

Compliance of Halal-Certified Business Actors with Environmentally Friendly Business Management from the Perspective of Islamic Business Ethics

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Abstract

This study is motivated by a paradox in the micro and small-scale food industry, where halal certification is often not directly proportional to environmental management responsibility. Halal labeling should cover all aspects of halalan thayyiban, but in practice, production waste is often neglected and pollutes the ecosystem. This study aims to analyze the level of compliance of halal-certified businesses with environmental management standards and to examine this phenomenon through the perspective of Islamic business ethics, particularly the principles of khalifah (stewardship of the earth) and hifz al-bi'ah (preservation of the environment). The research method used was descriptive qualitative with a sociological-legal approach. Data was collected through in-depth interviews with MSME actors, field observations of waste disposal systems, and documentation of relevant regulations. The research location focused on food businesses in the Pekalongan area that already had halal certificates, either through the regular scheme or self-declaration. The results of the study show that business actors' compliance with environmental management is still administrative in nature and has not yet become a substantial ethical awareness. Most business actors view halal certification as limited to the ritual cleanliness of raw materials, while the ecological impact of post-production is considered a separate entity. From the perspective of Islamic business ethics, this practice shows that the value of thayyib has not been fully internalized. This study recommends the integration of halal product assurance instruments with environmental management standards in order to create a sustainable halal industry ecosystem that is beneficial to nature.

Keywords: Legal Compliance; Halal Certification; Environmental Management; Islamic Business Ethics; MSMEs.

Abstrak

Penelitian ini dilatarbelakangi oleh adanya paradoks pada industri makanan skala mikro dan kecil, di mana kepemilikan sertifikat halal sering kali tidak berbanding lurus dengan tanggung jawab pengelolaan lingkungan. Label halal seharusnya mencakup aspek halalan thayyiban secara utuh, namun dalam praktiknya, limbah produksi sering kali diabaikan dan mencemari ekosistem. Penelitian ini bertujuan untuk menganalisis tingkat kepatuhan pelaku usaha bersertifikat halal terhadap standar pengelolaan lingkungan serta membedah fenomena tersebut melalui perspektif etika bisnis Islam, khususnya prinsip khalifah (pengelola bumi) dan hifz al-bi'ah (menjaga lingkungan). Metode penelitian yang digunakan adalah kualitatif deskriptif dengan pendekatan sosiologis-yuridis. Data dikumpulkan melalui wawancara mendalam dengan pelaku UMKM, observasi lapangan terhadap sistem pembuangan limbah, serta dokumentasi regulasi terkait. Lokasi penelitian difokuskan pada pelaku usaha makanan

di wilayah Pekalongan yang telah memiliki sertifikat halal baik melalui skema reguler maupun self-declare. Hasil penelitian menunjukkan bahwa kepatuhan pelaku usaha terhadap pengelolaan lingkungan masih bersifat administratif dan belum menjadi kesadaran etis yang bersifat substansial. Sebagian besar pelaku usaha memandang sertifikasi halal hanya terbatas pada aspek kebersihan bahan baku secara ritual, sementara dampak ekologis pasca-produksi dianggap sebagai entitas yang terpisah. Dalam perspektif etika bisnis Islam, praktik ini menunjukkan belum terinternalisasinya nilai thayyib secara menyeluruh. Penelitian ini merekomendasikan adanya integrasi antara instrumen jaminan produk halal dengan standar pengelolaan lingkungan hidup guna mewujudkan ekosistem industri halal yang berkelanjutan dan maslahat bagi alam.

Kata Kunci: Kepatuhan Hukum; Sertifikat Halal; Pengelolaan Lingkungan; Etika Bisnis Islam; UMKM.

Introduction

The Indonesian halal product assurance framework establishes mandatory halal certification for products entering, circulating, and traded within the country through a staged implementation mechanism. This obligation is primarily regulated under Law Number 33 of 2014 concerning Halal Product Assurance and its current implementing regulation, Government Regulation Number 42 of 2024 concerning the Implementation of Halal Product Assurance (Republic of Indonesia, 2014, 2024). The regulatory framework is intended to provide legal certainty regarding product halalness, protect Muslim consumers, and encourage business practices consistent with Sharia principles (Daulay, 2025; Fahrizi et al., 2026; Firdaus, 2023; Kaming, 2025). For businesses whose products have already been certified, legal compliance does not end with the issuance of a halal certificate but continues through the consistent implementation of the Halal Product Assurance System, proper use of halal labels, maintenance of product halalness, and reporting of changes in materials or production processes (Ardila, 2026; Arisandi et al., 2026; Bima et al., 2025; Republic of Indonesia, 2024).

From an Islamic perspective, halal cannot be separated from the principle of *halalan tayyiban*, which combines legal permissibility with goodness, safety, cleanliness, quality, and benefit (Auliyah, 2026; Lokman et al., 2025; Pradini, 2022; Rahman & Mahmud, 2025). Accordingly, a product should not only be free from prohibited materials but should also be produced through processes that protect consumers, workers, society, and the surrounding environment (Al Mustaqim, 2023; Erwaedy et al., 2021; Sahib & Ifna, 2024). Nevertheless, previous studies demonstrate that halal certification is frequently understood by micro and small business actors as an administrative requirement primarily concerned with raw materials, production facilities, and certification documents (Muhamad, 2020; Nijwah et al., 2026; Ningrum, 2022; Nurrahma, 2026). Such an understanding creates a gap between formal

compliance with halal certification requirements and the substantive ethical values underlying the concept of *halalan tayyiban*.

