; Lako, 2018). Lako (2018) further stated that when the series of impacts that companies have on the environment, social and economy becomes clear, companies are increasingly being asked to be responsible for the impacts of using environmental and social resources. The company's responsibility takes the form of continuous disclosure which is not only related to the environment, but also economic and social. This is because companies that are committed to ESG disclosure can overcome possible obstacles and attract investment now and in future to strengthen the basic pillars of the business and increase market share and profit growth and owner's equity value (Chen et al., 2023; Lako, 2018).

Increasing ESG disclosure is not only carried out by companies that have large capacity, but also companies that have limited capacity such as SMEs. SMEs as business actors also have an impact on their business activities, one of which has an impact on social and environmental impacts. According to Auemsuvarn (2019) and Putri et al (2023), if SMEs cannot ensure that the environment is protected from damage, this will have an impact on disrupting the SME economy itself which will ultimately have an impact on the country's economy. SMEs can have a sustainable competitive advantage by having unique characteristics and continuing to adapt to current developments (Nugroho et al., 2023; Auemsuvarn, 2019). SMEs must also be able to adapt to developments in the current business world which are increasingly rapid, which is applied ESG with caring about the environment and social issues for have an impact on increasing profits.

Business actors such as SMEs also increasingly need to pay serious attention to the social community and environment in which they operate (Lilis et al., 2022). In line with Arena & Azzone, 2012 said, SMEs, just like large companies, can exert great pressure on the environment and society, through the combined impact of many small activities. In today's business environment, the success and survival of micro, small and medium enterprises (SMEs) depends on how they influence the natural environment and society for economic gain (SinghManvendra Pratap Singh & Roy Mousumi, 2019). However, in reality, currently its

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implementation is still limited to large companies, because for MSMEs, implementing ESG is considered quite complicated and expensive (Steinhofel et al., 2019). Based on this, Martins et al (2022), further stated that more in-depth research is urgent regarding the ESG agenda for SMEs, because a good ESG rating will strengthen the company's position (Tan & Zhu, 2022).

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SMEs as business actors in carrying out their business activities also have a direct impact on the environment and one of them is Batik SMEs. Batik SMEs continues to grow, especially those in Central Java Province such as Bayat Batik SMEs and Batik Lasem SMEs. Batik SMEs such as Batik Bayat SMEs and Batik Lasem SMEs have the potential for a large environmental impact through waste such as gas waste from heating fumes, liquid waste containing chemical dyes and solid waste originating from wax waste. This is in line with what was stated by Kurniawan et al (2014), that the batik industry causes impacts in the form of organic liquid waste with large volumes, thick colors, strong odors and has temperature, acidity (pH), Biochemical Oxygen Demand (BOD), high Chemical Oxygen Demand (COD), Total Suspended Solid (TSS). Apart from environmental impacts, the importance of sustainability practices and disclosures by Batik Bayat SMEs and Batik Lasem SMEs is because these two batik SMEs have exported overseas and should be able to manage sustainability practices and disclosures. Therefore, issues related to sustainability practices and disclosures in the Batik industry are important. According to Martins et al (2022) even though SMEs are economic drivers and play an important role in managing global social and environmental resources, SMEs tend to have limited capacity.

Based on the background and presentation of several findings and facts above, researchers are interested in finding out how sustainability practices and disclosures in Batik SMEs, especially Batik Bayat SMEs and Batik Lasem SMEs support sustainability. This research aims to analyze how ESG challenges and opportunities are practiced and expressed by Batik Bayat SMEs and Batik Lasem SMEs to describe the journey of SMEs towards sustainable development. The analysis was carried out using the Simplified ESG Disclosure Guide (SEDG) for SMEs in Supply Chains to see to what extent the indicators related to practices and disclosures that Batik Bayat SMEs and Batik Lasem SMEs have implemented



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unconsciously in their business, as well as how much environmental and social impact is produced by Batik Bayat SMEs and Batik Lasem SMEs.

## **2. LITERATURE REVIEW**

### **Stakeholders theory**

Stakeholders theory according to Freeman states that the true success of a company lies in the satisfaction of all its stakeholders, not just shareholders. Stakeholders include individuals or groups who benefit or are harmed by the company's actions (Freeman, 1994). Herold (2018) further stated that stakeholders are those who have a stock in an organization and have something at risk, and they usually include internal stakeholders as well as external stakeholders (shareholders, suppliers, customers, non-profit organizations). Government, business associations or government authorities. Stakeholders claim the right to intervene in business, this is reflected in their expectations of the company. Therefore, companies must pursue two goals, the first is to generate income, and the second is to maintain good relations with the environment and stakeholders on which it depends (Galant, 2017).

