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Green Sukuk and Sustainable Development: An Islamic Finance Perspective on Environmental Investment

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ABSTRACT

This study examines the role of green sukuk in promoting sustainable development from the perspective of Islamic finance and environmental investment. The research aims to analyze how green sukuk integrates Shariah-compliant financial principles with sustainability-oriented investment frameworks while evaluating its contribution to environmental governance, renewable energy financing, and sustainable economic transformation. The study employs a qualitative research method using a descriptive case study design because this approach enables an in-depth exploration of institutional practices, ethical financial principles, and sustainability governance within green sukuk implementation. The research was conducted in Indonesia due to its strategic position as one of the leading global issuers of sovereign green sukuk and its active commitment toward sustainable Islamic finance development. Data were collected through semi-structured interviews and document analysis involving fifteen informants consisting of policymakers, Islamic finance practitioners, sustainability experts, environmental consultants, and academic scholars selected purposively based on their expertise and institutional involvement. The findings reveal that green sukuk significantly contributes to sustainable infrastructure financing, climate resilience, and environmentally responsible investment, although governance fragmentation and sustainability reporting limitations remain major challenges. The study recommends strengthening regulatory harmonization, environmental accountability mechanisms, and institutional collaboration to enhance the effectiveness and credibility of green sukuk within global sustainable finance systems.

INTRODUCTION

The accelerating climate crisis, accompanied by environmental degradation, biodiversity loss, and increasing carbon emissions, has become one of the most urgent global challenges of the twenty-first century (Kasri et al., 2023). Governments, international organizations, and financial institutions are continuously seeking innovative financing mechanisms capable of supporting sustainable development while simultaneously ensuring economic resilience and social welfare. Within this context, sustainable finance has emerged as a strategic framework that integrates environmental, social, and governance considerations into investment and development policies (Basit, 2023). Among various sustainable financial instruments, green bonds have gained considerable global recognition as an effective mechanism for financing environmentally friendly projects such as renewable energy, sustainable infrastructure, waste management, climate adaptation, and low-carbon transportation systems (Marianingsih, 2025). Nevertheless, in countries with significant Muslim populations, the integration of sustainability principles with Islamic financial ethics has encouraged the development of a more specific instrument known as green sukuk. Green sukuk represents an innovative convergence between Islamic finance and environmental sustainability, combining Shariah principles with ecological investment objectives to promote sustainable economic transformation (Saleh & Soualhi, 2025).

The development of green sukuk reflects the growing awareness that Islamic finance possesses ethical and moral foundations aligned with sustainable development principles (Jumat, 2025). Islamic finance emphasizes justice, balance, accountability, social welfare, and the prohibition of harmful economic activities, all of which correspond closely with the objectives of environmental sustainability. Consequently, green sukuk is increasingly viewed not merely as a financial instrument but also as a manifestation of maqashid al-shariah, particularly in preserving human welfare and environmental balance (Bello, 2023). Several countries, including Indonesia, Malaysia, Saudi Arabia, and the United Arab Emirates, have actively promoted green sukuk issuance to finance environmentally sustainable projects. Indonesia, for example, has become one of the leading issuers of sovereign green sukuk globally, demonstrating how Islamic finance can contribute to climate action and sustainable national development (Bin-Armia, 2024). This phenomenon illustrates that green sukuk has evolved into an important component of sustainable Islamic finance capable of mobilizing capital for environmentally responsible investment.

Despite its promising development, the implementation of green sukuk still faces numerous conceptual, regulatory, operational, and institutional challenges (Lulukiyyah, 2024). One major issue concerns the limited integration between Islamic financial objectives and global sustainability standards. While conventional green bonds have relatively established frameworks and internationally recognized environmental reporting mechanisms, green sukuk often encounters difficulties in harmonizing Shariah compliance with sustainability certification and environmental impact assessment (Minhas, 2023). In many developing countries, regulatory frameworks governing green sukuk remain fragmented and insufficiently standardized, thereby affecting investor confidence and market expansion. Furthermore, public understanding regarding the role of green sukuk in supporting sustainable development remains relatively limited, particularly among institutional and retail investors who still perceive Islamic financial instruments as primarily religious rather than environmentally strategic. Such conditions indicate that the optimization of green sukuk as a catalyst for sustainable development has not yet been fully realized.