Environmental management constitutes a distinct but closely related dimension of responsible halal business practices. Waste disposal, excessive consumption of water and energy, and dependence on single-use plastic packaging may generate environmental harm even when the materials and products involved have fulfilled formal halal requirements (Andin et al., 2025; Perdani et al., 2025). Under the existing halal product assurance framework, environmental management has not been explicitly established as a legal determinant of product halalness or as a formal indicator for the issuance of a halal certificate (Republic of Indonesia, 2024). Therefore, inadequate waste management should not automatically be categorized as a violation of halal certification law, although it may demonstrate that the ethical meaning of *tayyib*, stewardship, and environmental responsibility has not been fully internalized in business practices (Erwaedy et al., 2021; Rahman et al., 2024).

The relationship between halal certification and environmental responsibility is particularly relevant to micro, small, and medium enterprises in the food and beverage sector. These businesses frequently use water, energy, raw materials, disposable packaging, and production processes that may generate liquid and solid waste, thereby making environmental responsibility an important component of sustainable business management (Andin et al., 2025; Erwaedy et al., 2021; Perdani et al., 2025). Kajen District in Pekalongan Regency provides a pertinent research setting because food and beverage MSMEs in the area have participated in halal certification programs, including the Free Halal Certification Program or SEHATI. Preliminary field identification, however, suggests that the increasing ownership of halal certificates has not always been accompanied by an equivalent understanding of post-certification obligations and environmentally responsible production practices (Researcher's preliminary field observations, 2025).

Previous studies have largely emphasized the administrative and economic benefits of halal certification for MSMEs. Atsiriyyah and Fitriyanti (2023) found that halal certification can increase consumer confidence and strengthen the competitiveness of food-packaging MSMEs, while Illiyyina and Kriswibowo (2022) demonstrated its contribution to market expansion and the added value of business products. Rukoyah and Ayu (2023) similarly reported that small and medium-sized businesses generally respond positively to halal certification policies, although practical difficulties continue to affect their implementation. In addition, the effectiveness of halal certification policies depends on government communication, service transparency, institutional coordination, and the ability of certification

services to respond to the needs and capacities of business actors (Safitri & Cholil, 2025). These studies indicate that halal certification functions not only as an instrument of legal assurance but also as a strategic mechanism for strengthening consumer trust and business competitiveness.

Another group of studies has examined the barriers encountered by MSMEs in obtaining and maintaining halal certification. Nasori et al. (2022) identified limited human resources, insufficient knowledge, and difficulties in obtaining halal-certified materials as significant obstacles to the self-declaration certification process. Gustiana (2023) and Wahyuni and Handayani (2022) further explained that the effectiveness of the Halal Product Assurance System remains constrained by limited business capacity, insufficient mentoring, and weak post-certification monitoring. These findings indicate that sustainable halal compliance is influenced not merely by the existence of legal rules but also by legal literacy, institutional assistance, business resources, and continuous supervision. Accordingly, the sustainability of halal-certified MSMEs requires a governance framework that connects regulatory compliance with managerial capacity and long-term ethical responsibility.

More recent studies have expanded the conceptual meaning of *halalan tayyiban* beyond the formal legality of materials and products. Erwaedy et al. (2021) explained that the principle of *tayyib* encompasses clean, safe, ethical, and responsible production processes, including concern for environmental conservation, while Rahman et al. (2024) demonstrated that halal production and consumption involve moral choices relating to sustainability, animal welfare, social responsibility, and environmental impacts. Salisu et al. (2023) further argued that green production and green marketing are inherent in the principles of halal and *tayyib* because lawful business activities should also be wholesome, healthy, and environmentally sustainable. From a broader governance perspective, Raimi (2025) showed that the integration of Sharia-compliant corporate governance, sustainable resource management, and transparent supply-chain technologies can strengthen the long-term environmental and social sustainability of the halal industry. Sulaeman et al. (2025) similarly positioned Islamic business ethics within the higher objectives of *maqāṣid al-sharī'ah*, emphasizing that the protection of religion, life, intellect, lineage, and property requires economic growth to be balanced with moral values, stakeholder welfare, responsible resource management, and sustainable socioeconomic justice. These perspectives affirm that Islamic business ethics requires business actors to pursue lawful profit while preventing harm, wastefulness, exploitation, and ecological degradation (Al Mustaqim, 2023; Auliyah, 2026; Sahib & Ifna, 2024; Sulaeman et al., 2025).

The distinction between formal and substantive compliance has also been identified in other sectors of the Islamic economy. Research on Sharia crowdfunding demonstrates that compliance cannot be assessed solely through conformity with regulatory provisions and contractual structures but should also consider the achievement of *maqāṣid al-sharī'ah* and the social and ethical impacts generated by business activities (Iman et al., 2025). Applied to halal-certified businesses, this perspective suggests that legal compliance with certification requirements and ethical responsibility for environmental consequences are conceptually distinct but normatively interconnected. Halal certification establishes the legal status and traceability of products, whereas Islamic business ethics evaluates whether business conduct also promotes benefit, prevents harm, and reflects responsibility toward consumers, society, and nature (Erwaedy et al., 2021; Rahman et al., 2024).

Despite the growing literature on halal certification, previous research has not sufficiently examined the relationship between post-certification legal compliance and environmental management among halal-certified MSMEs. Existing studies predominantly discuss certification benefits, business responses, implementation constraints, and the effectiveness of the Halal Product Assurance System, while environmental responsibility is commonly addressed in separate discussions of sustainability and Islamic ethics (Atsiriyyah & Fitriyanti, 2023; Gustiana, 2023; Illiyyina & Kriswibowo, 2022; Nasori et al., 2022). Consequently, limited attention has been devoted to how halal-certified business actors distinguish, connect, and internalize legal halal obligations and environmental responsibility in their daily operations. This gap is particularly significant when examined through the principles of *halalan ṭayyiban*, *khalīfah*, and *hifẓ al-bi'ah*, which position humans as responsible stewards and environmental preservation as part of the realization of public benefit (Ahyani et al., 2023; Erwaedy et al., 2021).

