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# Halal Ecosystem Micro Small And Medium Enterprises Through The Integration Of Value Chain And Green Accounting Strategies

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#### Abstrak

Gaya hidup halal kini relevan bagi banyak orang, termasuk non-Muslim. Pemerintah serius mengembangkan industri halal dengan menyediakan kawasan khusus serta dukungan pembiayaan, seperti subsidi sertifikasi halal bagi UMKM. Infrastruktur logistik dan rantai pasok halal juga disiapkan untuk sektor makanan, farmasi, pariwisata, kosmetik, dan keuangan. Optimalisasi produk halal hijau dilakukan melalui konsep rantai pasok halal yang memperkuat empat pilar industri halal. UMKM telah mengenal konsep biaya lingkungan hidup dalam green accounting, namun tantangannya adalah memastikan ketepatan dan kesesuaian pengorbanan usaha dengan definisi biaya lingkungan.

Kata Kunci: Ekosistem Halal; Rantai Pasok Halal, Green Accounting

# Abstract

The halal lifestyle has become relevant for many people, not only for Muslims, but also for those who are not Muslims. The creation of the halal industrial area is a manifestation of the government's seriousness in creating a halal-based and environmentally friendly business climate. The government facilitates the halal guarantee financing component, for example, there are subsidies and financial support for MSMEs in the halal product certification process. Infrastructure is prepared in the form of logistics and halal supply chains which are different in each sector. Infrastructure as a preparation for raw material logistics and the chain sector to support industrial strengthening, among others; food, pharmaceuticals, tourism, cosmetics and finance. Optimizing green halal products with the concept of halal supply chain in developing a halal ecosystem for MSMEs in Indonesia is by strengthening the four pillars of the halal industry. MSME actors already know the existence of the environmental cost account component as a form of implementing green accounting, but the problem is the truth or suitability and accuracy of the sacrifices made by the business unit with the characteristics of the definition of environmental costs.

Keywords: Halal Ecosystem; Halal Supply Chain, Green Accounting

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#### INTRODUCTION

The rapid growth of industry in the global economy has led to the emergence of issues related to climate change. This phenomenon is caused by industrial activities that are not environmentally friendly and an increase in consumerism patterns increasing waste. Therefore, in the production process of halal products, attention to environmental impact is very important. The Halal Product Assurance Organizing Agency (BPJPH) is required to encourage halal product certification programs with sustainability principles. Currently, there are many green halal products or green halal products available in Indonesia and in the global market. The characteristics of these products include that they do not produce excess carbon emissions, the production process does not damage the environment, and if using packaging, the packaging is easily compostable, recyclable, or reusable. Ecofriendly products are products that do not hurt the environment from the manufacturing stage to use and disposal.

The halal lifestyle has become relevant for many people, not only for Muslims but also for those who are not Muslims. Therefore, it is important to implement and develop the concept of green products that are by halal principles widely in Indonesia, to reach the global market more effectively. The concept of halal includes not only religious aspects, but also aspects such as hygiene, safety, and environmental impact of a product. The halal green product business model must be able to reduce environmental risks by managing waste, increasing efficiency and productivity,

and encouraging environmentally friendly innovation.

Indonesia has successfully developed a halal industrial area, also known as Eco-Industrial Park (EIP) due to its concern for the environment. At the G20 Meeting in 2022, the main issue discussed was inclusive and sustainable industries. This eco-friendly industrial area offers significant business advantages compared to conventional industrial models. With more efficient use of resources, increased productivity, and commitment to corporate social responsibility and tackling global climate change, this industrial region has the potential to reduce risks associated with environmental and social impacts. The establishment of halal areas in Indonesia will play a role in promoting an economy sourced from halal products and meeting the growing demand for halal products, in line with the growing number of Muslim populations in Indonesia and around the world. Therefore, the government, stakeholders, and society need to turn their attention to building and expanding the halal industry in Indonesia, to become a leader in the global halal industry.

The government in particular should set this as a priority in its economic development efforts, following the steps taken by Malaysia and the United Arab Emirates. Not only that but collaboration from the community in using local halal products is also needed. Thus, Indonesia is expected to become a major hub for the halal industry globally, increasing its competitiveness in the international market. The Global Halal Hub offers an opportunity for Indonesia to become a leading exporter of halal

products, especially in the halal food sector.