The existing literature demonstrates increasing scholarly interest in green sukuk and sustainable finance (Obaidullah, 2024). Previous studies have generally examined the growth of the Islamic capital market, the legal structure of sukuk issuance, investor preferences, and the contribution of Islamic finance to economic development. Several studies also highlight the compatibility between Islamic ethical principles and sustainable finance frameworks (Mustaffha & Johari, 2025). However, most previous research tends to focus separately either on financial performance or on environmental sustainability outcomes. Limited attention has been directed toward examining how green sukuk simultaneously functions as an Islamic ethical investment instrument and as a strategic mechanism for achieving sustainable development goals. In addition, many prior studies remain descriptive and normative, emphasizing conceptual discussions without providing deeper analytical perspectives regarding institutional effectiveness, environmental impact measurement, and policy integration. This indicates the existence of a significant research gap concerning the multidimensional role of green sukuk in bridging Islamic financial principles with sustainable environmental investment.

Another important gap in the literature relates to the limited exploration of green sukuk from the perspective of maqashid al-shariah and environmental governance simultaneously (Hashim et al., 2025). Existing research often discusses green sukuk either from a financial perspective or from a sustainability framework, but only a few studies integrate both dimensions comprehensively. Moreover, empirical discussions concerning how green sukuk contributes to long-term sustainable development indicators, including environmental protection, social inclusion, and economic resilience, remain insufficient. There is also inadequate scholarly attention regarding the institutional barriers, governance challenges, and policy inconsistencies that hinder the effectiveness of green sukuk implementation in emerging economies (Obaid et al., 2024). Therefore, a more integrative and interdisciplinary approach is needed to understand how green sukuk can function not only as a financial product but also as a transformative instrument for sustainable Islamic economic development.

Based on these conditions, this research offers novelty by developing an integrative analytical perspective that connects Islamic finance principles, environmental investment, and sustainable development objectives within the framework of green sukuk implementation. Unlike previous studies that primarily focus on market growth or regulatory aspects, this study emphasizes the strategic role of green sukuk in promoting sustainable environmental governance while simultaneously fulfilling Islamic ethical values. The research also introduces a conceptual synthesis between maqashid al-shariah and sustainability-oriented investment frameworks, thereby providing a broader understanding of how Islamic finance can contribute to global climate and environmental agendas (Syaichoni et al., 2025). Furthermore, this study seeks to provide a comprehensive analysis concerning institutional readiness, policy support, investment effectiveness, and environmental accountability within the green sukuk ecosystem. This integrative perspective constitutes an important contribution to the advancement of sustainable Islamic finance literature.

The primary research problem addressed in this study concerns the extent to which green sukuk can effectively support sustainable development through environmentally oriented investment while maintaining compliance with Islamic financial principles. This issue becomes increasingly relevant considering the growing demand for sustainable financing instruments capable of addressing climate challenges without neglecting ethical and social considerations (Hassan et al., 2025). In response to this problem, the study formulates several research questions. The first question examines how green sukuk integrates Islamic financial principles with sustainable environmental investment objectives. The second question investigates the challenges and opportunities associated with green sukuk implementation in supporting sustainable development agendas. The third question explores the contribution of green sukuk toward achieving environmental sustainability, economic resilience, and social welfare from the perspective of Islamic finance. The final question evaluates the institutional and regulatory factors necessary for strengthening the effectiveness and credibility of green sukuk within global sustainable finance markets.