The novelty of this study lies in its analytical distinction and integration of three interrelated dimensions: post-certification halal compliance, environmental management practices, and Islamic business ethics. Rather than treating inadequate environmental management directly as a violation of halal certification law, this study assesses it as an indicator of the extent to which the substantive values of *ṭayyib*, stewardship, and environmental preservation have been internalized by halal-certified business actors. Based on this analysis, the study proposes complementary environmental indicators for post-certification guidance and sustainable halal business development, without positioning those indicators as determinants of the legal validity of halal certificates. This approach provides a more accurate conceptual

framework for connecting the halal product assurance system with environmental sustainability while preserving the distinction between halal regulation and environmental governance.

Based on this background, this study aims to analyze how halal-certified food and beverage MSMEs in Kajen District implement post-certification legal obligations and environmental management practices and to evaluate their relationship from the perspective of Islamic business ethics. The analysis addresses three interrelated questions: the extent to which business actors comply with post-certification halal obligations, how they manage the environmental impacts of their businesses, and how the principles of *halalan tayyiban*, *khalifah*, and *hifz al-bi'ah* can strengthen sustainable business conduct. Theoretically, this study contributes to Islamic business ethics by clarifying the relationship between formal halal compliance and substantive environmental responsibility. Practically, its findings are expected to provide input for the Halal Product Assurance Organizing Agency, regional governments, environmental authorities, halal product process facilitators, and higher education institutions in developing coordinated post-certification guidance and environmentally responsible halal business practices.

Methods

This study employed empirical legal research with a qualitative approach to examine how legal provisions concerning halal product assurance are understood and implemented in the business practices of halal-certified micro, small, and medium enterprises (MSMEs). Empirical legal research views law not only as a set of written norms but also as social behaviour that can be observed through the experiences, awareness, and practices of legal subjects within society (Febrimayanti, 2020; Hafizd et al., 2026). The research was conducted in Kajen District, Pekalongan Regency, which was selected because food and beverage MSMEs in the area have participated in halal certification programs, including the Free Halal Certification Program (SEHATI), supported by local governments, higher education institutions, and halal product process facilitators. The research informants consisted of 20 halal-certified MSME actors in the food and beverage sector who were selected purposively based on four criteria: possessing a halal certificate issued by the Halal Product Assurance Organizing Agency (BPJPH), having operated for at least one year, conducting business in the food and beverage sector, and being willing to participate in the research; these criteria ensured that the informants had relevant experience in implementing the Halal Product Assurance System and managing halal business activities (Bima et al., 2025). Primary data were collected through field observations and semi-structured in-depth interviews, in which observations focused on the implementation of post-

certification halal obligations, production practices, waste disposal, and the use of plastic packaging, while interviews explored legal understanding, maintenance of product halalness, reporting of changes in materials or production processes, and awareness of environmental responsibility. Secondary data were obtained through documentary analysis of Law Number 33 of 2014 concerning Halal Product Assurance, Government Regulation Number 42 of 2024 concerning the Implementation of Halal Product Assurance, BPJPH documents, relevant local government documents, and previous studies on halal certification, environmental management, and Islamic business ethics. The data were analyzed using the interactive qualitative analysis model of Miles, Huberman, and Saldaña, which comprises data condensation, data display, and conclusion drawing or verification; during this process, findings concerning post-certification legal compliance were analyzed separately from environmental management practices before their relationship was interpreted through the principles of *halalan tayyiban*, *khalifah*, and *hifz al-bi'ah* (Miles et al., 2014). Data credibility was maintained through source triangulation by comparing information among informants and method triangulation by comparing interview findings with field observations and documentary evidence, thereby reducing dependence on a single source or data-collection technique (Setha, 2024).

Post-Certification Halal Compliance and Environmental Responsibility among MSMEs

The assessment of halal-certified business actors in this study distinguishes post-certification legal compliance from environmental responsibility. Post-certification halal compliance refers to the implementation of obligations arising from Law Number 33 of 2014 concerning Halal Product Assurance and Government Regulation Number 42 of 2024 concerning the Implementation of Halal Product Assurance, including maintaining product halalness through the Halal Product Assurance System (SJPH), properly displaying halal labels, maintaining supporting documents, and reporting changes in materials or production processes when such changes occur (Republic of Indonesia, 2014, 2024). Accordingly, ownership of a halal certificate alone does not necessarily demonstrate sustainable compliance when business actors do not consistently maintain the processes and documentation underlying the certified status of their products (Arisandi et al., 2026; Bima et al., 2025; Putra et al., 2026; Saputra, 2025).

Environmental responsibility is assessed as a separate but ethically related dimension. Waste management, reduction of single-use plastics, and efficient use of production resources are not treated in this study as formal legal determinants of the validity of a halal certificate.

Instead, these practices are examined as indicators of the extent to which halal-certified businesses have internalized the broader values of *halalan tayyiban*, stewardship, and environmental preservation in their daily operations (Erwaedy et al., 2021; Rahman et al., 2024). This distinction prevents inadequate environmental management from being automatically classified as a violation of halal certification law while still allowing its ethical implications to be evaluated through Islamic business ethics.

