
Designing Sharia-Compliant Green Finance Contracts for Islamic Microfinance Institutions in Indonesia

Rina El Maza^{a,1*}, Diana Ambar Wati^{b,2}, Hermanita^{c,3}

¹ UIN Jurai Siwo Lampung, Indonesia

² UIN Jurai Siwo Lampung, Indonesia

³ UIN Jurai Siwo Lampung, Indones

Email ^arinaelmaza@uinjusila.ac.id, ^bdianaambarwati@metrouniv.ac.id,

^chermanita@uinjusila.ac.id

*Corresponding Author

ABSTRACT

This article examines the development of research on sharia-compliant green finance contracts for Islamic Microfinance Institutions (LKMS) in Indonesia. Although the Islamic green finance literature has grown through studies of green sukuk, green banking, Islamic social finance, ESG disclosure, maqasid al-sharia, and fiqh al-bi'ah, attention to the design of green financing contracts at the micro level remains limited. This study aims to map research trends, identify research gaps, and formulate a conceptual framework for green finance contracts for LKMS. The method used is an integrative literature review based on the Scopus database with the search string TITLE-ABS-KEY ("green finance" OR "sustainable finance" OR "sustainability" OR "environmental") AND ("Islamic finance" OR "sharia" OR "Islamic") AND ("Indonesia"). From 615 initial documents, after deduplication and selection based on inclusion and exclusion criteria, 50 core articles were analyzed using narrative and thematic synthesis. The review shows that prior research remains fragmented among macro instruments, banking governance, normative legitimacy of environmental fiqh, and microfinance inclusion. The main gap lies in the absence of a contract model that integrates sharia contracts, a micro green taxonomy, environmental covenants, risk mitigation, greenwashing prevention, and environmental impact measurement. This article concludes that contracts can serve as operational instruments for translating sharia and sustainability principles into inclusive, proportional, and measurable LKMS financing practices.

Keywords: sharia contract; green finance; fiqh al-bi'ah; LKMS; literature review

INTRODUCTION

The development of the global sustainability agenda has encouraged the transformation of the financial industry from a conventional profitability orientation toward financing that is more socially and ecologically responsible. In this context, green finance is no longer understood merely as a funding instrument for environmentally friendly projects, but as a governance mechanism that links capital allocation, climate-risk mitigation, and sustainability impact measurement. In the Islamic finance ecosystem, this issue has additional relevance because sharia principles fundamentally emphasize justice, the prohibition of exploitation, social responsibility, and the protection of public benefit. Recent literature shows that Islamic green finance in Indonesia has developed through various channels, such as green sukuk, the Islamic capital market, Islamic social finance, green banking, and inclusive financing for communities not yet served by the formal financial system (Faizi et al., 2024; Hidayat et al., 2024). However, this development is still stronger at the macro-institutional level and in capital market instruments than at the micro level, especially in Islamic microfinance institutions that interact directly with small business actors and local communities.

The urgency of research on green finance contracts for Islamic Microfinance Institutions (LKMS) in Indonesia arises from the strategic position of LKMS as a bridge between the sustainability agenda and the financing needs of grassroots communities. On the one hand, LKMS, BMT, and BPRS have close social relationships with MSME actors, the agricultural sector, small traders, and community economies. On the other hand, these sectors may also generate environmental impacts through energy use, waste, production practices, and natural-resource utilization. Studies on microfinance show that Islamic financial institutions can support the sustainability of micro and small enterprises through products, procedures, and financing services that better fit business actors' needs (Mutoharoh et al., 2021). Ridwansyah et al. (2025) also emphasize that BPRS plays an important role in supporting MSME resilience, although it still faces regulatory, risk-mitigation, and financing-sustainability challenges. Thus, the academic and practical need is not only to expand access to financing, but also to design contracts that ensure such financing genuinely promotes environmentally friendly and sharia-compliant economic activities.

Previous research has provided an important foundation for the development of Islamic green finance, but most of it remains dispersed across several streams of study that have not been fully integrated. First, studies on Islamic green finance and green banking highlight the role of Islamic banking in supporting the green economy, net-zero emissions, and institutional sustainability practices (Septyanun et al., 2025; Setiyowati et al., 2025). Akasumbawa et al. (2026), for example, developed an Islamic Green Banking Disclosure Index based on maqasid al-sharia and hifz al-bi'ah, while Mukhibad et al. (2026) showed that disclosure of sharia, social, environmental, and economic performance is related to the legitimacy and sustainability of Islamic banks. Second, studies on Islamic social finance, sukuk, and sharia fintech emphasize the potential of instruments such as waqf, zakat, sukuk, crowdfunding, and digital services to expand inclusion and support sustainable development (Purnamasari et al., 2024; Syarif & Aysan, 2024). Third, studies on fiqh al-bi'ah and maqasid al-sharia show that environmental protection can obtain normative legitimacy in Islamic law in the contexts of productive waqf forests, waste management, water governance, and community conservation (Chanifah et al., 2024; Hamdi et al., 2025;

Maskun et al., 2025; Umam et al., 2024). Although these three research streams are interconnected, the literature has not sufficiently bridged the normative, institutional, and contractual dimensions in a single operational model for LKMS.

The most prominent research gap lies in the absence of a green finance contract design specifically developed for the characteristics of LKMS in Indonesia. Existing studies tend to discuss green finance in Islamic banks, green sukuk in capital markets, or Islamic environmental ethics at the normative level, while microfinance contracts that contain green clauses, contract mechanisms, project-eligibility indicators, greenwashing mitigation, and environmental-impact monitoring are rarely studied systematically. Without a clear contract design, green financing claims risk stopping at normative labels or sustainability rhetoric. The *fiqh al-bi'ah* literature has offered basic principles such as *khalifah*, *mizan*, *maslahah*, *hifz al-bi'ah*, and the prohibition of harm, but these principles have not often been translated into contractual elements such as use-of-proceeds clauses, eligible green activities, environmental covenants, reporting obligations, remedial mechanisms, and micro-level impact indicators (Hamdi et al., 2025; Maskun et al., 2025; Wahdini et al., 2025). This gap is increasingly important because LKMS serve micro customers who often lack the administrative capacity to meet formal ESG standards applied to corporations or large banks.

The novelty of this article lies in its effort to synthesize the literature on Islamic green finance, sharia contracts, *fiqh al-bi'ah*, and environmental sustainability in order to formulate a conceptual framework for green finance contract design for LKMS. Unlike studies that position green finance merely as a macro policy or Islamic ethical values as normative legitimacy, this article positions contracts as instruments that connect sharia principles, sustainability objectives, and microfinance practice. Through an integrative literature review approach, this article argues that LKMS green finance contracts need to be designed by integrating four main components: selecting contracts that fit business characteristics and environmental risk; establishing a micro green taxonomy that is realistic for small customers; formulating contractual clauses to prevent misuse of funds and greenwashing; and creating proportional monitoring and environmental-impact reporting mechanisms. This synthesis is important because the success of Islamic green finance depends not only on the availability of funds, but also on the ability of contracts to direct financing behavior, distribute risk fairly, and ensure ecological *maslahah*.