Stakeholder theory is relevant to companies that seek to help protect the environment, seek to improve social welfare and community relations, and often embrace governance practices that maximize value (Peng & Isa, 2020). Peng & Isa (2020) further stated that satisfied and happy employees will be more motivated in their work; satisfied customers will foster loyalty, satisfied suppliers will provide discounts, and so on, which in turn will improve the company's reputation, and lead to better financial performance and sustainability.

Based on stakeholder theory, it can be concluded that company policies to take the initiative to implement ESG can protect profits and increase shareholder value. Because when a company contributes to compensation for environmental and social losses caused by its economic activities, and the better the company is at managing relationships with all stakeholders, the more successful the company will be over time (Peng & Isa, 2020; Herold, 2018; Galant, 2017; Freeman, 1994).

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### Batik Bayat SMEs and Batik Lasem SMEs

According to Law Number 20 of 2008, it is stated that SMEs is an independent productive business, developed by either individuals or business entities. This business is not a subsidiary or branch of a company, either directly or indirectly. Micro Business criteria include maximum assets of 50 million rupiah and turnover of 300 million rupiah. In line with what was stated by Francesco Perrini et al (2007) and Martins et al (2022) that SMEs have special characteristics that differentiate them from larger SMEs, where SMEs tend to be managed by owners and are personalized, independent, and carry out many tasks, limited to cash, based on personal relationships and informality, clustered within local production systems, closely connected to local communities, and have limited access to financial resources. As business actors, SMEs also need to pay serious attention to the community, social and environment in which they operate (Lilis et al., 2022). However, according to Das et al (2020) that the use of sustainability management tools and frameworks is still poorly practiced and disclosed in most SMEs, considering that these tools and frameworks are basically designed for large companies and do not meet the specific needs of SMEs. Likewise, Batik Bayat SMEs and Batik Lasem SMEs still do not fully implement sustainability, so it is a challenge and opportunity for them to implement ESG practices and disclosures.

Batik Bayat SMEs is one of the icons in the field of batik crafts in Bayat District, Klaten Regency, Central Java Province. The typical pattern of Batik Bayat is sogan brown and the earth is ukel and grinsing which are combined. Meanwhile, the motifs are taken from classic Solo Batik motifs such as sido motifs, cement motifs and others, where the dyes used also use natural dyes. Batik Bayat crafts have been marketed not only in Klaten Regency but also outside the city and even abroad such as Malaysia, Thailand and India.

Batik Lasem SMEs is a SMEs that operates in the field of batik crafts located in Lasem District, Rembang Regency, Central Java. One of the superior products from Batik Lasem is hand-written batik made from natural dyes. Lasem hand-written batik has a special pattern with a red chicken blood color which is said to be very difficult for batik makers from any region to imitate. The uniqueness of Batik Lasem also lies in its motif which is a

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combination of Chinese cultural influences, local culture of the northern coastal communities of Central Java and the culture of the Solo and Yogyakarta palaces.

### Practice and Disclosure SEDG for SMEs

Simplified ESG Disclosure Guide or SEDG is a guide that helps SMEs prepare to disclose Environmental, Social and Governance (ESG) data to their stakeholders in line with international standards. The aim of SEDG is to provide an overview for SMEs as data creators to be able to provide simple and standardized disclosures so that they can be tracked and reported to stakeholders (Capital Markets Malaysia & Securities Commission Malaysia, 2023). SEDG disclosure consists of 3 pillars and 15 topics. Pillar 1 is the Environment which consists of topics Emissions, Energy, Water, Waste and Materials. Pillar 2 is the Social which consists of the topics Human Rights and Labour Standards, Employee Management, Diversity, Equity and Inclusion, Occupational Health and Safety, and Community Engagement. Pillar 3 is the Governance which consists of topics Governance Structure, Policy Commitments, Risk Management and Reporting, Anti-Corruption and Customer Privacy.

As time passes, natural resources become increasingly depleted, and environmental changes occur more rapidly; as a result, international legal bodies and most developed countries continually raise questions regarding sustainability. In the last decade, sustainability disclosure has attracted the interest of many international organizations seeking to realize a sustainable green economy (Ellili, 2022). Furthermore, Herold (2018) said that more and more companies are disclosing information related to sustainability because it is a response to global challenges and climate change. ESG disclosure increases transparency, reduces information asymmetry and increases investment efficiency, especially for companies that provide products and not services, their ESG disclosure reflects their social innovation (Ellili, 2022; Shen, 2023).