Table 1. Analytical Framework for Post-Certification Halal Compliance and Environmental Responsibility

Assessment Indicators	High Integration (n=3)	Moderate Integration (n=6)	Limited Integration (n=11)
Maintaining the Halal Product Assurance System (SJPH)	Consistently implemented	Generally implemented	Not consistently implemented
Reporting changes in materials or production processes	Implemented when changes occurred	Partially implemented	Not consistently implemented
Using halal labels according to applicable provisions	Implemented	Implemented	Implemented
Maintaining halal documents periodically	Consistently implemented	Generally implemented	Not consistently implemented
Managing liquid and solid business waste	Consistently implemented	Partially implemented	Not consistently implemented
Reducing the use of single-use plastic	Consistently implemented	Partially implemented	Not consistently implemented

Source: Developed from Law Number 33 of 2014, Government Regulation Number 42 of 2024, interviews, and researcher observations (2025).

The available field data classified the 20 participating MSMEs into three combined profiles based on the consistency of their post-certification halal practices and environmental responsibility. These profiles are used as descriptive analytical categories rather than formal legal determinations issued by BPJPH or another supervisory authority. The classification therefore indicates the extent to which legal halal obligations and environmentally responsible practices are implemented together, without equating every environmental deficiency with non-compliance under halal certification law.

The high-integration profile refers to business actors who consistently maintained the principal post-certification halal requirements and also implemented environmental practices such as waste management and reducing single-use plastics. The moderate-integration profile refers to businesses that generally fulfilled basic halal requirements, particularly the use of halal labels and maintenance of certified production, but did not consistently implement all documentary, reporting, or environmental practices. The limited-integration profile refers to businesses that possessed and displayed halal certification but had not consistently maintained

several post-certification practices and had only limited implementation of environmentally responsible business management.

Table 2. Distribution of Combined Halal Compliance and Environmental Responsibility Profiles

Integrated Compliance Profile	Number of MSMEs	Percentage
High integration	3	15%
Moderate integration	6	30%
Limited integration	11	55%
Total	20	100%

Source: Primary data from interviews and researcher observations (2025).

Table 2 shows that 3 of the 20 participating MSMEs, or 15%, were classified within the high-integration profile, while 6 businesses, or 30%, were included in the moderate-integration profile. The remaining 11 businesses, representing 55% of the informants, were categorized as having limited integration between post-certification halal compliance and environmental responsibility. These figures describe only the distribution of the research informants and should not be generalized statistically to all halal-certified MSMEs in Pekalongan Regency or Indonesia.

The distribution indicates that obtaining halal certification does not automatically lead to the consistent implementation of all post-certification obligations or the internalization of environmental responsibility. Most informants had fulfilled the most visible aspect of certification by possessing or using halal certification and labels, but the maintenance of halal documents, reporting of changes in materials, and implementation of environmentally responsible practices varied among the businesses studied. This finding demonstrates a gap between possessing formal certification and sustaining an integrated halal business governance system in daily operations.

The findings are consistent with Gustiana (2023), who argues that the effectiveness of halal certification cannot be measured solely by the issuance of certificates but must also be supported by post-certification guidance and monitoring. They also reinforce the findings of Nasori et al. (2022), who identified limited human resources, knowledge, and business capacity as persistent barriers to the sustainable implementation of halal assurance among MSMEs. Similar concerns are raised by Bima et al. (2025), who emphasize that the reliability of halal certification depends on the perceptions, understanding, and continuing practices of halal supervisors and microbusiness actors.

From the perspective of legal compliance, the findings suggest that compliance among the participating businesses remained predominantly formal and administrative. Certification

and labeling were more readily implemented because they were directly visible to consumers and closely associated with market access, whereas documentary maintenance and reporting obligations required continuous understanding and institutional discipline. Weak post-certification assistance and limited legal literacy may therefore prevent formal certification from developing into sustained compliance based on awareness of the purposes underlying halal product assurance (Gustiana, 2023; Nasori et al., 2022).

From the perspective of Islamic business ethics, limited environmental management does not necessarily invalidate the legal halal status of a certified product, but it indicates that the substantive meaning of *tayyib* has not been fully realized. The concept of *tayyib* requires business processes to be good, safe, clean, beneficial, and capable of minimizing harm to humans and the environment (Erwaedy et al., 2021; Rahman et al., 2024). Consequently, the gap between formal halal compliance and environmental responsibility demonstrates the need to transform halal certification from a predominantly administrative achievement into a continuing ethical commitment grounded in *halalan tayyiban*, *khalifah*, and *hifz al-bi'ah*.

Factors Driving and Inhibiting Compliance

The interview findings indicate that market demand, consumer confidence, and government regulation are the primary factors encouraging business actors to obtain and maintain halal certification. Most informants regarded halal certification as an important requirement for expanding consumer acceptance, entering formal markets, and improving the competitiveness of their products. These motivations demonstrate that post-certification compliance is closely related to both legal obligations and the economic benefits expected by halal-certified MSMEs.

This finding is consistent with Atsiriyah and Fitriyanti (2023), who found that halal certification provides strategic benefits by increasing consumer confidence and expanding business opportunities. Other studies similarly show that certification strengthens market access, company reputation, and the competitiveness of halal products (Firdaus, 2023; Maufiroh & Sul-toni, 2025; Tahliani & Renaldi, 2023; Wardo & Samsuri, 2020). Illiyina and Kriswibowo (2022) also demonstrate that halal certification can increase the added value of MSME products and improve their ability to compete in broader markets.

Nevertheless, the findings identify several factors that inhibit the consistent implementation of post-certification obligations. Limited legal literacy prevents some business actors from fully understanding the need to maintain halal documents, preserve the consistency of materials and production processes, and report relevant changes when they occur. Weak post-

certification assistance and monitoring also encourage some business actors to regard the halal certificate as a completed administrative document rather than as a legal status that must be continuously maintained.