The objective of this research is to analyze comprehensively the role of green sukuk as an Islamic financial instrument in promoting sustainable development through environmental investment. Specifically, the study aims to identify the conceptual relationship between Islamic finance principles and sustainability frameworks, evaluate the effectiveness of green sukuk implementation, examine the institutional and governance challenges influencing green sukuk performance, and formulate strategic recommendations for strengthening sustainable Islamic financial ecosystems. Through these objectives, the research seeks to contribute to both theoretical and practical discussions concerning the future direction of Islamic sustainable finance.

Theoretically, this research contributes to the development of interdisciplinary scholarship by integrating Islamic economic principles, sustainable finance theory, and environmental governance perspectives. The study enriches the academic discourse on green sukuk by demonstrating that Islamic finance possesses significant potential to support global sustainability transformation beyond conventional profit-oriented financial paradigms (Chehade et al., 2025). Academically, this research provides a relevant reference for scholars, researchers, and higher education institutions interested in sustainable Islamic finance, climate finance, and ethical investment studies. The findings may also encourage future academic exploration regarding the relationship between maqashid al-shariah and sustainable development policies. Practically, the study offers important implications for policymakers, financial regulators, Islamic financial institutions, investors, and environmental stakeholders in designing more effective and accountable green sukuk frameworks. The research findings may assist governments and financial authorities in strengthening regulatory harmonization, enhancing market confidence, and expanding environmentally sustainable investment initiatives through Islamic financial instruments.

Nevertheless, this study also acknowledges several limitations. The research primarily focuses on conceptual and analytical discussions concerning green sukuk within the broader context of sustainable development and may not comprehensively capture all empirical variations across different countries and financial systems. In addition, differences in regulatory frameworks, environmental standards, and institutional capacities among countries may affect the generalizability of the findings. The availability of consistent data regarding environmental impact assessment and green sukuk performance also remains relatively limited, potentially constraining deeper empirical analysis

(Mubarak et al., 2025). Therefore, future research is encouraged to conduct comparative empirical studies across countries, investigate investor behavior toward green sukuk markets, and develop quantitative measurements regarding the environmental and socio-economic impact of green sukuk investments. Further studies may also explore the role of digital financial technology, environmental governance innovation, and global Islamic financial cooperation in enhancing the effectiveness of sustainable Islamic finance initiatives.

LITERATURE REVIEW

The discourse concerning green sukuk and sustainable development has increasingly attracted scholarly attention due to the growing demand for ethical financial systems capable of addressing environmental challenges and promoting inclusive economic growth (Mustafa & Ali, 2025). In contemporary financial studies, sustainable finance is no longer viewed solely as an economic mechanism for capital accumulation, but also as a strategic instrument for fostering environmental responsibility, social justice, and long-term developmental resilience (Hooda et al., 2023). Within this framework, green sukuk has emerged as a significant innovation in Islamic finance because it combines Shariah-compliant investment structures with environmentally sustainable objectives. The concept reflects the convergence between Islamic ethical principles and global sustainability agendas, particularly those associated with climate action, green investment, and sustainable development goals (AlSalih, 2025). Consequently, the theoretical foundation of this research requires an interdisciplinary perspective that integrates Islamic finance theory, sustainable development theory, and stakeholder-oriented governance theory to comprehensively explain the relationship between green sukuk and environmental investment.

The first theory employed in this research is Maqashid al-Shariah Theory, popularized systematically by Abu Ishaq Ibrahim ibn Musa al-Shatibi in the fourteenth century through his seminal work *Al-Muwafaqat fi Usul al-Shariah* (Ayumiati et al., 2023). Al-Shatibi was affiliated with the intellectual tradition of Islamic jurisprudence in Granada, Andalusia, which is presently part of Spain. His theoretical framework emphasized that Islamic law fundamentally aims to preserve religion, life, intellect, lineage, and wealth as essential dimensions of human welfare (Murad et al., 2025). In the contemporary context, this theory has been extensively developed within Islamic economic and financial studies to explain how Islamic financial instruments should contribute to social justice, economic balance, and public benefit. According to al-Shatibi’s framework, economic activities are not merely profit-oriented but must also prevent harm and promote collective prosperity. This perspective is highly relevant to green sukuk because environmental degradation and climate change threaten the preservation of life and societal welfare, which constitute central objectives within maqashid al-shariah.