SEDG used as assess ESG disclosure because it covers indicators that can be tracked and disclosed to measure ESG progress (Capital Markets Malaysia & Securities Commission Malaysia, 2023). Furthermore, the standards and frameworks referenced include Bursa Malaysia's Listing Requirements and Sustainability Reporting Guide, FTSE4Good, GRI,

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IFRS S1 and S2, TCFD and CDP. Specifically, the target users of SEDG are SMEs that are compelled to track and report on ESG data – usually because they want to, they are being asked to, or they want to qualify for incentives. It was concluded that the Simplified ESG Disclosure Guide (SEDG) for SMEs is appropriate to use as a disclosure guide for SMEs, especially Batik Bayat SMEs and Batik Lasem SMEs where both SMEs are companies that provide products, not services. Batik Bayat SMEs and Batik Lasem SMEs as companies with limited resources will find it difficult and a challenge to be able to carry out overall ESG practices and disclosure, but they can do something simple by disclosing ESG on social media, where this is also an opportunity promotion for Batik Bayat SMEs and Batik Lasem SMEs.

### 3. RESEARCH METHODS

This research uses a qualitative approach with phenomenological analysis, which is an approach to qualitative data analysis that aims to understand individuals' subjective experiences in dealing with certain phenomena or events. An in-depth analysis was carried out regarding environmentally friendly industrial management practices and sustainable reporting. Qualitative research is research where the type of data used is generally text, writing, phrases, groups of words or sentences that clarify events or happenings. The analysis was carried out using the Simplified ESG Disclosure Guide (SEDG) for SMEs in Supply Chains to see to what extent the indicators related to practices and disclosures that UKM Batik Bayat and UKM Batik Lasem have implemented unconsciously in their business, as well as how big the environmental and social impacts are. produced by UKM Batik Bayat and UKM Batik Lasem.

Data collection was carried out in November 2023 using several qualitative data collection techniques, namely, 1) interviews, 2) observations, and 3) documentation studies. The process of analyzing and interpreting data in this research was carried out by coding, reducing data, presenting data and drawing conclusions. Moleong (2013) states that qualitative research methodology is research that produces descriptive data, either in the form of spoken or written words from people or observed behavior. Participants in this research were 6 SME owners, namely 3 Batik Lasem SMEs owners and 3 Bayat Batik SMEs. The cities of Lasem and Bayat were chosen because their batik industry shows uniqueness in

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making batik with very distinctive hand-written batik models by the local wisdom of each region. Apart from that, there are also differences between the two, where Lasem batik still uses chemical dyes, while Bayat batik uses natural dyes.

#### 4. RESULTS AND DISCUSSION

This research analyzes Batik Bayat SMEs and Batik Lasem SMEs in Central Java using the Simplified ESG Disclosure Guide (ESDG) for SMEs in Supply Chains as a guide. The interview results show the real implementation and management of the Environment, Social and Governance (ESG) concept. IFAC as the world's leading accounting body recommends actions by companies and asset owners to improve reporting on the Sustainable Development Goals (SDGs) as an effort to achieve the goals. This strongly supports the national goals set by the Indonesian government, by 2030. These recommendations are detailed in the report, Disclosure of Sustainable Development Goals (SDGD).

The SDGD recommendations offer a new approach for businesses and other organizations to address sustainable development issues that aligns with three of the most influential and popular reporting frameworks. They seek to establish best practices for corporate reporting on the SDGs and enable more effective and standardized reporting and transparency on climate change, social and other environmental impacts. The Sustainable Development Goals (SDGs) are to demonstrate accountability for damage to environmental values and its governance as well as the negative impacts they cause. This is in line with Smith et al (2022), that the SDGs are a call to action for governments, companies and society to rebalance the relationship between the economy, environment and society. Therefore, companies must pursue two goals, the first is generating income, and the second is maintaining good relations with the environment and the stakeholders on which it depends (Galant, 2017). This is in line with the stakeholder theory according to Freeman which states that the true success of a company lies in the satisfaction of all its stakeholders, not just shareholders.

In relation to achieving the SDGs, the role of SMEs can contribute to the 17 goals in the SDGs, as explained in the UNDESA – Report on MSMEs and the Sustainable

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Development Goals. However, what is most closely related is eradicating poverty (SDG 1) and ensuring livelihoods and economic growth (SDG 8) (UNDESA, 2019). Individual SMEs have the potential to adopt actions in their business practices to contribute to the goal. They can set and enforce strict policies and practices that do not discriminate against the poor. SMEs can also recruit, train, and employ local community members, including those living in poverty, and integrate them into the SME value chain.

This research describes in depth how Batik Bayat SMEs and Batik Lasem SMEs carry out activities relevant to environmental, social and governance implementation. Batik Bayat itself is the name of a batik product typical of the Bayat area. Batik Bayat has its own distinctive batik motif compared to other batik industries. The motifs of the Batik Bayat include the parang liris, gajah birowo, baboon angram and mukti wirasat. This typical Batik Bayat motif is dominated by brown or soga coloring which is very identical to the coloring of Batik Surakarta. Batik Bayat has advantages both in terms of motifs and the creation of new creations and its natural colors (Putri & Sabardila, 2023).