Halal and environmentally friendly products have become an integral part of sustainable economic development efforts. A sustainable economy is considered an effective solution to deal with various negative impacts that may arise due to economic growth. Among them are the decline in environmental quality, the expansion of growing social inequality, which often occurs because it is difficult to achieve a balance between economic growth and economic equity, and the impact caused by climate change.

The adoption of halal green products can help mitigate these negative impacts. With the many benefits that can be obtained from halal green products, it is important to increase their distribution in Indonesia, and even increase the potential for export abroad. Indonesia is currently ranked 4th in the global Islamic economy according to The Global Islamic Economy Indicator 2022. The hope for the future is that Indonesia can reach the first rank and become a major producer of global halal products worldwide. The following is data on total halal product spending in Indonesia, including;

MSMEs in Indonesia show data that of 1.6 million MSMEs, only 10 percent have halal certification. The data is based on data from BPS and the Association of Food and Beverage Entrepreneurs (GAPMMI) which means that there are still around 90 percent of MSMEs that do not have halal certification. Factors causing this include; the existence of halal certification fee rates, low awareness of MSME actors to carry out halal certification, and the unwillingness of MSME actors to halal certification of their products. The apathy of MSME players is used as a basis for assessing that MSMEs do not support government programs as halal industries.

A key factor in the growth of the halal economy is directly proportional to the increasing population of Muslim populations around the world. The total number of Muslim population in the world until 2018 has reached 1.8 billion and it is predicted that this number in 2030 will reach 2.2 billion. Challenges and obstacles in the development of the halal industry in Indonesia include; a) the low number of MSME products that have halal certificates; b) the absence of a Minister of Finance Regulation regulating tariffs as the basis for

Table 1. Total Halal Product Shopping in Indonesia

No	Halal Industry Sector	Realizable & Predicted Value (USD Billion)			Indonesia's Position	Value (USD billion)
		2018	2024	Increase (%)		
1	Halal Food	1.37	1.97	6.3	1	173
2	Islamic Finance	2.52	3.47	5.5	7	86
3	Travel Halal	189	274	6.4	5	11
4	Halal Fashion	283	402	6.0	3	21
5	Media & Recreation	220	309	5.8	6	10
6	Halal Pharmacy	92	134	6.5	46	5

Source; Thomson Reuters(2019)

BLU for BPJPH; c) not maximized the Halal Information System in JPH services; and d) The majority of human resources who understand halal are still limited qualitatively and quantitatively. The halal industry in Indonesia in its development must be able to connect the supporting processes of the halal industry from upstream to downstream, commonly called 2H. Upstream and downstream are the core components that can create a halal ecosystem. The 2H halal ecosystem includes the process of producing goods and services, as well as its supporting components, namely; infrastructure, government, human resources. MSMEs in Indonesia whose growth is significantly positive but not yet comparable to the concept of good and correct accounting records. The existence of SAK-EMKM is a form of accountability that can be adopted by MSME actors to start an orderly manner in conducting financial records. In line with the existence of green accounting, MSME players are also part of expected to carry out the policy well to support the implementation of the halal ecosystem.

In its implementation, MSMEs lack in handling environmental waste or care about environmental friendliness, which is due to more importance on profit in their business activities, as evidenced that MSMEs focus more on product quality without paying attention to environmentally friendly concepts so that environmental costs are ignored. This is supported by Pentiana's research (2019) showing that MSMEs only focus on operating profits because of low knowledge of environmental costs. Other results show

that MSMEs are aware of environmental protection issues, but MSMEs' commitment to environmental protection is still low. (Jahamani, 2003)

The creation of a halal industrial area is a manifestation of the government's seriousness in creating a halal-based and environmentally friendly business climate. The criteria that become indicators that need to be considered are the existence of a good management concept for halal industrial estates, cooperation with independent institutions that inspect and test MSME products both halal and environmentally friendly, the construction of sanitation and ventilation for water and clean air management according to halal requirements, the readiness of employees or workers who have skills or are trained in the implementation of halal product guarantees, as well as boundary areas for halal industrial estates.