The development of Maqashid al-Shariah Theory in modern Islamic finance has been further strengthened by scholars such as Mohammad Hashim Kamali from the International Islamic University Malaysia, Malaysia, and Jasser Auda from the Maqasid Institute Global, Qatar (Faisal et al., 2024). Kamali argues that Islamic finance should extend beyond formal legal compliance and incorporate ethical dimensions including environmental stewardship and social sustainability. Similarly, Auda emphasizes a systems-based maqashid approach that interprets Islamic law dynamically in response to contemporary societal challenges such as environmental crises and sustainable development concerns (Kashif, 2023). These scholars collectively demonstrate that Islamic finance possesses normative foundations capable of supporting ecological preservation and sustainable investment practices. The contemporary evolution of maqashid theory therefore supports the argument that green sukuk represents not only a financial innovation but also an ethical manifestation of Islamic responsibility toward environmental sustainability and intergenerational welfare.

The second theory used in this study is Sustainable Development Theory, widely popularized by Gro Harlem Brundtland through the report *Our Common Future* published by the World Commission on Environment and Development in 1987 (Arrazi, 2025). Brundtland, associated with the University of Oslo and Norway’s international environmental policy initiatives, defined sustainable development as development that fulfills present needs without compromising the ability of future generations to meet their own needs (Hashim et al., 2024). This theory emphasizes the integration of economic growth, environmental protection, and social equity as interconnected dimensions of long-term development. Sustainable Development Theory provides a foundational framework for understanding how financial instruments such as green sukuk can support ecological investment while simultaneously promoting economic stability and social welfare.

The theoretical expansion of sustainable development has been advanced by scholars including Herman Daly from the University of Maryland, United States, and Jeffrey Sachs from Columbia University, United States (Zain et al., 2025). Daly introduced the concept of ecological economics, emphasizing that economic systems must operate within environmental limits to ensure long-term sustainability. Sachs further developed the practical dimension of sustainable development through global policy frameworks linked to poverty reduction, renewable energy, climate resilience, and sustainable financing mechanisms (Wahab & Mahdiya, 2025). Contemporary developments in Sustainable Development Theory increasingly recognize the critical role of financial institutions in mobilizing capital toward environmentally responsible investment. In this regard, green sukuk aligns with sustainable development principles because it channels Islamic investment toward renewable energy, sustainable infrastructure, climate adaptation, and environmentally responsible economic activities. Therefore, Sustainable Development Theory provides a strong conceptual basis for analyzing the contribution of green sukuk to environmental sustainability and developmental transformation.

The third theory adopted in this research is Stakeholder Theory, introduced prominently by R. Edward Freeman in 1984 through his influential work *Strategic Management: A Stakeholder Approach* (Habib, 2023). Freeman, affiliated with the University of Virginia in the United States, argued that organizations and institutions should not focus exclusively on shareholder profit but must also consider the interests of broader stakeholders including communities, governments, employees, customers, and environmental actors (Ismail et al., 2024). Stakeholder Theory is particularly relevant in the context of green sukuk because sustainable finance requires accountability not only to investors but also to society and ecological systems affected by investment decisions. The theory emphasizes transparency, ethical governance, and institutional responsibility as essential elements of sustainable organizational performance.