Batik Bayat production is carried out using a home industry model. Batik has become a daily work and habit that can unite and support the Bayat community, especially Jarum village. Written batik made by hand requires a relatively long time so it can be classified as expensive (Putri & Sabardila, 2023). Several Bayat natural batik business owners have also penetrated the international market, there are several orders coming in from Japanese people.

Batik Lasem is very famous because of its characteristics as batik beautiful coastline with bold coloring, especially the red color. A special characteristic of Batik Lasem that you will not find in any other batik is its red color which is known as the color of abang getih pithik or the color of chicken blood. This color is made from noni root and jiruk root plus Lasem water which has a unique mineral content. This color cannot even be created in a laboratory. Apart from being beautiful, Batik is also strong. The more you wash it, the more the color comes out. The red color has been recognized as the best red color that cannot be imitated in other batik centers (Fitinline, 2013).

This batik from Lasem, Rembang Regency, is characterized by a combination of Javanese batik motifs and Chinese patterns, the result of cultural acculturation since the end

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of the 14th century AD when the fleet under the leadership of Admiral Cheng Ho stopped in the archipelago. In 2022, Batik Lasem makers received environmentally friendly textile training and tried to print motifs such as Peony, Lung-lungan and Ringgit Gunung on white viscose rayon fabric using natural indigofera dye. The result is high quality batik cloth with a sinuous motif in an elegant blue color. Various efforts have been made by both the government and the private sector so that traditional batik in this area plays an important role in the local economy, and encourages its growth (APR, 2022).

#### **4.1 Environment Disclosures**

Batik SMEs awareness in processing waste as an aspect of environmental protection. Table 1 is a summary of interviews with 6 participants regarding their business practices and efforts to maintain a healthy business environment. The results of interviews with batik owners show that Batik Bayat SMEs and Batik Lasem SMEs are still not aware of the importance of waste management, this can be seen from the use of batik dyes which still use chemical dyes and from interviews with them we found that Mr. Rudi, Mrs. Winarti and Mr. Samsul conveyed that in the industry They stated that there was some waste in their batik, namely:

1. Waste gas from heating smoke: Liquid waste contains acids, oils, detergents. Waste gas from heating fumes and wax vapor.
2. When dyeing there is liquid waste containing dye, Turkish solution Red Oil (TRO), diazo salts, caustic soda (NaOH), waste gas from heating fumes Solid waste in the form of wax impurities. Liquid waste contains starch and soda ash.

Table 1: Environmental Considerations in The Batik Business

ENVIRONMENTAL DISCLOSURES						PARTICIPANTS					
Code	Level	Topic	Topic Description	Indicator	Units	RDI	MML	SSL	ZWB	TNB	DOB
ESD1-01.1	Home	GHG emissions	GHG emissions	Total Scope 1 GHG emissions	tonnes per annum						
ESD1-01.2	Home	GHG emissions	GHG emissions	Scope 2 GHG emissions	tonnes per annum						
ESD1-02.1	Home	Energy consumption	Renewable fuel sources	Renewable fuel sources	percentage						
ESD1-02.2	Home	Energy consumption	Non-renewable fuel sources	Non-renewable fuel sources	percentage						
ESD1-03.1	Home	Energy consumption	Electricity	Electricity	percentage						
ESD1-03.2	Home	Water usage	Water usage	Water usage	percentage						
ESD1-03.3	Home	Water usage	Water usage	Water usage	percentage						
ESD1-03.4	Home	Water usage	Water usage	Water usage	percentage						
ESD1-03.5	Home	Water usage	Water usage	Water usage	percentage						
ESD1-03.6	Home	Water usage	Water usage	Water usage	percentage						
ESD1-03.7	Home	Water usage	Water usage	Water usage	percentage						
ESD1-03.8	Home	Water usage	Water usage	Water usage	percentage						
ESD1-03.9	Home	Water usage	Water usage	Water usage	percentage						

Source: processed data, 2024

In the production process, waste management is carried out in a very traditional way, the three of them differ in their waste handling processes. Mr. Rudi said that waste is disposed of in its own ditch only in its own area, it cannot be processed. Mrs. Winarti and Mr. Samsul said that the waste was disposed of in the ditch itself, but the ditch flowed into the surrounding environment.

Apart from that, from the waste produced there is also energy, which is non-renewable fuel, namely materials that cannot be replaced, including NaOH, Turkish solution. Red Oil (TRO), diazo salts, caustic soda (NaOH), starch and soda ash, plasticine. Electricity is also used for activities in factories and offices, but it is only used for lighting production locations and offices.