Government support in increasing exports of halal products in Indonesia is to launch special gateways or doors for various export activities on halal food products. The manifestation of the commitment to the development of the halal industry is expected to increase economic growth and Indonesia's Gross Domestic Product by optimizing the halal industrial area.

# LITERATURE REVIEW

### **Halal Industry and Green Economic**

Muslim countries began to be consistent in creating halal and green economic industries. The halal industry describes a collection of companies that operate in economic activities that are manufactured, namely processing raw materials into finished goods with a process that prioritizes Islamic law. The current era of halal labels on a product is a prima donna which is not only a form of regulatory compliance but a universal legalization as an indicator of assurance of the quality of a product. (Gillani et al, 2016). Being universal because halal no longer indicates a religious label or spiritual belief but can be adopted by all circles, both Muslim and non-Muslim.

Green Economy or green economy has become the main idea for all countries in the world, this is evidenced by the agreement of G20 countries to continue to be consistent in the development of the green economy. This green economy concept aims to protect our planet from increasingly severe damage. Indonesia itself has committed to implementing a green economy by integrating all elements involved in the economic cycle, including human resources, nature, and business units from both the government and private sectors.

# **Concept Halal Value Chain**

Humans in consuming have a basis that is used as a basis in making decisions to make purchases. Halal literacy is an ability that must be possessed by humans in decision-making to distinguish goods and services to be consumed based on halal or haram sharia. (Purnomo, 2016) Halal literacy is important to provide an assessment of the correct consumption decision because it goes through the process of knowledge, persuasion, decision, and confirmation in advance of the product to be consumed.

Green Product is a product produced by the company by paying attention to the needs of consumers who care about the environment. In other words, this product is known as an environmentally friendly product or a product designed to reduce negative impacts on the environment, starting from the stage of production, distribution, to use. The concept of green products also includes prudent management of natural resources during the production process to reduce environmental pollution. Products produced from environmentally friendly materials and halal ingredients are called green halal products. The concept of the Halal Value Chain is a process or stage that becomes a reference for MSME actors in running their businesses and businesses based on environmentally friendly and halal regulations.

# **Green Accounting**

Accountinghasaroleinenvironmental efforts, with voluntary conservation disclosure (environmental disclosure) in its financial statements related to environmental costs or Environmental Costs incurred by the company. The accounting system in which there are accounts related to environmental costs is referred to as green accounting or environmental accounting. Green accounting has an important role in addressing environmental and social issues and has goals that have an impact on achieving sustainable development and the environment, which influences corporate behavior in dealing with responsible

and social issues. With environmental accounting, it is possible to see the impact of ecologically sustainable practices in everything from the supply chain, production process, and distribution to customers to the process of recycling waste on products that have reached customers.

Green accounting or environmental accounting is the concept of collaboration between information on benefits to be obtained with environmental costs into various accounting practices and the incorporation of environmental costs in business decisions. (Uno, 2004). Green accounting is the process of identifying, assessing, and measuring aspects of corporate social activities to maintain the quality of the environment. (Goddess, 2016)

Green accounting is an important element in green halal products. Financial reporting that includes environmental information from green accounting can increase company transparency. This is closely related to consumer awareness of the environment which will prefer products that are produced responsibly. Thus, companies that implement green accounting can attract environmentally conscious consumers and increase demand for halal green products. Green accounting can also influence government policies related to environmental regulations and halal certification. The government can encourage the use of green accounting as one of the criteria for obtaining halal certification, thereby improving production

standards and ensuring products marketed meet environmental and religious requirements.

# **Halal Ecosystem**

The Halal Industry Ecosystem in its development shows a positive direction, both on a national and global scale. This development requires the support and facilities of financing/financial services, with various schemes offered. Because there has been no specific policy or program issued in the form of regulations that require the use of Islamic financing/financial services for the halal industry. The large opportunities of the halal industry and the need for financing have not been met by banking institutions. This gap must be overcome to achieve the development of the halal industry ecosystem.