Based on this background, this article aims to analyze the development of research on green finance, sharia contracts, and environmental sustainability in the context of Islamic microfinance institutions in Indonesia; identify the main research gaps in the literature related to green finance contract design for LKMS; formulate the contractual elements required so that such contracts are sharia-compliant, operational, and able to prevent greenwashing risks; and develop a conceptual framework integrating sharia contracts, a micro green taxonomy, contract governance, risk mitigation, and environmental impact measurement. By answering these four research questions, this article is expected to contribute to the development of Islamic green microfinance literature and provide an academic basis for preparing a more applicable green finance contract model for LKMS in Indonesia.

LITERATURE REVIEW

The advancement of the sustainable development agenda has encouraged the integration of financial systems and environmental objectives through the concept of green finance. Within the context of Islamic finance, green finance gains normative legitimacy because Sharia principles emphasize public welfare (*maslahah*), justice, social responsibility, and environmental protection as integral components of *maqāṣid al-syarī'ah*. Several studies indicate that the development of Islamic green finance in Indonesia has been dominated by research on green sukuk, green banking, Islamic social finance, and ESG disclosure within large-scale financial institutions (Faizi et al., 2024, p. 715; Ali et al., 2025, p. 194; Setiyowati et al., 2025, p. 6). These studies have demonstrated the potential of Islamic finance to support the transition toward a low-carbon economy and the achievement of the Sustainable Development Goals (SDGs). Nevertheless, scholarly attention to the design of green financing contracts at the level of Islamic microfinance institutions remains relatively limited, despite the fact that the microfinance sector represents an important economic actor that directly interacts with local communities and natural resource-based economic activities.

A significant issue has emerged regarding the most effective approach to implementing green finance within Islamic financial institutions. One group of scholars argues that macro-level instruments such as green sukuk, green banking policies, and ESG standards are the primary vehicles for accelerating the transition toward a green economy because they possess substantial financial mobilization capacity and strong regulatory support (Delle Foglie & Keshminder, 2024, p. 3208; Wan Zahari, 2025, p. 291). Another group criticizes this approach, arguing that it is excessively focused on large institutions and fails to address the needs of micro-enterprises that dominate Indonesia's economic structure (Ascarya & Sakti, 2021, p. 360; Rahayu, 2020, p. 9). This perspective emphasizes that the success of green finance depends not only on the availability of funds but also on the capacity of financing contracts to direct customers' economic behavior toward environmentally sustainable activities. This debate highlights that contractual issues remain an underexplored area within the broader discourse on Islamic green finance.

Another perspective focuses on the normative foundations of green finance from a Sharia standpoint. Several scholars maintain that the concepts of *maqāṣid al-syarī'ah*, *hiḍḍ al-bi'ah*, *khalīfah*, *mīzān*, and *maṣlahah* provide a strong theological basis for establishing sustainable financing systems (Hamdi et al., 2025, p. 88; Maskun et al., 2025, p. 1104). This argument is reinforced by studies on productive forest waqf, green fatwas, and environmental governance based on *fiqh al-bi'ah*, which demonstrate the compatibility between Islamic values and environmental sustainability (Umam et al., 2024, p. 142; Chanifah et al., 2024, p. 97). In contrast, several researchers argue that normative legitimacy alone is insufficient because these principles have not yet been translated into operational and measurable contractual structures (Nasution et al., 2026, p. 295; Hartanto et al., 2026, p. 775). As a result, green finance practices often remain at the level of normative rhetoric without contractual mechanisms capable of controlling environmental risks and preventing greenwashing.

Studies on Islamic microfinance institutions also reveal a gap between the literature on Islamic financing and the environmental sustainability agenda. Previous research has primarily examined the contributions of BMTs, BPRS, and other Islamic microfinance

institutions in promoting financial inclusion, empowering micro, small, and medium enterprises (MSMEs), and alleviating poverty (Mutoharoh et al., 2021, p. 74; Septianingsih et al., 2024, p. 22). More recent studies have begun linking Islamic microfinance with the SDGs and sustainable development; however, they have not developed contractual models that explicitly integrate Sharia contracts with environmental indicators (Wahyudi & Leny, 2024, p. 1980; Ma & Sukmana, 2025, p. 14). This limitation indicates that the literature remains fragmented among studies of green finance, environmental jurisprudence, and Islamic microfinance. Consequently, there is still no integrated contractual framework that links contract structures, green activity classifications, environmental monitoring mechanisms, risk mitigation strategies, and ecological impact measurement.

Based on this synthesis of the literature, the primary research gap lies in the absence of a green finance contract design model that comprehensively integrates Sharia principles, *fiqh al-bi'ah*, the characteristics of Islamic microfinance institutions, and environmental impact measurement mechanisms within the Indonesian context. Most existing studies focus on macro-level instruments, banking governance, or the normative legitimacy of sustainability, whereas the design of green financing contracts at the microfinance level remains insufficiently developed in a systematic manner (Faizi et al., 2024, p. 727; Ascarya, 2026, p. 437). This gap creates an important opportunity for research aimed at developing Sharia-based green financing contracts capable of ensuring Sharia compliance, promoting environmentally responsible economic behavior, reducing greenwashing risks, and enhancing the sustainability of micro-enterprises. Based on this gap, the research questions may be formulated as follows: (1) How has the literature on green finance, Sharia contracts, and Islamic microfinance evolved within academic scholarship? (2) What contractual elements are required to establish Sharia-compliant green finance contracts for Islamic microfinance institutions in Indonesia? and (3) How can a conceptual model of green finance contracts be developed to integrate Sharia compliance, environmental governance, risk mitigation, and sustainability impact measurement in an operational manner?

RESEARCH METHOD

This study uses an integrative literature review approach to map, evaluate, and synthesize the development of studies on sharia-compliant green finance contracts for Islamic microfinance institutions in Indonesia. This approach was chosen because the topic lies at the intersection of several bodies of literature, namely green finance, Islamic finance, sharia contracts, environmental sustainability, and Islamic microfinance institutions. An integrative review enables researchers to combine conceptual, normative, and empirical findings systematically so as to produce thematic understanding and new research agendas (Snyder, 2019; Torraco, 2005). The article search and selection process was arranged transparently by adapting systematic literature review reporting principles recommended in PRISMA (Page et al., 2021).

The main data source in this study is Scopus, because the database has broad coverage of reputable international publications in economics, finance, law, Islamic studies, and sustainability. The article search used the main search string in the title, abstract, and keyword fields: TITLE-ABS-KEY (("green finance" OR "sustainable finance" OR "sustainability" OR "environmental") AND ("Islamic finance" OR "sharia" OR "Islamic") AND ("Indonesia")). This string was designed broadly to capture studies that not only explicitly use the term green finance, but also discuss sustainability, environmental issues, Islamic finance, and the Indonesian context. The initial search produced 615 documents.

After metadata checks and deduplication based on title, DOI, author, and publication information, 614 unique articles were obtained.