Environmental responsibility involves additional challenges that should be distinguished from formal halal certification obligations. Some informants perceived waste management, environmentally friendly packaging, and the reduction of single-use plastics as additional operational costs that did not provide immediate economic returns. This perception limited their willingness and capacity to adopt environmentally responsible practices, even though such practices are relevant to the substantive ethical meaning of *halalan tayyiban*.

These findings reinforce Nasori et al. (2022), who identify limited human resources, knowledge, and business capacity as significant obstacles to the sustainable implementation of halal assurance among MSMEs. Gustiana (2023) similarly argues that the effectiveness of halal certification depends not only on the issuance of certificates but also on continuous guidance, monitoring, and institutional supervision. Consequently, strengthening compliance requires a combination of legal education, accessible technical assistance, proportionate supervision, and support adapted to the financial and managerial capacities of micro and small businesses.

From the perspective of Islamic business ethics, compliance that is driven exclusively by market incentives and administrative requirements has not yet reached the level of ethical internalization. Halal certification should function not only as a legal and commercial instrument but also as an expression of responsibility toward consumers, society, and the continuity of lawful and beneficial production. The principle of *halalan tayyiban* therefore requires business actors to move from formal certification toward business conduct that is safe, clean, responsible, and capable of minimizing social and environmental harm.

Integration of Environmental Indicators into Post-Certification Halal Governance

The research findings indicate that most participating business actors understood halal certification primarily in relation to the halal status of raw materials, production processes, and product labels. This understanding is consistent with the formal scope of halal product assurance, but it does not automatically encompass the wider social and environmental dimensions associated with the concept of *tayyib*. Erwaedy et al. (2021) explain that *halalan tayyiban* includes not only lawful materials but also production processes that are clean, safe, ethical, beneficial, and environmentally responsible.

Rahman et al. (2024) similarly emphasize that halal production and consumption involve moral choices related to sustainability and responsibility for the consequences of business

activities. Environmental policy studies also demonstrate that sustainable development requires the integration of environmental considerations into institutional governance rather than treating them as separate and incidental obligations (Mudassir & Natsir, 2024). However, the field findings show that environmental management has not yet become a consistent component of the daily business governance practiced by most halal-certified MSMEs in the study.

This condition reveals a gap between the formal implementation of halal certification and the broader ethical meaning of *halalan tayyiban*. Existing halal legal discourse and certification practices remain predominantly focused on product status, materials, and production processes, while the ecological consequences of business activities are generally governed through separate environmental instruments (Hidarya & Badrudin, 2024; Republic of Indonesia, 2014, 2024). Therefore, environmental shortcomings should not automatically be interpreted as invalidating the halal status of certified products, but they can be evaluated as evidence that the substantive values of *tayyib*, stewardship, and prevention of harm have not been fully internalized.

Based on this distinction, the study proposes that environmental indicators be incorporated as complementary components of post-certification guidance, monitoring, and sustainable halal business development. The proposal does not position environmental indicators as new legal determinants for issuing or revoking halal certificates. Instead, it provides an ethical and governance framework through which BPJPH, regional governments, environmental authorities, halal product process facilitators, and higher education institutions can encourage halal-certified MSMEs to improve the sustainability of their production practices.

Table 3. Proposed Environmental Indicators for Post-Certification Halal Governance

SJPH-Related Business Components	Proposed Environmental Indicators	Expected Business Practices
Materials	Use of environmentally responsible materials	Prioritizing safe, traceable, and minimally harmful materials
Production process	Energy and water efficiency	Controlling excessive water and energy consumption
Production facilities	Liquid and solid waste management	Separating, reducing, treating, or properly disposing of production waste
Product packaging	Reduction of single-use plastic	Using reusable, recyclable, or lower-impact packaging where feasible
Monitoring and evaluation	Periodic environmental self-assessment	Recording environmental practices and evaluating improvements regularly

Source: Developed by the researchers based on field findings and the principles of Islamic business ethics (2025).

The proposed indicators reflect the principle of *hifz al-bi'ah*, which places environmental preservation within the protection of public benefit and the prevention of harm. Ahyani et al. (2023) explain that environmental awareness and responsible economic behaviour are increasingly important to the realization of Sharia objectives in contemporary business activities. Environmental preservation can also be connected to *hifz al-nafs*, *hifz al-māl*, and *hifz al-nasl* because environmental degradation may threaten health, economic resources, and the welfare of future generations.

The proposed framework is also consistent with the Islamic prohibition of wastefulness and environmental damage. Surah al-An'ām verse 141 prohibits excessive consumption, while the ethical principles derived from Islamic teachings require humans to maintain cleanliness, avoid harm, and manage natural resources responsibly. In this context, the principles of *khalīfah*, *amānah*, and *maṣlahah* provide an ethical foundation for encouraging halal-certified businesses to consider the environmental impacts of production beyond minimum administrative compliance.

The implementation of these indicators should be gradual and proportionate to the capacity of MSMEs. Environmental self-assessment, simplified waste records, packaging reduction targets, and periodic mentoring can be introduced without immediately imposing complex audit requirements that may burden microbusinesses. Incentives, technical assistance, access to environmentally friendly production technologies, and cooperation between government institutions and universities would be more constructive than treating environmental indicators solely as punitive requirements.

Digital technology can also support transparency, documentation, and sustainable business management, although its use should remain adapted to the scale and capacity of each enterprise. Alfarizi and Ngatindriatun (2022) show that the adoption of Islamic financial technology can contribute to MSME sustainability by strengthening financial literacy, management efficiency, and access to supportive business services. In the context of the present study, simple digital records may be used to document material changes, waste handling, resource consumption, and periodic environmental improvements without transforming digitalization into a new administrative burden.