In contrast to the Batik Lasem SMEs, based on the results of interviews, it is known that the Batik Bayat SMEs has taken concrete steps to reduce negative impacts on the environment. This is because the Batik Bayat SMEs are colored with natural dyes. The natural dyes used in the form of leaves and wood can be processed to make fertilizer for agriculture. However, some other waste is still not processed properly, such as Batik Lasem SMEs.

#### 4.2 Social Disclosures

Table 2: Social Considerations in The Batik Business

SOCIAL DISCLOSURES						PARTICIPANT						
Code	Level	Topic	Topic Description	Indicators	Units	RDL	WNL	SSL	SWB	TNB	DOB	
SEDG-S1.1	Basic	Human rights and	Child labour and forced	Number of child labour	number	0	0	0	0	0	0	
SEDG-S1.1	Basic	Human rights and	Child labour and forced	Nature of child labour	description	0	0	0	0	0	0	
SEDG-S1.1	Basic	Human rights and	Child labour and forced	Number of forced	number	0	0	0	0	0	0	
SEDG-S1.1	Basic	Human rights and	Child labour and forced	Nature of forced	description	0	0	0	0	0	0	
SEDG-S2.1	Basic	Employee management	Employee training	Average hours of	hours	48	96	32	48	24	36	
SEDG-S3.1	Basic	Diversity, equity and	Company's employees	Percentage of	percent	95% women	80% women	90% women	80% women	80% women	90% women	
SEDG-S3.1	Basic	Diversity, equity and	Company's employees	Percentage of	percent	majority > 50 years	majority > 50 years	majority > 50 years	between 35-50 years	between 35-50 years	between 35-50 years	
SEDG-S4.1	Basic	Occupational health	Company's OHS	Number of fatalities	number	0	0	0	0	0	0	
SEDG-S4.1	Basic	Occupational health	Company's OHS	Number of injuries	number	1 of 40 employees	1 of 80 employees	1 of 30 employees	1 of 25 employees	1 of 15 employees	1 of 10 employees	
SEDG-S5.1	Basic	Community engagement	Community investments	Total number of	MYR	20 million/year	30 million/year	5 million/year	15 million/year	5 million/year	1.5 million/year	

Source: data processes, 2024

The implementation of sustainability by companies does not only focus on the environment but is also socially related. According to Ziolo et al., (2020), companies that state they are running a sustainable business model are more likely to carry out social and environmental activities than companies that state otherwise. Furthermore, Lako (2018) stated that the increasingly intensive implementation of Corporate Social Environmental Responsibility (TJSLP) and CSR by companies can be used as an investment strategy now and in the future to strengthen the basic pillars of business and increase market share and profit growth and owner's equity value. Based on the results of interviews related to social disclosures with Batik Lasem SMEs, it is known that:

1. In the batik industry, Mr. RDL, Mrs. WNL and Mr. SSL do not employ children in the batik industry, so there are no work accidents related to children working in their batik.

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The involvement of children is only an introduction to their families about how to manage the batik business. This is done as a first step to prepare the family as heirs to the business, so that Lasem batik can continue to be sustainable.

2. Training given to employees to be able to carry out their duties in the batik industry, such as sketching, canting, blocking, coloring. The training in the batik business of Mr. RDL, Mr. SSL and Ms. WNL is generally the same. They provide training internally and externally. Internal training means training provided by the owner himself or by his senior employees, while external training is carried out by involving them in official training that develops batik, as well as training from various external agencies.
3. The number of employees varies. Mr. RDL has 40 employees, Mrs. WNL has 80 people and Mr. SSL has 30 people. Of the number of employees, Mr. RDL is 95% female, Ms. WNL 80% is female, and Mr. SSL is 90% female.
4. Most of their batik workers are 59 years old. This is a concern for the three of them regarding the scarcity of employees who can make batik. So, the regeneration process is carried out to ensure the sustainability of the business.
5. Based on the health needs of the employees, the production process is maintained in such a way. Apart from that, this industry also does not use many modern tools which pose a big risk of work accidents. The tools used include canting, plasticine stoves, steamers, tools for drying and bleaching, tubs for dyeing. In the traditional batik industry, work accidents that occur include being poured with hot water, being exposed to hot wax/plasticine, and forgetting to turn off the stove. From work experience, only around 2-3% of accidents occur. And the owner directly handles and cares for workers who experience work accidents.
6. Mrs. WNL's batik business is often used as a place for school children, for other batik industries both from within and outside the region. Also received assignments from the government to attend various training courses run by the department. Mr. RDL's batik industry is also the same. Mr. RDL, as well as being a cooperative administrator, is often asked to be a speaker in several forums and in discussions about the development of Lasem batik. Several universities also use Mr. RDL's selected batik as research material. Pak Samsul's batik business is also often used by the government as a model. There is also

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a forum between batik makers, between provinces which is facilitated by Bank, which is part of its CSR, where the bank holds a meeting forum between inter-provincial batik makers. Mrs. WNL's batik business is a place for batik businesses from Bali to learn about Batik Lasem patterns.