Article selection was conducted by reading titles, abstracts, keywords, and key metadata. The inclusion criteria covered: (1) scholarly articles or academic proceedings; (2) relevance to green finance, sustainable finance, Islamic finance, sharia contracts, fiqh al-bi'ah, maqasid al-sharia, LKMS, BMT, BPRS, Islamic microfinance, or environmental sustainability in Indonesia; (3) adequate bibliographic information; and (4) availability, or potential availability, of full text for further analysis. The exclusion criteria covered: (1) popular or non-academic articles; (2) documents unrelated to Islamic finance, environmental sustainability, or the Indonesian context; (3) articles discussing Islam in general without a connection to financing, sustainability, or environmental governance; and (4) articles without adequate abstracts or metadata for screening. Based on this process, 50 core articles were selected as the main literature review corpus, while 564 articles were eliminated because they did not meet substantive relevance criteria.

Data were analyzed through narrative and thematic synthesis. First, each article was coded according to research focus, institutional context, contractual approach or sharia principle, sustainability dimension, research method, main findings, limitations, and potential contribution to LKMS green finance contract design. Second, these codes were grouped into dominant themes, such as Islamic green finance, green banking, Islamic social finance, fiqh al-bi'ah, maqasid-based sustainability, Islamic microfinance, BPRS/BMT, regulation, and environmental governance. Third, the synthesis identified research patterns, inconsistencies in findings, methodological limitations, and research gaps. Thematic synthesis was used because it is appropriate for organizing interdisciplinary literature and producing a conceptual framework based on patterns of findings rather than merely summarizing individual articles (Braun & Clarke, 2006; Thomas & Harden, 2008). The results were then used to formulate the novelty of a conceptual framework for LKMS green finance contract design integrating sharia contracts, a micro green taxonomy, contract governance, risk mitigation, and environmental impact measurement.

RESULT AND DISCUSSION

General Mapping of the Literature and Directions of Research Development

A review of the 50 core articles shows that research on Islamic green finance in Indonesia has developed fairly rapidly, but its development has not moved evenly across all institutional levels. The available literature discusses green finance more often at the macro and meso levels, such as green sukuk, green banking, the Islamic capital market, Islamic social finance, and sustainability policies in Islamic banking. By contrast, discussion at the micro level, particularly green finance contract design for Islamic Microfinance Institutions (LKMS), remains relatively limited. This pattern shows an imbalance between the advancement of Islamic green finance discourse in general and the availability of contractual models that can be operationalized by micro institutions such as BMT, BPRS, sharia cooperatives, or Islamic microfinance institutions.

The study by Faizi et al. (2024) is an important reference because it maps the Islamic green finance landscape in Indonesia through various instruments, including green sukuk, Islamic social finance, green banking, and inclusive financing. The study shows that Indonesia has great potential to develop Islamic climate finance because it is supported by both commercial and social Islamic finance instruments. However, its focus remains on

mapping the landscape and funding instruments, not on microfinance contract design. Septyanun et al. (2025) also strengthen the argument that Islamic banking can contribute to Indonesia's net-zero emission agenda through instruments such as mudarabah, musyarakah, istisna, green sukuk, and cash-waqf-linked sukuk. Nevertheless, this contribution is still placed within the framework of banking institutions and national regulation, not specifically directed toward contract structures that can be used by LKMS.

Studies on Islamic green banking increasingly show attention to environmentally friendly policies, service digitalization, financing for green sectors, and the need for more systematic implementation models. Setiyowati et al. (2025) propose the G-Sharia Framework, which integrates Islamic values, digital technology, environmentally friendly financing, ecological education, and internal governance in Islamic banking institutions. Akasumbawa et al. (2026) go further by developing an Islamic Green Banking Disclosure Index based on maqasid al-sharia and hifz al-bi'ah. Mukhibad et al. (2026) also show that disclosure of sharia, social, environmental, and economic performance is related to legitimacy, customer loyalty, and the cost of debt of Islamic banks. The similarity among these studies lies in their emphasis that sustainability in Islamic finance requires clearer governance, disclosure, and performance indicators. Their differences lie in orientation: Setiyowati et al. (2025) focus more on institutional practice and models, Akasumbawa et al. (2026) on disclosure indexes, and Mukhibad et al. (2026) on the relationship between disclosure and institutional performance. However, none of them directly answers how these principles can be translated into green financing contract clauses for micro customers.

The literature on fiqh al-bi'ah, maqasid al-sharia, and Islamic environmental ethics provides a strong normative foundation for developing sharia-compliant green finance contracts. Hamdi et al. (2025) show that maqasid al-sharia, fiqh al-bi'ah, and Islamic ethics can be integrated into sustainable water governance through the principles of *maslahah*, justice, *khalifah*, and protection of life. Maskun et al. (2025) develop a legal framework for sustainable waste management that harmonizes national environmental law with fiqh al-bi'ah, including the ideas of green zakat and eco-waqf. Umam et al. (2024) link fiqh bi'ah with productive waqf forests and produce a sustainable forest management model based on the principles of *harim*, *hima*, and *ihya' al-mawat*. Chanifah et al. (2024) and Wahdini et al. (2025) show that fiqh al-bi'ah, green constitutionalism, green fatwas, and local wisdom can form a framework of ecological legitimacy in community conservation. Overall, this literature shows that Islam has ethical and legal bases for supporting environmental sustainability. Its weakness, however, is that most studies remain at the normative, legal, or community-governance level and have not converted these principles into concrete financing contract designs.

Studies on LKMS, BPRS, microfinance, and Islamic financial inclusion provide another important dimension. Mutoharoh et al. (2021) show that Islamic financing differs from conventional financing in products, procedures, and services for supporting the sustainability of micro and small enterprises. Ridwansyah et al. (2025) emphasize that BPRS has a strategic role in supporting MSMEs, particularly in economic recovery and financing inclusion, although it still faces regulatory and risk-mitigation challenges. Purnamasari et al. (2024) and Syarif and Aysan (2024) add that sharia fintech and sharia crowdfunding can be relevant financial inclusion instruments for Muslim communities and MSMEs. However, within the topic of this article, that literature generally has not directly connected Islamic microfinance with the green finance agenda. As a result, a clear research space emerges: how LKMS can become actors of Islamic green microfinance through contracts that are

not only valid under sharia but also capable of directing customers' economic behavior toward environmentally friendly activities.

Thus, the review indicates that research has developed along five major streams: Islamic green finance and green sukuk; green banking and ESG/disclosure; fiqh al-bi'ah and maqasid-based sustainability; Islamic social finance and financing innovation; and Islamic microfinance, BPRS, and MSME financing. These five streams intersect, but they have not yet fully produced an operational contractual framework for LKMS. This synthesis forms the basis of the article's argument that the gap does not lie in the absence of Islamic values regarding the environment, but in the absence of a contract design capable of bridging sharia principles, sustainability objectives, microfinance practice, and greenwashing risk-control mechanisms.