Strengthening post-certification governance therefore requires more than the existence of normative regulations. It requires continuing education, coordinated supervision, environmental mentoring, and incentives for businesses that gradually implement responsible production practices. Through collaboration among the Halal Product Assurance Organizing Agency (BPJPH), regional governments, environmental authorities, halal product process

facilitators, and higher education institutions, formal halal compliance can develop into a broader moral and ecological commitment that supports an inclusive, competitive, and sustainable halal business ecosystem.

Conclusion

This study concludes that halal-certified MSMEs in Kajen District, Pekalongan Regency, have implemented post-certification halal obligations at varying levels, particularly in maintaining the Halal Product Assurance System, using halal labels, preserving supporting documents, and reporting changes in materials or production processes. Of the 20 business actors studied, 3 MSMEs, or 15%, demonstrated a high level of integration between post-certification halal compliance and environmental responsibility, 6 MSMEs, or 30%, demonstrated moderate integration, and 11 MSMEs, or 55%, demonstrated limited integration. Environmental practices, including waste management and the reduction of single-use plastics, were not consistently implemented by most participating businesses, although these practices should not be directly classified as legal requirements determining the validity of halal certificates. The findings indicate that halal certification is still predominantly understood as an administrative and market-oriented instrument, while the ethical principles of *halalan tayyiban*, *khalifah*, and *hifz al-bi'ah* have not been fully internalized in daily business management. Limited legal literacy, insufficient post-certification guidance and monitoring, constrained business resources, and the perceived additional costs of environmentally responsible practices were identified as the principal factors inhibiting the development of substantive halal compliance and sustainable business conduct.

The novelty of this study lies in distinguishing post-certification halal obligations from environmental responsibility while integrating both dimensions within a complementary framework for sustainable halal business governance. The proposed framework incorporates the use of environmentally responsible materials, energy and water efficiency, liquid and solid waste management, reduction of single-use plastics, and periodic environmental self-assessment as components of post-certification guidance rather than as new legal determinants for issuing or revoking halal certificates. This study is limited to 20 halal-certified food and beverage MSMEs in Kajen District and relies on qualitative interviews, observations, and documentary data; therefore, its findings cannot be statistically generalized to all halal-certified MSMEs in Pekalongan Regency or Indonesia. Future studies should involve broader geographical areas, larger and more diverse samples, and quantitative or mixed-method designs to examine the relationship between post-certification compliance, environmental performance,

business capacity, and the effectiveness of environmental mentoring. Further research may also test the feasibility of the proposed environmental indicators across different business sectors and evaluate their implementation through collaboration among BPJPH, regional governments, environmental authorities, halal product process facilitators, and higher education institutions.

Bibliography

- Ahyani, H., Putra, H. M., Muharir, M., Mutmainah, N., & Prakasa, A. (2023). Relevansi kesadaran global terhadap produk halal hubungannya dengan perilaku ekonomi masyarakat Indonesia di era Revolusi Industri 4.0. *Adzkiya: Jurnal Hukum dan Ekonomi Syariah*, 11(2), 66. <https://doi.org/10.32332/adzkiya.v11i2.5870>
- Al Mustaqim, D. (2023). Sertifikasi halal sebagai bentuk perlindungan konsumen Muslim: Analisis maqashid syariah dan hukum positif. *AB-JOIEC: Al-Bahjah Journal of Islamic Economics*, 1(2), 54–67.
- Alfarizi, M., & Ngatindriatun, N. (2022). Indonesian halal MSME open innovation with Islamic fintech adoption. *Jurnal Akuntansi dan Keuangan Indonesia*, 19(2), 221. <https://doi.org/10.21002/jaki.2022.11>
- Andin, I. W., Evantrino, M. D., & Pertiwi, R. P. (2025). Eksistensi penegakan hukum lingkungan dalam mewujudkan pertumbuhan ekonomi dan pembangunan berkelanjutan di Indonesia. *Jurnal Hukum, Politik dan Ilmu Sosial*, 4(2), 16–31.
- Ardesta, P. S., Elwardah, K., & Zaki, K. (2025). *Sertifikat halal di era 5.0: Upaya mewujudkan integritas nilai ekonomi syariah*. CV Brimedia Global.
- Ardila, H. (2026). Efektivitas Undang-Undang No. 33 Tahun 2014 tentang sertifikasi halal dalam menjamin kepercayaan konsumen Muslim. *Jurnal Literasiologi*, 15(1).
- Arifin, F., Annisa, N., & Abdullah, M. W. (2026). Peran sertifikasi halal dalam mendorong inovasi produk pada industri halal: Perspektif kewirausahaan syariah. *Jurnal Asy-Syarikah: Jurnal Lembaga Keuangan, Ekonomi dan Bisnis Islam*, 8(1), 47–67.
- Arisandi, M. I. M., Arisandi, B., Ulum, B., Hakim, Z., & Akbar, J. (2026). Akselerasi sertifikasi halal *self-declare* melalui pendampingan partisipatif berbasis digital bagi UMKM di Desa Langkap. *Journal of Community Service and Engagement*, 2(1), 41–51.
- Asriyadi, Putra, M. F. V., Awaliyah, R., & Anwar, D. R. (2026). Supply chain halal: Pengaruh *traceability* (blockchain), sertifikasi, dan kepatuhan pemasok terhadap kepercayaan rantai pasok Kota Makassar, Sulawesi Selatan. *JUMESI: Jurnal Manajemen dan Akuntansi*, 2(1), 15–31. <https://doi.org/10.66819/jumesi.v2i1.19>
- Atsiriyyah, A., & Fitriyanti, F. (2023). Respon pelaku usaha mikro, kecil, dan menengah (UMKM) kemasan pangan terhadap kewajiban sertifikasi halal di Indonesia. *Jurnal Hukum & Pembangunan*, 53(2). <https://doi.org/10.21143/jhp.vol53.no2.1564>
- Auliyah, A. S. (2026). Ekonomi halal global dan maqāshid sharī'ah: Kerangka integrasi untuk pencapaian Tujuan Pembangunan Berkelanjutan (SDGs). *Sahmiyya: Jurnal Ekonomi dan Bisnis*, 5(1), 1–16.
- Bima, M., Alim, M. N., & Adnan, N. I. M. (2025). Assessing the reliability of halal certification implementation: A qualitative study on perceptions of halal supervisors and micro