As for the results of the interview with Batik Bayat, it is known that:

1. In the batik industry, Mr. SWB, Mrs. TNB and Mr. DDB do not employ children in the batik industry, so there are no work accidents related to children working in their batik. The involvement of children is only an introduction to their families about how to manage the batik business. This is done as an initial step to prepare the family as heirs to the business, so that Bayat natural batik can be sustainable.
2. Training given to employees to be able to carry out their duties in the batik industry, such as sketching, painting, blocking, coloring and for natural colored batik, namely mixing the natural dyes themselves. The training in the batik business of Mr. SWB, Mr. DDB and Ms. TNB is generally the same. They provide internal training, especially for new employees who have never done the job. According to the three of them, the ability to make batik is a talent inherited from their ancestors. Internal training emphasizes training in walling batik cloth that has been drawn and will be colored. Apart from that, there is also coloring practice, because in natural Batik Bayat, the natural dye is made and mixed by yourself from leaves and wood. External training is carried out by involving them in official training that develops batik, as well as training from various external agencies.
3. The number of employees varies. Mr. SWB has 48 employees, Mrs. TNB has 24 employees and Mr. DDB has 16 employees. Of the number of employees, Mr. SWB and Mrs. TNB, 80% are women, while Mr. DDB has a workforce of 90% women.
4. Most of their batik workers are between 35-50 years old. This is a concern for the three of them regarding the scarcity of employees who can make batik and efforts have been made to regenerate them. One way to carry out regeneration is by involving the owner's children in managing the business and placing them as employees. So, the regeneration process is carried out to ensure the sustainability of the business.
5. Based on the need for employee health, as a very important part of the batik business, it is hoped that batik business owners can guarantee the health of their employees. This

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industry also does not use many modern tools which pose a big risk of work accidents. The tools used include canting, plasticine stoves, steamers, tools for drying and bleaching, tubs for dyeing. In the traditional batik industry, work accidents that occur include being poured with hot water, being exposed to hot wax/plasticine, and forgetting to turn off the stove. From work experience, only around 1-2% of accidents occur. And the owner directly handles and cares for workers who experience work accidents.

6. Mr. SWB's batik business is often used as a place for school children, for other batik industries both from within and outside the region. Mr. SWB is also often invited by several organizations and universities to share his batik business experience.

#### **4.3 Governance Disclosures**

Hendro & Bowo Pranogyo (2023) state that companies that have initiatives towards good business management are the company's foundation for implementing ESG. Furthermore, Zhao et al (2018) stated that companies that implement ESG well will have an impact on improving the company's financial performance. The results of interviews with Batik Lasem SMEs show that the company's business governance structure is still very simple, because the owner of Batik Lasem SMEs and the manager still manages the batik business himself.

Financial reporting and risk management for Batik Lasem SMEs is fully carried out and borne by the batik business owner. The risks faced are varied, including the risk of fluctuating prices for the fabric, marketing risk, production risk, and financial risk in the form of incorrect recording. Meanwhile, financial management is still very simple. For Mr. RDL's business, he uses the Excel system, as does Mrs. WNL's batik business. Meanwhile, Mr. SSL's batik business is still carried out by recording manually. This happened because their emphasis was on sustainability in their sales in the past and more energy was spent on marketing and efforts to make it known to the wider community, even Mr RDL's Batik Lasem business could reach overseas (Malaysia and Japan). The financial reporting that is prepared does not yet reach the balance sheet or cash flow, but only reaches the profit and loss calculation, which is very simple. Mr. SSL is more traditional, only recording sales manuals

and costs, some have been recorded but there are also some which haven't been recorded because they feel they are not costs, even though there are expenses.

The Batik Bayat SMEs does not have much difference from the Batik Lasem SMEs where the governance structure is very simple because the director is also the owner. Mr. SWB, Mrs. TNB and Mr. DDB manage their own batik business, they are the owners and act as managers. Financial reporting and risk management are fully carried out and borne by the batik business owner. The risks faced are varied, including the risk of fluctuating prices for the fabric, marketing risk, production risk and financial risk of misprinting. Meanwhile, financial management is still very simple. For Mr. SWB, Mrs. TNB, and Mr. DDB's business, it is still done manually. This happened because their emphasis was on sustainability in sales in the past and more energy was spent on marketing and efforts to make it known to the wider community, even for Pak SWB's Batik Lase, business to reach overseas (Japan). The financial reporting that is prepared does not yet reach the balance sheet or cash flow, but only reaches the profit and loss calculation, which is very simple. Mrs. TNB and Mr. DDB are more traditional, only recording sales manuals and costs, some of which have been recorded but some things have not been recorded because they feel that they are not costs, even though there are expenses.