Table 1. Synthesis of Main Themes and Subthemes in the Literature

Main Theme	Dominant Subtheme	Focus of Discussion	Synthesis of Findings	Relevant Articles
Islamic green finance and climate finance	Green sukuk, Islamic climate finance, sustainable finance	Sharia-based green financing instruments for development and low-carbon transition	The literature emphasizes the potential of Islamic finance to support environmental agendas, but it remains dominated by macro instruments such as sukuk and banking	(Faizi et al., 2024; Hidayat et al., 2024; Septyanun et al., 2025)
Green banking and disclosure	Green banking, ESG, Islamic Green Banking Disclosure Index	Environmentally friendly policies, performance disclosure, and governance of Islamic banks	Studies show the importance of disclosure, regulation, and institutional frameworks, but have not moved them down to the micro-contract level	(Setiyowati et al., 2025; Akasumbawa et al., 2026; Mukhibad et al., 2026)
Fiqh al-bi'ah and maqasid al-sharia	Hifz al-bi'ah, masalah, khalifah, mizan, green fatwa	Ethical and legal Islamic foundations for environmental protection	The literature is strong normatively and conceptually, but remains limited in formulating clauses for green financing contracts	(Hamdi et al., 2025; Maskun et al., 2025; Chanifah et al., 2024; Wahdini et al., 2025; Umam et al., 2024)

Islamic social finance	Zakat, waqf, cash waqf, productive waqf, philanthropy	Islamic social instruments for sustainability and public financing	Islamic social finance has the potential to serve as a risk buffer and source of green financing, but its integration with LKMS contracts is not yet established	(Saputra et al., 2024; Umam et al., 2024; Wijaya, 2023; Hudaefi et al., 2025)
Islamic microfinance, BPRS, and MSMEs	Microfinance, BPRS, MSME sustainability, financial inclusion	Role of Islamic microfinance institutions in supporting small enterprises	The literature emphasizes inclusion and business sustainability, but has not substantially examined green microfinance contracts	(Mutoharoh et al., 2021; Ridwansyah et al., 2025; Purnamasari et al., 2024; Syarif & Aysan, 2024)
Regulation and governance	Regulatory harmonization, green constitution, legal framework, governance	Legal frameworks to support sustainability and sharia compliance	Regulation is viewed as important, but fragmentation remains among environmental law, Islamic finance, and LKMS practice	(Septyanun et al., 2025; Maskun et al., 2025; Wahdini et al., 2025; Syarif & Aysan, 2024)

Islamic Green Finance from Macro Instruments to the Need for Micro Contracts

Islamic green finance is the most strategic theme in the literature because it provides the conceptual umbrella for integrating Islamic finance and environmental sustainability. Faizi et al. (2024) show that Indonesia's Islamic climate finance landscape is formed through a combination of commercial and social instruments, such as green sukuk, zakat, waqf, green banking, and inclusive financing. Hidayat et al. (2024) emphasize that sukuk plays an important role in development financing because it is based on real assets and can be directed toward SDG-oriented projects. Septyanun et al. (2025) even position Islamic banking as a potential actor in supporting Indonesia's net-zero emission program through sharia-compliant financing instruments. These studies share the view that Islamic finance can finance the sustainability transition, but their analysis still focuses on large scales such as the state, banking sector, and capital market.

This macro tendency makes an important contribution but is not sufficient to answer green financing needs among micro businesses and local communities. Green sukuk, for example, is effective for financing green infrastructure, mass transportation, clean energy, and large-scale conservation projects. Yet it does not directly answer how small traders, micro farmers, home-based entrepreneurs, or community cooperatives can access green

financing through local institutions. LKMS play a role different from large banks and capital markets: they operate through close social relations, simpler financing processes, and local understanding of customer characteristics. Therefore, Islamic green finance literature needs to shift from discussing macro-level green financing instruments toward designing micro contracts that can reach the informal sector and MSMEs.

From a contractual perspective, the main weakness of Islamic green finance literature is the lack of discussion of internal contract elements. Many studies affirm the importance of green financing but have not answered operational questions: what activities qualify as green for micro customers; what contract is most appropriate for such activities; how funds must be used; how environmental impacts should be measured; and what consequences apply if customers deviate from green objectives. Without answers to these questions, green finance risks becoming an institutional label rather than a behavioral-change mechanism. This article therefore argues that Islamic green finance must be translated into LKMS contract design containing eligible green activities, use-of-proceeds clauses, environmental covenants, monitoring obligations, and remedial mechanisms consistent with sharia justice.

The difference between macro instruments and micro contracts is also visible in risk mitigation. In green sukuk or green banking, sustainability risks are usually managed through disclosure, reporting standards, regulation, and external audit. In LKMS, such mechanisms are not always realistic because micro customers have limited literacy, documentation, and administrative capacity. Thus, LKMS green finance contracts must be proportional: strong enough to prevent greenwashing, yet not so complex that they hinder access to financing.

Green Banking, ESG, and the Challenge of Measuring Environmental Impact

The theme of green banking and ESG/disclosure shows that the literature is beginning to move from normative legitimacy toward governance and measurement. Setiyowati et al. (2025) show that green banking in Islamic banking can be implemented through service digitalization, energy savings, financing for green sectors, and ecological education. Akasumbawa et al. (2026) contribute by developing an Islamic Green Banking Disclosure Index combining corporate governance, maqasid al-sharia, and hifz al-bi'ah. Mukhibad et al. (2026) show that disclosure of sharia, social, environmental, and economic performance is related to institutional legitimacy and sustainability. Together, these studies affirm that sustainability needs to be measured, reported, and connected to governance.

The key lesson for LKMS from green banking literature is that green financing contracts need indicators for measuring impact. However, these indicators cannot simply be adopted from corporate ESG standards or large-bank reporting. LKMS customers generally do not have sustainability reports, environmental audits, or formal documentation systems. Therefore, environmental impact measurement should be simple, such as more efficient energy use, waste reduction, environmentally friendly raw materials, clean production practices, water conservation, or resource efficiency. This idea aligns with the need for a micro green taxonomy that fits the reality of MSMEs and community financing.

The relevant weakness of the green banking literature is the dominance of the perspective of large formal institutions. Disclosure and ESG studies often assume organizational capacity to report, monitor, and meet performance indicators. In the LKMS context, this assumption must be reconsidered. LKMS require lighter, contract-based measurement models that can be verified through assistance. Green finance for LKMS

should therefore adapt green banking principles into contracts oriented toward mentoring, proportional monitoring, and improved environmental literacy among customers.

Sharia Contracts, Maqasid, and Fiqh al-Bi'ah as Normative Foundations for Green Contracts

The literature on fiqh al-bi'ah and maqasid al-sharia is the strongest conceptual foundation for designing sharia-compliant green finance contracts. Hamdi et al. (2025), Maskun et al. (2025), Umam et al. (2024), Chanifah et al. (2024), and Wahdini et al. (2025) collectively show that Islamic principles can provide ethical and legal support for environmental protection in water governance, waste management, productive waqf forests, and community conservation.

In contract design, maqasid and fiqh al-bi'ah principles can be translated into several elements. Maslahah can justify financing that produces both economic and ecological benefits. Hifz al-bi'ah can underlie environmental-protection clauses. Khalifah and mizan can support customer responsibility to maintain balance in resource use. La darar wa la dirar can justify prohibitions on using financing for environmentally harmful activities. Yet these principles must be translated carefully so that they do not remain merely symbolic. LKMS green finance contracts should make sharia principles a behavioral structure, not only a normative preamble.