- business actors. *Journal of Islamic Economic Laws*, 8(1), 79–105. <https://doi.org/10.23917/jisel.v8i01.7305>
- Daulay, N. K., & Zulham. (2025). Analisis hukum ekonomi kewajiban sertifikasi halal terhadap UMKM perspektif maqashid syariah. *Indonesian Journal of Humanities and Social Sciences*, 6(1), 27–44. <https://doi.org/10.33367/ijhass.v6i1.6945>
- Erwaedy, A., Pardiman, P., Syahril, S., & Andiriyanto, A. (2021). Implementing halal industry management and environment conservation based on maqashid sharia. *AL-FALAH: Journal of Islamic Economics*, 6(2), 268. <https://doi.org/10.29240/alfalah.v6i2.3504>
- Fahrizi, S., Aditya, R., Wibowo, R. A., & Hartati, S. Y. (2026). Kerangka regulasi industri halal di Indonesia: Analisis UU No. 33 Tahun 2014 dan PP No. 39 Tahun 2021 terhadap jaminan produk halal. *Jurnal Penelitian Ilmiah Multidisipliner*, 2(4), 1507–1522.
- Febriyanti, F. (2020). Implementation of halal certification for micro, small, and medium enterprises in West Tulang Bawang District. *Administrative and Environmental Law Review*, 1(2), 75. <https://doi.org/10.25041/aelr.v1i2.2148>
- Firdaus, F. (2023). Implikasi sertifikat halal dalam manajemen bisnis industri makanan dan minuman. *At-Tawazun: Jurnal Ekonomi Syariah*, 11(2), 39–54.
- Gustiana, R. (2023). Efektivitas BPJPH terhadap sertifikasi halal produk UMKM Indonesia. *Al-Maqrizi*, 1(1), 1. <https://doi.org/10.32493/amq.v1i1.31673>
- Hafizd, J. Z., Nurfuadah, I., Ramadhan, F. B., Aini, F. N., & Musthafa, B. (2026). *Metodologi penelitian hukum Islam dan penulisan karya ilmiah*. CV Strata Persada Academia.
- Hidarya, I., & Badrudin, E. (2024). Tinjauan hukum ekonomi syariah tentang mengonsumsi dan memperjualbelikan produk makanan dan minuman yang belum bersertifikat halal. *Sharia: Jurnal Kajian Islam*, 1(2), 29. <https://doi.org/10.59757/sharia.v1i2.25>
- Illiyyina, I., & Kriswibowo, A. (2022). Respon industri kecil menengah (IKM) di Provinsi Jawa Timur pada kebijakan sertifikasi halal. *Jurnal Ilmiah Universitas Batanghari Jambi*, 22(2), 1183. <https://doi.org/10.33087/jiubj.v22i2.2378>
- Iman, T., Mustofa, M., Tantriana, D., & Mugiyati, M. (2025). Sharia compliance of crowdfunding platforms for MSME financing in Indonesia. *Al-Mustashfa: Jurnal Penelitian Hukum Ekonomi Syariah*, 10(2), 587–603. <https://doi.org/10.24235/jm.v10i2.20667>
- Kaming, K. (2025). *Analisis kepatuhan hukum pelaku usaha terhadap kewajiban sertifikasi halal: Studi kasus pada pelaku UMKM di Kecamatan Maritengngae* [Undergraduate thesis, IAIN Parepare].
- Lokman, N. A. A., Khalid, N., Zafridin, N. Z., Mohd Sukri, N. S., Othman, N. H., & Othman, A. (2025). Kajian awal penerapan konsep *halalan tayyiban* dalam industri makanan mengikut perspektif syariah. *Journal of Islamic Philanthropy & Social Finance*, 7(1), 26–40.
- Maufiroh, S., & Sultoni, M. H. (2025). Strategi peningkatan pendapatan UMKM di Desa Laden melalui penerapan sertifikasi halal. *Jurnal Ilmiah Ekonomi Islam*, 11(2).
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Mudassir, A. F., & Natsir, M. K. K. (2024). Integrasi kebijakan pengelolaan lingkungan dan pembangunan berkelanjutan di Kota Jayapura. *Cakrawala: Jurnal Pengabdian Masyarakat Global*, 3(4), 268–292.