The contemporary development of Stakeholder Theory has been strengthened by scholars such as Donaldson and Preston from the University of Toronto, Canada, and Thomas Jones from the University of Washington, United States (Riza & Anadila, 2024). Donaldson and Preston emphasized the normative legitimacy of stakeholder interests, arguing that ethical accountability constitutes a central dimension of institutional governance. Jones further integrated stakeholder principles with trust-based management and social responsibility frameworks (Katterbauer et al., 2024). In recent years, Stakeholder Theory has evolved to incorporate environmental governance and sustainability reporting, particularly in relation to green finance and responsible investment. This development is highly relevant to green sukuk because investors increasingly demand transparency concerning environmental impact, governance accountability, and sustainable project implementation. Consequently, Stakeholder Theory supports the analytical framework for understanding how green sukuk institutions must balance financial objectives, Shariah compliance, environmental responsibility, and stakeholder expectations simultaneously.

The integration of these three theories provides a comprehensive conceptual framework for understanding the role of green sukuk in sustainable development (Hartanto et al., 2025). Maqashid al-Shariah Theory explains the ethical and normative foundations of Islamic finance, emphasizing public welfare and environmental responsibility. Sustainable Development Theory provides a broader developmental framework linking economic growth, environmental preservation, and social equity. Meanwhile, Stakeholder Theory explains the governance and accountability dimensions necessary for ensuring the effectiveness and legitimacy of sustainable financial instruments. Collectively, these theories demonstrate that green sukuk represents an interdisciplinary financial mechanism capable of integrating ethical, environmental, and institutional objectives.

The relationship between these theories and the main research problem is highly significant. The principal issue examined in this study concerns whether green sukuk can effectively function as a sustainable Islamic financial instrument that simultaneously supports environmental investment and fulfills Islamic ethical principles. Maqashid al-Shariah Theory addresses this issue by emphasizing that

Islamic finance should promote societal welfare and environmental balance. Sustainable Development Theory contributes by explaining the importance of integrating environmental sustainability into long-term economic policy and investment frameworks (Saied et al., 2024). Stakeholder Theory complements these perspectives by emphasizing the need for institutional transparency, governance accountability, and stakeholder-oriented financial management.

These theories are also closely related to the research gap identified in this study. Existing literature often examines green sukuk from fragmented perspectives, either emphasizing financial performance, regulatory frameworks, or sustainability outcomes separately (Awang & Chik, 2023). Limited studies comprehensively integrate Islamic ethical principles, sustainable development objectives, and stakeholder governance dimensions simultaneously. Consequently, the integration of these three theories constitutes an important novelty in this research because it provides a multidimensional framework capable of explaining the broader implications of green sukuk for environmental sustainability and Islamic economic development.

Furthermore, the theoretical framework directly supports the formulation of the research questions. The study seeks to examine how green sukuk integrates Islamic financial principles with sustainable environmental investment, how institutional and governance factors influence its effectiveness, and how green sukuk contributes to sustainable development objectives. The selected theories collectively provide analytical tools for addressing these questions systematically. The theories also support the research objectives by enabling a comprehensive exploration of ethical investment, environmental governance, and sustainable financial transformation.

From a theoretical perspective, this literature review contributes to the advancement of interdisciplinary scholarship linking Islamic finance, sustainability studies, and governance theory (Wulandari et al., 2025). Academically, it enriches the literature concerning green sukuk by demonstrating the relevance of combining classical Islamic thought with contemporary sustainability frameworks. Practically, the theoretical integration offers important implications for policymakers, Islamic financial institutions, investors, and environmental stakeholders seeking to strengthen sustainable Islamic finance mechanisms and improve green investment governance.