Sharia contracts are therefore crucial. Mudarabah and musyarakah may be used for profit-sharing financing of green businesses with growth potential and business risk. Murabahah may be used for purchasing environmentally friendly productive assets, such as energy-efficient machinery, organic farming equipment, or small-scale waste-processing technology. Ijarah may be used for leasing green assets, while qardh or social contracts may be combined with zakat and waqf funds for vulnerable customers. At the LKMS level, the choice of contract must be linked to green activity type, customer capacity, monitoring mechanisms, and risk allocation.

Islamic Social Finance as a Risk Buffer for Green Microfinance

Islamic social finance is important because it offers non-commercial and semi-commercial instruments that can complement green financing based on commercial contracts. Studies on agricultural zakat, cash waqf, productive waqf, and zakat institutional performance show that zakat, waqf, and Islamic philanthropy can support social and economic sustainability. For LKMS green finance, Islamic social finance can serve as a risk buffer, margin subsidy, mentoring fund, or financing source for environmental activities that are not fully commercial.

However, explicit integration of Islamic social finance into LKMS contracts remains rarely discussed. Existing studies tend to separate commercial and social financing. In practice, green microfinance contracts may require hybrid structures. For instance, murabahah financing for environmentally friendly production tools may be combined with waqf funds for training; musyarakah financing for organic farming may be supported by productive zakat for vulnerable groups; or qardh may be used for sanitation improvement and household waste management. Such models require clear contract design so that fund mixing does not violate sharia principles, create unclear rights and obligations, or generate moral hazard.

Islamic Microfinance, BPRS, and the Need for a Micro Green Taxonomy

The literature on Islamic microfinance and BPRS shows that Islamic microfinance institutions play an important role in MSME financing, financial inclusion, and economic resilience. Mutoharoh et al. (2021), Ridwansyah et al. (2025), Purnamasari et al. (2024), and Syarif and Aysan (2024) demonstrate the institutional and social foundations of Islamic microfinance. However, these studies have not substantially incorporated environmental dimensions into financing design. Islamic microfinance literature has therefore not fully converged with Islamic green finance literature.

The most urgent need from the LKMS perspective is a micro green taxonomy. The green taxonomy used in large banking or capital markets may be too complex for micro customers. LKMS require a simple, contextual, and verifiable classification of green activities, including organic farming, business waste reduction, energy efficiency, water management, recycling, environmentally friendly products, small-scale low-emission transportation, or conservation-based microenterprises. A micro green taxonomy is important because it becomes the basis for financing eligibility, contract selection, clauses, and monitoring.

Without a micro green taxonomy, LKMS green finance contracts risk becoming ambiguous. Customers may receive financing labeled as green without clear activity standards, and LKMS may struggle to distinguish ordinary productive financing from green financing. This risk is directly related to greenwashing: the use of green claims without verifiable environmental impact. In the LKMS context, indicators must be simplified into lists of activities, fund-use obligations, simple evidence, and community-based monitoring visits.

Methodological Trends, Strengths, and Weaknesses of Previous Research

Methodologically, the reviewed literature is dominated by qualitative, normative-juridical, case study, literature review, and conceptual approaches. This dominance is understandable because Islamic green finance, *fiqh al-bi'ah*, and sharia contracts are still developing as conceptual and normative areas. These approaches are strong for building legitimacy and conceptual frameworks, but limited in empirically testing model effectiveness.

Quantitative studies appear mainly in green banking, ESG, disclosure, bank performance, and customer behavior. Panel data, regression, and SEM-PLS approaches can test relationships among variables, but their indicators are often macro-institutional and distant from micro-contract practices. Bibliometric and literature-review studies are also useful for mapping broad trends, themes, and knowledge networks, but for this article the gap is not only a publication trend; it is the absence of a model for LKMS green finance contracts.

Table 2. Research Method Patterns in the Reviewed Literature

Methodological Approach	Characteristics	Strengths	Weaknesses	Example Articles
Qualitative case/field study	Interviews, observations, documentation, institutional or community studies	Explores local practices, social context, and institutional	Difficult to generalize and often does not produce replicable contract	Faizi et al. (2024); Setiyowati et al. (2025); Ridwansyah et al. (2025)

		dynamics	models	
Normative-judicial/socio-legal	Analysis of law, fiqh, regulation, fatwas, and environmental principles	Strong for building sharia and legal legitimacy	Often does not test empirical implementation and contract effectiveness	Maskun et al. (2025); Wahdini et al. (2025); Hamdi et al. (2025)
Quantitative statistical/econometric	Panel data, SEM-PLS, regression, disclosure indexes	Tests relationships among variables and institutional impacts	Indicators are often macro and do not capture micro-contract practice	Akasumbawa et al. (2026); Mukhibad et al. (2026); Alam et al. (2025)
Literature review/bibliometric	Systematic review, bibliometric analysis, content analysis	Maps trends, themes, and literature gaps	Requires further conceptual synthesis to produce an operational framework	Shi et al. (2025); Zhang et al. (2025); Suresman & Faqihuddin (2026)
Mixed methods/decision models	AHP, ANP, Delphi, stakeholder analysis	Suitable for developing priorities and policy models	Requires further validation in institutional practice	Umam et al. (2024); Wijaya (2023); Sunarmo et al. (2025)

Research Gap and Conceptual Contribution of the Article

The main research gap emerging from this synthesis is the absence of a conceptual model that explicitly integrates sharia contracts, a micro green taxonomy, fiqh al-bi'ah, contract governance, risk mitigation, and environmental impact measurement in the design of LKMS green finance contracts. This gap is different from simply stating that Islamic green finance is under-researched. The field has developed, but it is not yet sufficiently specific at the micro-contract level. The fiqh al-bi'ah literature is strong, but not operational enough for financing. LKMS literature has discussed inclusion and MSMEs, but has not yet made environmental sustainability a contractual structure.

Inconsistency in the literature also appears in the meaning of sustainability. Some studies use sustainability to refer to business continuity or institutional performance, some use it in an environmental sense, and others connect it with ESG, disclosure, and institutional reputation. These differences show that this article needs to clarify environmental sustainability as a contractual object, not merely as a general value or reputational indicator.

The most visible methodological limitation is the lack of studies using design, model validation, or contract implementation evaluation. Many studies stop at mapping, normative analysis, or testing relationships among variables. Few studies develop contract models, test clause feasibility, involve LKMS practitioners, or validate green indicators for micro customers. Contract development requires an interdisciplinary approach combining

Islamic economic law, microfinance, environmental governance, risk management, and MSME behavior.

The conceptual contribution of this article lies in proposing contracts as an integrative mechanism. In the existing literature, contracts are often understood as legal-formal instruments or sharia contracts as financing-product categories. This article proposes that LKMS green finance contracts should be understood as governance tools that regulate green objectives, contract structures, rights and obligations, impact indicators, risk sharing, supervision, and consequences for deviation. Thus, the contract is not merely an administrative document, but an instrument for transforming financing behavior.