- Muhamad, M. (2020). Tantangan dan peluang penerapan kebijakan mandatory sertifikasi halal: Studi implementasi UU No. 33 Tahun 2014 dan PP No. 31 Tahun 2019. *Jurnal Ilmu Ekonomi dan Bisnis Islam*, 2(2), 1–26.
- Muqorobin, A., & Ussholihah, M. (2025). Empowering mustahiq through productive zakat. *Invest Journal of Sharia & Economic Law*, 5(2), 227–242. <https://doi.org/10.21154/invest.v5i2.10439>
- Nasori, N., Asih, R., Baqiya, M. A., & Rubiyanto, A. (2022). Pemantauan kesiapan produk UMKM Jawa Timur dalam sertifikasi halal *self-declare*. *Sewagati*, 7(2), 240. <https://doi.org/10.12962/j26139960.v7i2.475>
- Ningrum, R. T. P. (2022). Problematika kewajiban sertifikasi halal bagi pelaku usaha mikro dan kecil (UMK) di Kabupaten Madiun. *Istithmar*, 6(1), 43–58.
- Nurrahma, A. (2026). *Analisis penerapan kewajiban sertifikasi halal pada usaha mikro kecil (UMK) di Desa Mendalo Indah* [Undergraduate thesis, Universitas Jambi].
- Perdani, A. S., Umar, G., Dewata, I., & Amar, S. (2025). Pembangunan berkelanjutan di pesisir Indonesia: Tantangan dan solusi atas ancaman lingkungan. *Journal of Current Research in Humanities, Social Sciences, and Business*, 2(1), 11–22.
- Pradini, A. Y. (2022, December). The Urgency of Halal Certification in Creative Economy Development in Cirebon Regency. In *International Conference on Islamic Studies (ICIS)* (pp. 267-274).
- Rahman, K. A., & Mahmud, H. (2025). Daging sintesis dalam Al-Qur'an: Studi tematik ayat-ayat tentang makanan halal. *Jurnal Al-Mubarak: Jurnal Kajian Al-Qur'an dan Tafsir*, 10(2), 130–148.
- Rahman, M. M., Razimi, M. S. A., Ariffin, A. S., & Hashim, N. (2024). Navigating moral landscape: Islamic ethical choices and sustainability in halal meat production and consumption. *Discover Sustainability*, 5(1). <https://doi.org/10.1007/s43621-024-00388-y>
- Raimi, L. (2025). Development of Shari'ah framework for halal policy and standards for integrating blue economy for halal industry sustainability. In M. A. Salisu, L. Raimi, N. B. Bamiro, & I. O. Elegbede (Eds.), *Green and blue economy frameworks for halal industry sustainability* (pp. 151–170). Springer Nature. https://doi.org/10.1007/978-981-96-1729-6_9
- Republic of Indonesia. (2014). *Law of the Republic of Indonesia Number 33 of 2014 concerning Halal Product Assurance*.
- Republic of Indonesia. (2024). *Government Regulation of the Republic of Indonesia Number 42 of 2024 concerning the implementation of halal product assurance*.
- Rukoyah, A. F., & Ayu, D. P. (2023). Implementasi UU Nomor 33 Tahun 2014 tentang Jaminan Produk Halal pada produk makanan industri kecil menengah di Desa Ploso Kabupaten Pacitan. *Journal of Sharia Economic Law*, 1(1), 43. <https://doi.org/10.37680/jshel.v1i1.2324>
- Safitri, E., & Cholil, S. (2025). The transformation of halal certification policy and public response: An Islamic economic law perspective. *Al-Mustashfa: Jurnal Penelitian Hukum Ekonomi Syariah*, 10(1), 165–186. <https://doi.org/10.24235/jm.v10i1.19790>
- Sahib, M., & Ifna, N. (2024). Urgensi penerapan prinsip halal dan *thayyib* dalam kegiatan konsumsi. *POINT: Jurnal Ekonomi dan Manajemen*, 6(1), 53–64.

- Salisu, M. A., Showole, R. K., & Moyosore, T. U. (2023). Green marketing as an ethical practice for halal entrepreneurs for a sustainable ecosystem. In L. Raimi, I. O. Elegbede, M. A. Salisu, & N. B. Bamiro (Eds.), *Contemporary discourse of halal and Islamic entrepreneurship: Trends and future opportunities* (pp. 237–249). Springer Nature. https://doi.org/10.1007/978-981-99-6427-7_16
- Saputra, H. (2025). *Pengaruh kesadaran halal, kemudahan, prospek bisnis, dan sikap owner terhadap kepatuhan sertifikasi halal usaha mikro di Kota Jambi* [Undergraduate thesis, Universitas Jambi].
- Setha, D. (2024). Implementasi hukum lingkungan di Indonesia: Analisis kebijakan dan praktik penegakan hukum. *Jurnal Ilmu Hukum, Humaniora dan Politik*, 5(2), 1338. <https://doi.org/10.38035/jihhp.v5i2.3555>
- Sulaeman, S., Herianingrum, S., Ryandono, M. N. H., Napitupulu, R. M., Hapsari, M. I., Furqani, H., & Bahari, Z. (2025). Islamic business ethics in the framework of higher ethical objective (Maqasid al-Shariah): A comprehensive analysis and future research directions. *International Journal of Ethics and Systems*, 1–29. <https://doi.org/10.1108/IJOES-12-2024-0398>
- Sutono, Nijwah, I. S., Delima, Z. M., & Abdurrosid, E. W. (2026). Implementasi halal supply chain management (HSCM) pada usaha mikro, kecil, dan menengah (UMKM) pangan: Studi kualitatif. *Jurnal Ilmu Manajemen*, 16(1), 11–24. <https://doi.org/10.32502/jim.v16i1.1635>
- Tahliani, H., & Renaldi, R. (2023). Sertifikasi halal dan implikasinya untuk meningkatkan daya saing perusahaan. *Syarie: Jurnal Pemikiran Ekonomi Islam*, 6(1), 1–12.
- Wahyuni, H. C., & Handayani, P. (2022). Program implementasi sistem jaminan halal pada UMKM binaan PCM Tanggulangin Sidoarjo. *JMM (Jurnal Masyarakat Mandiri)*, 6(1), 177. <https://doi.org/10.31764/jmm.v6i1.6163>
- Warto, W., & Samsuri, S. (2020). Sertifikasi halal dan implikasinya bagi bisnis produk halal di Indonesia. *Al Maal: Journal of Islamic Economics and Banking*, 2(1), 98–112.