Table 3: Governance practice in The Batik Business

GOVERNANCE DISCLOSURES					PARTICIPANTS						
Code	Level	Topic	Topic Description	Indicators	Units	Mr. SWB	Mrs. TNB	Mr. DDB	Mr. SWB Bayat	Mrs. TNB Bayat	Mr. DDB Bayat
SDG-48.2	Basic	Governance structure	Company governance structure	Number of directors	number						
SDG-48.2	Basic	Policy (commitment)	Company policy commitment	List of company policies	list	Policies are made by the owner and covered verbally to employees	Policies are made by the owner and covered verbally to employees	Policies are made by the owner and covered verbally to employees	Policies are made by the owner and covered verbally to employees	Policies are made by the owner and covered verbally to employees	Policies are made by the owner and covered verbally to employees
SDG-48.2	Basic	Risk management and reporting	Raport company risk	Type of risk submitted	report	Financial reports are still very simple and have not been audited	Financial reports are still very simple and have not been audited	Financial reports are still very simple and have not been audited	Financial reports are still very simple and have not been audited	Financial reports are still very simple and have not been audited	Financial reports are still very simple and have not been audited
SDG-48.3	Basic	Anti-corruption	Incidents of anti-corruption	Number of confirmed incidents of corruption, if any	number						
SDG-48.3	Basic	Anti-corruption	Incidents of anti-corruption	Number of confirmed incidents of corruption, if any	description	There is no fraud because the management is also the owner of the business	There is no fraud because the management is also the owner of the business	There is no fraud because the management is also the owner of the business	There is no fraud because the management is also the owner of the business	There is no fraud because the management is also the owner of the business	There is no fraud because the management is also the owner of the business

Source: data processes, 2024

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## Challenges and Opprtunities

Based on the business processes that occur in Batik Lasem SMEs and Batik Bayat SMEs, operational implementation can be part of the ESG implementation process in Batik SMEs. From the description presented in detail in the discussion, there are many things that need to be explored more deeply so that Batik Lasem SMEs and Batik Bayat SMEs can implement ESG in more detail. from the focus group discussion can be described as follows:

Batik SMEs' responses regarding the challenges in implementing ESG:

1. For the batik industry, green entrepreneurship is one way to answer the challenges of environmental sustainability and reduce negative impacts on the environment generated from its business activities. This is consistent with Gatut & Aryanto (2010), what needs to be pursued to encourage green entrepreneurship is a positive attitude from the batik entrepreneur owner and a sense of trust that employees and other people will feel the positive impact and can change environmentally friendly behaviour. This is closely related to self-actualization, personal abilities improvement, and concern for the preservation of culture as well as humans and the surrounding environment (Gatut & Aryanto, 2010).
2. For environmentally friendly business owners, it is a must have strong ethical values underlying their adoption of green entrepreneurship (Gifford & Sussman, 2012).
3. Use resources wisely and employ environmentally friendly manufacturing techniques in an effort to encourage development green industry (Indrayani & Triwiswara, 2020).

Opportunities for batik SMEs when they can implement ESG:

There is a megatrend that has developed in the last decade or so, namely human awareness to be friendlier to the environment and the damage caused by many consumer products on the market, both to consumers themselves and the environment, making consumers look for alternative products that are more environmentally friendly. This is an opportunity for batik SMEs to market their products to a market that is fanatical about environmentally friendly products (Nurtjahjadi, 2020). Apart from that, it also encourages sustainable behaviour related to its products, including recycling products, buying organic

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products, using green transportation, having an anti-materialistic view, and donating or doing charity in a sustainable manner (sustainable charities) (Peterson et al., 2021). This will also expand marketing overseas because there is a lot of awareness about environmentally friendly products abroad.

## 5. CONCLUSION AND SUGGESTIONS

Based on the results of the discussion above, the challenges and opportunities faced by Batik Lasem SMEs and Batik Bayat SMEs business owners can be summarized as follows:

### Opportunity:

1. Many opportunities can be achieved by Batik Lasem SMEs and Batik Bayat SMEs. There are characteristics inherent in the condition of each batik, so that it can be used as promotional material. Batik Lasem SMEs has the characteristics of batik from 3 countries with distinctive patterns and colors, while for Batik Bayat its uniqueness is in its natural colors and ancient motifs. If they can market it well, several domestic and even foreign batik lovers will look for their products.
2. Opportunities for the younger generation to learn batik, so that it will increase the sustainability of batik itself. Batik as Indonesia's cultural heritage is an opportunity to be developed and known more internationally, especially now that batik has been recognized by Unesco.
3. Opportunities for Batik Lasem SMEs and Batik Bayat SMEs is obtain the financial benefits arising from more sustainable choices. Protecting the environment and social helps SMEs gain a good name and trust from customers.