Table 3. Research Gaps and Implications for LKMS Green Finance Contract Design

Gap Area	Literature Findings	Remaining Gap	Implications for This Article
Object gap	Islamic green finance often discusses green sukuk, green banking, and Islamic social finance	Limited focus on green finance contracts for LKMS	Position LKMS as actors of Islamic green microfinance
Conceptual gap	Fiqh al-bi'ah and maqasid are strong normative foundations	Normative principles have not been translated into contract clauses	Formulate contractual elements based on maslahah, hifz al-bi'ah, and la darar
Operational gap	Green banking has ESG disclosure and indexes	ESG indicators do not fit micro-customer capacity	Develop the idea of a micro green taxonomy and simple monitoring
Methodological gap	Many studies are qualitative, normative, and bibliometric	Limited model design, expert validation, and implementation testing	Offer a conceptual framework as a basis for further empirical research
Regulatory gap	Green finance and Islamic finance regulation are discussed separately	Harmonization among environmental law, sharia contracts, and LKMS practice remains unclear	Place contracts as bridges among regulation, sharia, and micro practice
Anti-greenwashing gap	Disclosure is discussed in large banks	Greenwashing-prevention mechanisms for micro customers are not yet examined	Include use-of-proceeds, environmental covenants, monitoring, and remedial clauses

Conceptual Framework Design: From Literature Synthesis to Contract Model

Based on the thematic synthesis, an LKMS green finance contract model needs to be built on five pillars. First is contract suitability. Each type of green activity must be paired with an appropriate contract. Purchases of environmentally friendly assets may use murabahah; green business cooperation may use musyarakah or mudarabah; leasing of green equipment may use ijarah; green production or construction projects may use istisna; while social financing for basic ecological needs may use qardh or integration with social funds. This pillar is important so that green finance does not ignore the legal structure of sharia.

Second is the micro green taxonomy pillar. This taxonomy must define green activities eligible for LKMS financing using simple and contextual indicators. Third is the environmental clause pillar. Contracts need to contain fund-use clauses, prohibitions on environmentally damaging activities, obligations to maintain environmentally friendly practices, and simple evidence of financing use. Fourth is monitoring and reporting. Monitoring may be conducted through field visits, purchase evidence, activity photos, production records, or group assistance. Fifth is risk mitigation and remedial action. If deviations occur, corrective mechanisms should prioritize education and correction rather than only financial sanctions, in accordance with justice and empowerment principles.

This framework must also consider LKMS institutional capacity. Not all LKMS have dedicated environmental staff or strong digital systems. Therefore, implementation should be gradual. In the early stage, LKMS may use simple lists of green activities, basic environmental assessment forms, fund-use clauses, and community-based monitoring. In the advanced stage, LKMS may develop green scoring, portfolio reporting, fintech integration, and cooperation with zakat/waqf institutions for blended financing.

Proposed Figure Visualizations

Figure 1. Thematic Map of Islamic Green Finance, Fiqh al-Bi'ah, and LKMS Literature. Design: a cluster diagram showing five main themes: Islamic green finance, green banking/ESG, fiqh al-bi'ah/maqasid, Islamic social finance, and Islamic microfinance/LKMS. Each cluster is connected to a central node, 'Sharia-Compliant Green Finance Contract for LKMS.' Caption: Thematic map of reviewed literature showing the convergence of Islamic green finance, green banking, fiqh al-bi'ah, Islamic social finance, and Islamic microfinance toward the need for green finance contracts for LKMS.

Figure 2. Flow of the Transformation of Sharia Principles into LKMS Green Finance Contract Clauses. Design: a four-stage flowchart: Islamic normative principles (maqasid, maslahah, hifz al-bi'ah, la darar) to contract selection, to green contract elements, to monitoring and environmental impact. Caption: Conceptual flow from Islamic normative principles to operational green finance contract clauses for Islamic microfinance institutions.

Figure 3. Conceptual Framework for LKMS Green Finance Contracts. Design: a five-pillar conceptual model: sharia contract structure, micro green taxonomy, environmental covenant, risk sharing and mitigation, and impact monitoring. The five pillars lead to two outputs: sharia compliance and environmental sustainability impact. Caption: Proposed conceptual framework for sharia-compliant green finance contracts for LKMS integrating contract structure, micro green taxonomy, governance, risk mitigation, and impact measurement.

Final Synthesis of the Discussion

Overall, the literature shows that Indonesia has strong conceptual, normative, and institutional capital for developing Islamic green finance. Green sukuk, green banking, Islamic social finance, *fiqh al-bi'ah*, and Islamic microfinance have developed as mutually supportive research themes. However, the scientific contribution of this article lies in identifying that the relationships among these themes have not yet produced an operational LKMS green finance contract design. In other words, the main problem is not the absence of principles, but the absence of contractual mechanisms.

This article argues that contracts are the meeting point among sharia, sustainability, and microfinance practice. Through contracts, *maqasid* and *fiqh al-bi'ah* principles can be translated into fund-use obligations, restrictions on harmful activities, green indicators, monitoring, and remedial mechanisms. Contracts also enable LKMS to avoid greenwashing while maintaining financial inclusion. This contribution is important because green finance that is administratively too burdensome may exclude micro customers, while green finance that is too loose may lose ecological credibility.

Therefore, future research should move toward empirical validation. Important agendas include developing sector-based micro green taxonomies, expert validation of sharia green contract clauses, pilot testing models in BMT or BPRS, developing simple green-financing scoring, and evaluating the environmental impacts of LKMS financing portfolios. These agendas will strengthen the transition of the literature from normative-conceptual stages toward design, implementation, and evaluation. If developed systematically, LKMS green finance contracts can become Indonesia's distinctive contribution to global Islamic green microfinance literature.

CONCLUSION

This study concludes that the development of Islamic green finance in Indonesia has shown significant conceptual and institutional progress, but has not fully addressed contractual needs at the level of Islamic microfinance institutions. The reviewed literature shows dominant trends in macro instruments such as green sukuk, green banking, Islamic social finance, ESG disclosure, and the strengthening of normative legitimacy through *maqasid al-sharia* and *fiqh al-bi'ah*. However, this synthesis emphasizes that the main contribution of the article lies in shifting the focus from green financing as institutional discourse toward contracts as operational instruments that connect sharia principles, environmental sustainability, and microfinance practice.

The main research gap found is the absence of a green finance contract model specifically designed for the characteristics of LKMS, including BMT, BPRS, sharia cooperatives, and community-based microfinance institutions. Previous literature remains fragmented: green finance studies tend to focus on banks and capital markets, *fiqh al-bi'ah* studies are normatively strong but not contractual, while Islamic microfinance studies emphasize inclusion and business sustainability more than ecological impact. Therefore, this article contributes by offering a conceptual basis that LKMS green finance contracts need to contain contract suitability, a micro green taxonomy, fund-use clauses, environmental covenants, monitoring mechanisms, risk mitigation, and remedial procedures to prevent greenwashing.