The halal industry is not only a trending tagline, but with the strengthening of the halal industry, it can have a positive impact on improving the economy. The existence of a halal ecosystem shows that MSME players will compete so it is necessary to increase competitiveness competence for business people. In the era of Society 5.0, Indonesia requires MSME players to use digital strategies on all fronts to achieve halal production capabilities so that the market is global in scale (Pujayanti, 2020). The implementation of this strategy can maximize market potential, especially the existence of the halal industry. (Mubarok &; Imam, 2020).

Rachman & Syamsudin (2019)

describe aspects that need to be considered in the halal ecosystem, including; 1). Funding and financing aspects; 2). Production process/input; and 3) Regulation. The halal industry will be achieved well, so the creation of a halal ecosystem is needed. The halal ecosystem starts from upstream to downstream (2H) starting from raw materials and production, finance, and regulatory forces, thus creating Islamic finance which has a major and crucial role in shaping the halal industry ecosystem.

# RESULTS AND DISCUSSION

# Optimization Of The Halal Value Chain Concept In Developing A Halal Ecosystem For Msmes In Indonesia

Optimizing green halal products with the concept of the Halal Value Chain in developing a halal ecosystem for MSMEs in Indonesia by strengthening the pillars of the halal industry. The development of the halal industry ecosystem in Indonesia consists of four pillars, including; 1). Regulation or government making; 2). Readiness of supporting infrastructure; 3). Readiness of human resources (HR); 4). Service by the government. (Bank Indonesia Halal Industry Ecosystem, 2020)

The form of government support in the implementation of the halal ecosystem is how the sharia and halal atmosphere can be known and run. Government policies are needed both macro and micro. The government facilitates the financing components of halal guarantees. For example, there are subsidies and financial support for MSMEs in the process of halal product certification. Infrastructure is prepared in the form of logistics and halal supply chain which in each sector is different. Infrastructure is a preparation for raw material logistics and the chain sector to support the strengthening of the industry, among others; food, pharmaceuticals, tourism, cosmetics, and finance.

Human resources are strengthened by training and socialization or awareness of the importance of halal assurance of products. Strengthening the HR pillar is carried out with the concept of how to realize halal policies and the importance of halal assurance in Indonesia, as a largely Muslim country. Strengthening the preparation of halal industry players by providing training in the form of competency training related to halal products, such as supervisors and auditors, testing materials and products, and other competencies that are part of the halal industry ecosystem chain in Indonesia.

Strengthening services is devoted to financial services and funding. The main problem of Islamic finance is the concept of distribution, legality, or legal procedures in the distribution of financing. Another form of service is in the form of assistance to MSME actors related to halal products, the sector that is a halal priority in Indonesia is food and beverage products.

Previous research supports the results of the implementation of the four pillars, among others, showing the results that halal-certified products have not become a necessity not only for Muslims but also non-Muslims, because halal certification also assures that product quality has met standardization and has the feasibility for consumption not only because it is made from raw materials that are not haram. Halal and certified products are marked with the inclusion of a halal logo on a package. (Ambali & Bakar, 2012). This value chain describes the concept of the Halal Value Chain, which is a series of activities or processes carried out by organizations to produce products or services. Value chain strategy requires collaboration and integration of input, manufacture, distribution, marketing, and consumption processes as the final product result, all processes must be by sharia values (Subianto, 2018).

According to the results of Mutiara Sari's research (2023), the majority of the halal MSME market dominates products in Indonesia consisting of the food and beverage sector, the fashion sector, and the cosmetics sector. According to the Dinar Standard report the Indonesian state has succeeded in recording Indonesia's consumption level of halal food and beverages in 2020 reaching US \$ 135 billion, while the consumption of halal fashion and cosmetics was recorded at US \$ 15.6 billion and US \$ 4.19 billion in the same year (Sari, 2023).

In the implementation of the Halal Value Chain, according to Kurniawan & Azwir (2018), business units must carry out evaluation and re-supervision from the initial stage to the final stage or from

planning. The method known in the halal value chain is known as PDCA or Plan-Do-Check-Action method.



Figure 1. Halal Value Chain Ecosystem The theory of Tjiptono &; Diana, (2003) describes the stages in the PDCA method, among others;

# 1. Plan Preparation.

This stage begins with the basic concepts of the core points in the form of understanding the process, minimizing waste of time and energy, reducing errors, and planning continuous improvement.