### Challenge:

1. The current shortage of labor is a problem that needs to be resolved. The current generation is less interested in continuing to make batik, because they are more interested in other fields that are considered more modern by society. The solution that can be done is to conduct training for new batik makers.
2. The owners of Batik Lasem SMEs and Batik Bayat SMEs do not yet realize the importance of business and financial management based on correct accounting

**Commented [RSH28]:** 1. What is the urgency of SMEs to disclose ESG? The challenges and opportunities presented should be accompanied by their contributions to existing theories and the advancement of knowledge, specifically in the context of sustainability disclosure in SMEs.  
2. Include implications, limitations, and trends for future research.

**Commented [U29R28]:** Has been added opportunity, challenge, limitation and suggestion for future research

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standards. These challenges cause SMEs to have difficulty producing the information needed for faster decision making for both internal and external parties.

3. Awareness regarding waste management is still quite low, where batik SMEs are not yet aware of the dangers of environmental pollution and the importance of protecting the environment. Apart from that, batik SMEs owners also feel that funds for investment in waste management are still considered a waste. These challenges mean that SMEs cannot be fully declared environmentally friendly, so SMEs need to be aware that the importance of protecting the environment can have an impact on business sustainability and increasing profits. This is because SMEs have limited resources and finances to manage the environment, besides that it is quite complicated and expensive for SMEs to implement ESG.
4. In future research, empirical research (using survey and mixed methods approaches) can be conducted to evaluate company and stakeholder perceptions of the economic, social and governance of sustainability. **The participants used in this research were limited to Batik Lasem SMEs and Batik Bayat SMEs. Suggestions for further research are to expand the scope of SMEs to other industrial fields like manufacturing, so that they can fully reflect the company's concern for the ESG, especially in SMEs.** Finally, comparative research can be conducted between large sector companies and SMEs to understand their ESG practices and explore opportunities for SMEs.

**Commented [U30]:** Comment Reviewer 2 Yeasydarmayanti ubh: In literature review Suggestions not yet visible. Suggestions for further research must be clearer and more focused, because this research is only initial research or more in the form of a simple description of the existing conditions of the two partners.

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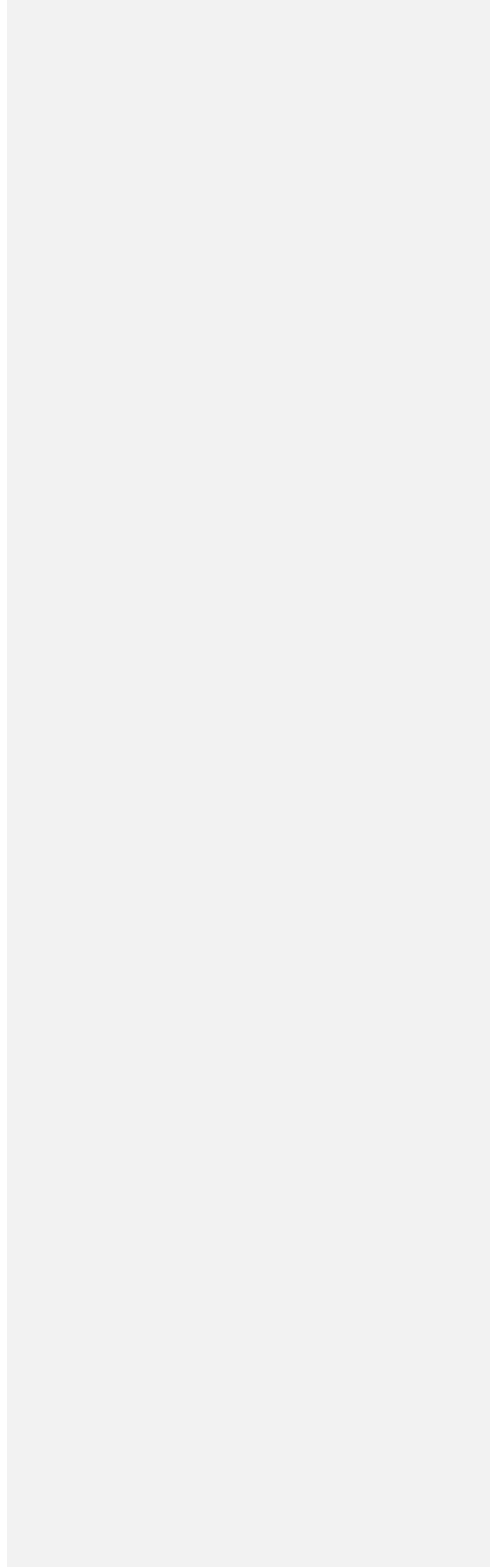
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