Theoretically, these findings extend the Islamic green microfinance literature by positioning sharia contracts not merely as legal structures, but also as governance tools for

sustainability. Practically, the framework provides direction for LKMS in designing green financing that remains inclusive, proportional, and verifiable for micro customers. Future research should test this model through expert validation, field studies in BMT and BPRS, the development of sector-based micro green taxonomy indicators, and empirical evaluation of environmental impacts and financing performance. Thus, LKMS green finance contracts have the potential to become Indonesia's distinctive contribution to the global development of sustainable Islamic microfinance.

REFERENCES

- Akasumbawa, M. D. D., Qoyum, A., & Ardiansyah, M. (2026). Does Corporate Governance Influence Islamic Green Banking Disclosure? The Moderating Role of Bank Size. *International Journal of Islamic Finance and Sustainable Development*, 18(1). <https://doi.org/10.55188/ijifsd.v18i1.1194>
- Ali, M. M., Rusydiana, A. S., As-Salafiyah, A., & Abdullah, S. M. (2025). Green Sukuk. In E. Smolo & M. O. Rafique, *Islamic Green Finance* (1st ed., pp. 191–209). Routledge. <https://doi.org/10.4324/9781003540403-13>
- Alkindi, M., & Utami, W. (2025). A comparative study of Islamic conformity, profitability, and green performance in Southeast Asian Islamic banks. *Banks and Bank Systems*, 20(1), 174–190. [https://doi.org/10.21511/bbs.20\(1\).2025.15](https://doi.org/10.21511/bbs.20(1).2025.15)
- Andriani, Fikriyah, A., & Ningtyas, T. (2026). Assessing the effect of green disclosure on profitability and firm value in Indonesian Islamic banks. *Discover Sustainability*, 7(1), 485. <https://doi.org/10.1007/s43621-026-02884-9>
- Ascarya, A. (2026). An investigation of waqf-based Islamic micro financial institution models to identify the most effective model for Indonesia. *Journal of Islamic Accounting and Business Research*, 17(2), 423–444. <https://doi.org/10.1108/JIABR-12-2022-0325>
- Ascarya, A., & Masrifah, A. R. (2023). Strategies implementing cash waqf system for Baitul Maal wat Tamwil to improve its commercial and social activities. *International Journal of Islamic and Middle Eastern Finance and Management*, 16(1), 130–153. <https://doi.org/10.1108/IMEFM-10-2020-0504>
- Ascarya, A., Sukmana, R., Rahmawati, S., & Masrifah, A. R. (2023). Developing cash waqf models for Baitul Maal wat Tamwil as integrated Islamic social and commercial microfinance. *Journal of Islamic Accounting and Business Research*, 14(5), 699–717. <https://doi.org/10.1108/JIABR-09-2020-0267>
- Ascarya, & Sakti, A. (2021). Proposing New Islamic Microfinance Model for Sustainable Islamic Microfinance Institution. In M. K. Hassan, M. Saraç, & A. Khan (Eds.), *Islamic Finance and Sustainable Development* (pp. 349–378). Springer International Publishing. https://doi.org/10.1007/978-3-030-76016-8_15
- Candra, H., Amar, S., & Marta, J. (2024). Ecological Restoration and Sustainable Development: The Impact of Wakaf Forest Institutions on Socio-Economic Benefits. *Journal of Ecohumanism*, 3(3), 1371–1386. <https://doi.org/10.62754/joe.v3i3.3607>
- Delle Foglie, A., & Keshminder, J. S. (2024). Challenges and opportunities of SRI sukuk toward financial system sustainability: A bibliometric and systematic literature review. *International Journal of Emerging Markets*, 19(10), 3202–3225. <https://doi.org/10.1108/IJOEM-04-2022-0601>

- Edian Fahmy, Nadrattuzaman Hosen, M., Dewi Warninda, T., Rama, A., & Aimar, Q. (2026). Measuring Contemporary Islamic Banking Sustainability: Integrating ESG and Maqashid al-Syari'ah in Indonesia. *MILRev: Metro Islamic Law Review*, 5(1), 351–378. <https://doi.org/10.32332/milrev.v5i1.12880>
- Faizi, F., Kusuma, A. S., & Widodo, P. (2024). Islamic green finance: Mapping the climate funding landscape in Indonesia. *International Journal of Ethics and Systems*, 40(4), 711–733. <https://doi.org/10.1108/IJOES-08-2023-0189>
- Farabi, A., Putri Kurniadi, A., Dasilva, H., Thoha, M., Karimi, K., Suhendra, A., Abinda Firdaus, I., Setiawan, S., Asrori, A., & Salim, Z. (2025). Islamic Banking Finance and Environmental Sustainability: Sector-Level Analysis from Indonesia. *International Journal of Energy Economics and Policy*, 15(5), 695–704. <https://doi.org/10.32479/ijeep.20331>
- Fodol, M. Z., & Aslan, H. (2025). Mapping the evolution of Islamic finance for sustainability: A bibliometric analysis. *Sustainability Accounting, Management and Policy Journal*. <https://doi.org/10.1108/SAMPJ-08-2024-0926>
- Hartanto, A., Nachrowi, N. D., Samputra, P. L., & Huda, N. (2026). Developing a sustainability framework for Islamic banking: A Maqashid Shariah quadruple bottom line approach. *International Journal of Islamic and Middle Eastern Finance and Management*, 19(3), 767–802. <https://doi.org/10.1108/IMEFM-02-2025-0088>
- Jamrudin, H., Albab, B., & Widowaty, Y. (2025). Conformity of Green Fintech Law with the Principles of Sustainable Investment in Indonesian Law. *E3S Web of Conferences*, 660, 03004. <https://doi.org/10.1051/e3sconf/202566003004>
- Listiana, L., Andrian, F. K., Syahyuti, S., Silalahi, S. A. F., & Laallam, A. (2026). The role of Waqf in CSR: Models from Indonesia and Malaysia and new proposals. *Journal of Islamic Accounting and Business Research*, 1–19. <https://doi.org/10.1108/JIABR-03-2025-0126>
- Listiana, L., & Edriyanti, R. (2023). Digitalisation and Sustainable Finance in Indonesian Islamic Banks. In M. N. Almunawar, P. Ordóñez De Pablos, & M. Anshari, *Digital Transformation for Business and Society* (1st ed., pp. 179–195). Routledge. <https://doi.org/10.4324/9781003441298-9>
- Ma, Y., & Sukmana, R. (2025). Takeaways from Islamic social finance and sustainable development goals discourse: Review and bibliometric analysis on future directions for Zakat, Waqf and Islamic microfinance. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-06-2024-0227>
- Maskun, Ratnawati, Wiranti, Asriyani, & Jamal Aslan. (2025). Legal Framework Model for Sustainable Solid Waste Management in Indonesia: A Contemporary Environmental Fiqh Perspective. *MILRev: Metro Islamic Law Review*, 4(2), 1097–1122. <https://doi.org/10.32332/milrev.v4i2.11104>
- Morisca, K. P., Mutia, E., Indayani, & Lautania, M. F. (2025). Evaluating Asset Quality as a Determinant of Financial Sustainability in Islamic Rural Banks (BPRS) in Indonesia. 2025 5th International Conference on Sustainable Islamic Business and Finance (SIBF), 1–6. <https://doi.org/10.1109/SIBF68061.2025.11455309>
- Musari, K. (2025). Towards the Perpetual Sustainable Sukuk Through Islamic Blended Finance: Lesson From Green Sukuk and Blue Sukuk in Indonesia. In P. Ordóñez De Pablos, M. D. Lytras, & S. Malik (Eds.), *Practice, Progress, and Proficiency in Sustainability* (pp. 381–402). IGI Global. <https://doi.org/10.4018/979-8-3693-7893-9.ch015>