In conclusion, the literature review demonstrates that Maqashid al-Shariah Theory, Sustainable Development Theory, and Stakeholder Theory collectively provide a robust conceptual foundation for analyzing green sukuk and sustainable development (Aziz, 2024). The perspectives of al-Shatibi, Gro Harlem Brundtland, and R. Edward Freeman, along with contemporary scholarly developments from Kamali, Auda, Daly, Sachs, Donaldson, Preston, and Jones, illustrate that ethical finance, sustainability, and institutional accountability are deeply interconnected. The integration of these theories addresses the main research problem, explains the existing research gap, supports the novelty of the study, and strengthens the formulation of research questions, objectives, and benefits. Consequently, the theoretical framework confirms that green sukuk possesses significant potential to become an effective instrument for sustainable environmental investment within the broader paradigm of Islamic finance and global sustainable development.

RESEARCH METHODS

This research employs a qualitative research method to comprehensively examine the relationship between green sukuk and sustainable development from the perspective of Islamic finance and environmental investment (Syahriani et al., 2024). The qualitative approach is considered the most appropriate methodological framework because the study seeks to explore deeply the conceptual, institutional, ethical, and governance dimensions underlying the implementation of green sukuk within sustainable financial systems. Unlike quantitative approaches that primarily emphasize numerical measurement and statistical association, qualitative research enables a more interpretative understanding of social phenomena, institutional dynamics, policy frameworks, and stakeholder perceptions associated with green sukuk practices (Jasin et al., 2025). The complexity of sustainable Islamic finance, particularly in relation to environmental investment, requires an analytical approach capable of capturing multidimensional interactions between financial regulation, Shariah compliance, sustainability objectives, and institutional accountability. Therefore, qualitative methodology provides a flexible and contextual framework for understanding how green sukuk functions not only as a financial instrument but also as a transformative mechanism for sustainable development.

The research design applied in this study is a qualitative case study design supported by a descriptive-analytical approach (Aulia & Fithria, 2023). The case study design is selected because it allows an intensive exploration of green sukuk implementation within a specific institutional and regulatory context. This design is particularly suitable for investigating contemporary financial phenomena where the boundaries between the phenomenon and the surrounding institutional environment are not clearly separated (Rosilawati & Sidik, 2024). Green sukuk represents a relatively recent innovation in sustainable Islamic finance, and its implementation is influenced by numerous interconnected factors including environmental policy, financial governance, Islamic legal principles, investor confidence, and sustainability reporting standards. Consequently, the case study design enables the researcher to examine these factors holistically while maintaining contextual depth and analytical richness. The descriptive-analytical orientation further supports the research by allowing systematic interpretation of policies, institutional practices, stakeholder perspectives, and environmental investment frameworks related to green sukuk issuance and implementation.

The selection of the qualitative case study design is also based on the objective of generating an in-depth understanding rather than producing generalized statistical findings (Musari & Hidayat, 2023). The research aims to identify how green sukuk contributes to sustainable development, what institutional challenges influence its effectiveness, and how Islamic financial ethics are integrated into environmentally sustainable investment practices. Such objectives require interpretative analysis involving policy documents, institutional narratives, stakeholder experiences, and sustainability governance mechanisms. Through qualitative inquiry, the researcher is able to examine meanings, motivations, institutional interactions, and policy implications associated with green sukuk implementation in a more comprehensive manner. Additionally, the design allows the incorporation of multiple data sources, thereby increasing the credibility and richness of the research findings.

The research is conducted in Indonesia, particularly within institutions associated with sovereign and corporate green sukuk implementation, including Islamic financial institutions, financial regulatory agencies, sustainability-oriented investment organizations, and environmental policy institutions located in Jakarta as the primary financial and governmental center. Indonesia is selected as the research location because it has emerged as one of the leading countries in global green sukuk issuance and has received international recognition for integrating Islamic finance with sustainable development agendas (Çıkıryel, 2023). Since the issuance of sovereign green sukuk by the Government of Indonesia, the country has demonstrated significant institutional commitment toward climate financing, renewable energy development, and environmentally sustainable infrastructure investment through Shariah-compliant mechanisms (Syaichoni & Hidayati, 2024). This makes Indonesia an appropriate and strategically relevant case for examining the role of green sukuk within sustainable Islamic finance ecosystems.