2. Implementation of Plan (Do). The next stage is that the business unit will plan and run it in stages.

# 3. Auditing (Check).

At this stage, there is collaboration in the previous two stages and the suitability is analyzed.

# 4. Action.

In this last stage then the business unit will evaluate and analyze the effectiveness of the implementation of the previous three stages, to find the right formula if there is a gap in results for the future period.

The collaboration between the halal value chain and PDCA in the halal industry has a positive impact on business units, namely achieving competitive advantage and having competitiveness by consistently maintaining halal in the sequence of the process chain, up to sales to consumers. The PDCA method can help optimize business unit operations. (Junior &; Broday, 2019). The Ministry of Industry also provides support by developing Halal Industrial Estates in Indonesia.

Optimization of the halal ecosystem is by supporting the halal lifestyle trend that has great potential, including: 1). Development of demand for products and services labeled halal and environmentally Increase friendly; 2). consumer understanding and awareness of the need for halal products; 3). Improve company performance by increasing the use of labor. In the realm of building a government digital economic strategy represented by the Ministry of IBRA, the Indonesian Sharia Economy Master Plan 2019-2024 includes;

- 1. Creation of a halal marketplace with the concept of a Sharia financing system;
- Support and facilities for the growth of the start-up industry in improving the national and global halal value chain with the establishment of incubator facilities;
- 3. Provision of an integrated information system for traceability of halal products.

The obstacles to the progress of halal MSMEs from previous research are summarized as follows;

- 1. Not yet the maximum distribution of funds to MSMEs;
- 2. The majority of MSMEs have not been certified halal;
- 3. Expertise from HR is still relatively low;
- 4. The use of halal MSME technology is still limited;
- 5. Halal literacy of MSME actors is limited,
- 6. Halal MSME data has not been integrated,
- 7. Limited access to facilities for digital product and service innovation is still limited:
- 8. Related institutional support has not been optimal. (Danarti Hariani, 2023)

Support for halal MSME funding If conventional banking is still difficult, then Sharia development can facilitate funding for halal MSMEs. Forms of convenience

include; easing financing requirements, and priorities for MSMEs that have environmental impact assessment (AMDAL). This can encourage the progress of halal MSMEs in Indonesia. The government through the Ministry of Religious Affairs offers a free halal certification quota program for halal MSME actors throughout Indonesia known as the SEHATI program. The program has an impact on halal MSME players being more enthusiastic about applying for halal certification and can attract consumer confidence.

Consumers still have an understanding that halal products are products that do not contain alcohol and pork. Halal according to MUI is the process of starting from input or the beginning of making products until the product is ready to be sold or finished goods must not contain haram ingredients and harmful ingredients. There is a need for socialization regarding halal product requirements for MSME actors so that the halal certification process can be quickly achieved.

The quality of human resources is still low, impacting on technology has not been utilized optimally or optimally. Not all regions in Indonesia have access to product innovation facilities and technology access. Training related to the use of technology is needed so that there is an increase in the human resource skills of halal MSME actors. Equitable access to product innovation facilities to reach product innovation ideas from MSMEs in Indonesia. The data has not been validated properly so the need for information about MSMEs that have been certified halal does not yet exist, the lack of complete data is an obstacle for the Halal Product Assurance Organizing Agency cannot distinguish MSMEs that have been certified halal, and those that have not. The government or its derivative institutions have not been maximized to encourage the progress of halal MSMEs in Indonesia.

(Natalina, 2023)

Islamic banking has a role in supporting the management of the halal industry directly and indirectly, among others; financing assistance, management consultants/financial services in the halal integrity process stage as part of business sustainability, and supervision of agreed transactions and contracts. Indirectly, it can also foster MSMEs and promote MSME products as well as cooperate with halal certification bodies in the halal certification process as a form of the institution's CSR (social corporate responsibility) program.

Optimization carried out by the government in addition to those mentioned above, namely by strengthening exports of halal products. Forms of strengthening exports of halal products include;

- 1. There is a decrease in export tariffs for products in OIC member countries.
- 2. Strengthening the value chain of halal products based on export priority products, among others; processed food, meat, animal feed, clothing (fashion), cosmetics, and pharmaceuticals.
- 3. Strengthening product branding, through promotion and cooperation with OKI countries.