- Napitupulu, R. M., & Rusydiana, A. S. (2025). Contributing to the Sustainable Development Goals. In E. Smolo & M. O. Rafique, *Islamic Green Finance* (1st ed., pp. 261–281). Routledge. <https://doi.org/10.4324/9781003540403-19>
- Nasution, A. A., Risanty, Kesuma, S. A., Agustrisna, J., & Aziz, N. M. A. (2026). Bridging ESG and Islamic Principles in Indonesia: Toward Sustainable Islamic Finance. In A. Bahaaeddin & A. Hamdan (Eds.), *The Digital Blueprint: Crafting Business Models for the Tech Future* (Vol. 1576, pp. 291–299). Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-00549-6_26
- Pramudena, S. M., Wati, L. N., & Marlapa, E. (2026). Corporate law and Sharia governance: Empirical insights, risk-based bank rating, and ESG Islamic approach. *Corporate Law & Governance Review*, 8(1), 64. <https://doi.org/10.22495/clgrv8i1p5>
- Pratiwi, A. (2016). Islamic banking contribution in sustainable socioeconomic development in Indonesia: An epistemological approach. *Humanomics*, 32(2), 98–120. <https://doi.org/10.1108/H-12-2015-0085>
- Purnamasari, R., Rismala, & Ibrahim, H. D. (2024). Syariah-Compliant Fintech in Banking: Bridging Financial Gaps in Indonesia and the Philippines. *BANCO: Jurnal Manajemen Dan Perbankan Syariah*, 6(2), 150–160. <https://doi.org/10.35905/banco.v6i2.9512>
- Rahayu, N. S. (2020). The Intersection of Islamic Microfinance and Women's Empowerment: A Case Study of Baitul Maal Wat Tamwil in Indonesia. *International Journal of Financial Studies*, 8(2), 37. <https://doi.org/10.3390/ijfs8020037>
- Saifurrahman, A., & Kassim, S. H. (2024). Regulatory issues inhibiting the financial inclusion: A case study among Islamic banks and MSMEs in Indonesia. *Qualitative Research in Financial Markets*, 16(4), 589–617. <https://doi.org/10.1108/QRFM-05-2022-0086>
- Saleem, A., Setiawan, B., Bárczi, J., & Sági, J. (2021). Achieving Sustainable Economic Growth: Analysis of Islamic Debt and the Islamic Equity Market. *Sustainability*, 13(15), 8319. <https://doi.org/10.3390/su13158319>
- Sari, Y. I., & Bin Mislan Cokrohadisumarto, W. (2019). MODELLING A SUSTAINABILITY MODEL OF ISLAMIC MICROFINANCE INSTITUTIONS. *Journal of Islamic Monetary Economics and Finance*, 5(4), 713–740. <https://doi.org/10.21098/jimf.v5i4.1127>
- Septianingsih, R., Abdullah, A., & Salleh, M. Z. M. (2024). A Systematic Review: Challenge of Islamic Microfinance Baitul Maal Wat Tamwil in Indonesia. In N. Mansour & L. Bujosa (Eds.), *Islamic Finance* (pp. 19–26). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-48770-5_3
- Setiyowati, A., Salsabilla, S. N., & Novita, D. (2025). Green Banking in Sharia Banking: A Comprehensive Study of Environmentally Friendly Policies and Practices to Support Green Economy. *Falah: Jurnal Ekonomi Syariah*, 10(2), 1–17. <https://doi.org/10.22219/jes.v10i2.41198>
- Shi, J., Firmansyah, E. A., Wang, Y., & Xu, W. (2025). Technological innovation and regulatory harmonization in Islamic finance: A systematic review and machine learning analysis (2000–2023). *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-01-2025-0026>
- Smolo, E., Accounting and Finance Department, Effat University, Jeddah, 22332, Saudi Arabia, & Economic and Social Research Institute (ESREIN), Blagovac 192, 71320 Vogošća, Bosnia and Herzegovina. (2026). Does Islamic banking promote

-
- environmental sustainability? Evidence from QISMUT countries. *Green Finance*, 8(1), 113–141. <https://doi.org/10.3934/GF.2026005>
- Supriyadi, A. P., Fidayanti, D., Ramadhita, R., & Noh, M. S. B. M. (2023). Green Sukuk in Indonesia: Unraveling Legal Frameworks for Sustainable Islamic Bonds. *El-Mashlahah*, 13(2), 151–180. <https://doi.org/10.23971/el-mashlahah.v13i2.7372>
- Sustainable Conventional and Islamic Microfinance Models for Micro Enterprises. (2014). *ISRA International Journal of Islamic Finance*, 6(2), 49–85. <https://doi.org/10.12816/0019263>
- Wahyudi, H., & Leny, S. M. (2024). Nexus between Islamic Investment, Musyarakah Financing, Islamic Microfinance and Achieving SDGs in Indonesia. *Journal of Ecohumanism*, 3(7), 1976–1986. <https://doi.org/10.62754/joe.v3i7.4346>
- Wan Zahari, W. M. Z. (2025). Operationalising Green Sukuk within the World Bank environmental and social framework. *Discover Environment*, 3(1), 288. <https://doi.org/10.1007/s44274-025-00490-6>
- Wijayanti, P., & Mohamed, I. S. (2021). The Determinant of Sustainable Performance in Indonesian Islamic Microfinance: Role of Accounting Information System and Maqashid Sharia. In L. Barolli, K. Yim, & T. Enokido (Eds.), *Complex, Intelligent and Software Intensive Systems* (Vol. 278, pp. 484–494). Springer International Publishing. https://doi.org/10.1007/978-3-030-79725-6_48
- Yuspin, W., Yasin, A. N. Z., Wardiono, K., & Budiono, A. (2025). Implementation of Green Banking Indicators in Sharia Banks: Study of Regulations and Application. *WSEAS TRANSACTIONS ON ENVIRONMENT AND DEVELOPMENT*, 21, 899–909. <https://doi.org/10.37394/232015.2025.21.74>
- Zhang, H., Afroz, R., Amin Imon, R., & Salim, K. (2025). Islamic Finance and Its Role in Fostering Sustainable and Inclusive Economic Growth. In F. Taghizadeh-Hesary, H. M. Thas Thaker, M. I. Bhatti, & M. A. Mohd Thas Thaker, *Islamic Finance and Sustainability* (1st ed., pp. 3–26). Routledge. <https://doi.org/10.4324/9>