To support the smooth export of halal products to MSME players, strategies for the concept Halal Value Chain are needed, including;

- 1. Halal product standardization, marketing, halal product literacy, and halal certification;
- 2. Marketing distribution of halal products and standardization or standardization of product quality internationally;
- 3. Increasing the effectiveness and strengthening of institutions with superior regional work programs;
- 4. Continuity of research and development (R&D), especially on halal food and the establishment of halal industrial centers in every region throughout Indonesia.

# The Concept Of Green Accounting In The Development Of The Halal Ecosystem For Msmes In Indonesia

Green accounting is the main tool to collaborate aspects of the natural environment that can affect the economy and a sustainability agent. (Monsnja and Grzinic, 2019). Green accounting aims to provide information on the operational performance of organizations based on protection and concern for the environment. The hope is that there will be compliance and prudence of the company in processing resources by paying attention to the impact on the community. Regulations on the application of green accounting aimed at MSMEs still do not exist, but the application of green accounting in private companies has been regulated in Government Regulation No. 47 of 2012, which is a follow-up to the Limited Liability Company Law No. 40 of 2007. Meanwhile, according to Lindrianasari (2007) outlines that every PT has social and environmental responsibilities in carrying out its business in fields related to natural resources.

The application of green accounting is one of the sacrifices made by business units on economic resources measured by units of money for certain purposes. Assessment of business costs includes; Costs for activities of business units for their business operations. (Hansen & Mowen, 2009) This knowledge is needed by business unit managers to identify costs that arise during the production process so that the value correctly calculates the profit. The majority of MSME actors in calculating business costs are that there has been a separation between business costs and private so that the value of the total business costs and profits is generated.

Environmental costs are a component of the account that represents a business unit implementing green accounting or producing environmentally friendly products. (Maghfiroh, 2023) Referring to

Adham's opinion (2020) that environmental cost knowledge can be defined by the knowledge of business units in spending business costs to finance business operations whose purpose is used for environmentally friendly concepts, for example; waste management costs, energy efficiency costs, and environmental investment costs. The same definition, Hansen & Mowen (2009) also support that knowledge of environmental costs is a sacrificial activity carried out, among others; the disposal of waste or garbage into the environment. The majority of MSME actors already know the existence of environmental cost account components as a form of implementing green accounting, but the problem is the suitability and accuracy of the sacrifices made by the business unit with the characteristics of the definition of environmental costs.

There are 2 forms of errors that occur in the application of green accounting to MSME actors, including; 1). The value recognized as an environmental cost still needs to be audited whether there is conformity with the characteristics of the environmental cost; 2). Sacrifices for waste management or consistency in participating in producing environmentally friendly products are moral responsibilities, so expenditures made by MSME actors are not recognized and recorded as environmental costs. (Ginting,2007)

#### CONCLUSION

Optimization of the halal ecosystem in Indonesia for MSME players is with support for the halal lifestyle trend and with the Indonesian Sharia Economic Master Plan 2019-2024. The application of a method known in the halal value chain (2H), namely PDCA or the Plan-Do-Check-Action method, shows that there has been a development of halal MSMEs in Indonesia. The collaboration between the halal value chain and PDCA in the halal industry has a

positive impact on business units, namely achieving competitive advantage and having competitiveness by consistently maintaining halal in the sequence of the process chain, up to sales to consumers. Meanwhile, optimizing green halal products with the upstream-to-downstream concept in developing halal ecosystems for MSMEs in Indonesia by strengthening the four pillars of the halal industry.

The majority of MSME actors already know the existence of environmental cost account components as a form of implementing green accounting, but the problem is the truth or suitability and accuracy of the sacrifices made by the business unit with the characteristics of the environmental cost definition. The majority of MSME actors in calculating business costs are that there has been a separation between business costs and private so that the value of the total business costs and profits generated. Green accounting has not been fully understood in its application to accounting records for MSME actors, this is shown by MSME actors who do not record accounting for environmental cost sacrifices, because it is perceived as a moral responsibility as a citizen and a form of concern for consumer demand.

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