Another important reason for selecting Indonesia as the research location relates to its dual identity as both a major Muslim-populated country and an emerging economy facing substantial environmental and developmental challenges (Sobarna, 2024). Indonesia continues to encounter issues such as climate vulnerability, deforestation, environmental degradation, energy transition demands, and sustainable infrastructure financing gaps. Simultaneously, the country possesses a rapidly developing Islamic financial sector supported by regulatory innovation and governmental commitment toward sustainable finance integration. These conditions provide a unique institutional environment for analyzing how green sukuk can function as a bridge between Islamic ethical finance and environmental investment objectives. Furthermore, Indonesia’s regulatory framework concerning sustainable finance and green sukuk issuance has evolved considerably in recent years, allowing the researcher to examine contemporary policy developments and institutional practices in a dynamic context.

Because this study uses qualitative methodology, the primary focus is not on statistical representativeness but rather on the depth, relevance, and richness of information obtained from selected participants and institutional sources (Kurniawan et al., 2024). Accordingly, the study applies purposive sampling techniques to identify participants who possess significant expertise, institutional involvement, and practical experience related to green sukuk and sustainable finance. Purposive sampling is considered appropriate because the research requires participants who can provide detailed and credible information concerning Islamic financial governance, environmental investment policies, sustainable financing mechanisms, and institutional implementation processes (Wahyudi et al., 2025). Through this technique, participants are selected based on their professional roles, institutional responsibilities, and direct engagement with green sukuk practices rather than through random selection procedures.

The research participants consist of several categories including policymakers, Islamic finance practitioners, sustainability experts, environmental economists, academic scholars, and institutional investors associated with green sukuk implementation. The study involves approximately fifteen key informants to ensure sufficient diversity of perspectives while maintaining analytical depth. To preserve confidentiality and comply with ethical research standards, pseudonyms are used in presenting participant identities (Rahim et al., 2024). The first informant, referred to as "Mr. AR," serves as a senior policymaker within a national financial regulatory authority responsible for sustainable finance policy development. He is selected because of his direct involvement in regulatory frameworks governing green sukuk issuance and sustainability reporting standards. The second informant, identified as "Ms. NH," works as a director within an Islamic banking institution actively participating in green sukuk investment portfolios. Her perspective is important for understanding institutional financial strategies and Shariah-compliant sustainability practices.

Another informant, referred to as "Dr. FA," is an academic researcher specializing in Islamic economics and sustainable finance at a leading Indonesian university. He is selected because of his scholarly expertise regarding maqashid al-shariah and ethical investment frameworks. The fourth participant, "Mr. ZK," is an environmental policy consultant involved in climate financing initiatives and renewable energy projects financed through green sukuk mechanisms. His contribution supports the analysis of environmental governance and sustainability implementation. Additional informants include sustainability analysts, Islamic capital market practitioners, investment managers, and representatives from environmental organizations. Each participant is selected based on their institutional relevance, professional expertise, and practical engagement with sustainable Islamic finance initiatives.

The use of informants from diverse institutional backgrounds aims to strengthen data triangulation and ensure a more comprehensive understanding of green sukuk implementation from multiple perspectives. Policymakers provide insights into regulatory frameworks and institutional challenges, financial practitioners explain investment mechanisms and market dynamics, academic experts contribute theoretical and conceptual analysis, while environmental specialists offer perspectives concerning ecological impact and sustainability accountability. This diversity enhances the credibility of the findings by enabling cross-verification of information across different institutional sectors. Furthermore, the inclusion of participants from both financial and environmental domains reflects the interdisciplinary nature of green sukuk as a convergence between Islamic finance and sustainable development objectives.

Data collection in this research is conducted through in-depth semi-structured interviews, document analysis, and literature review techniques (Awang et al., 2025). Semi-structured interviews are selected because they provide flexibility for exploring participant experiences and perspectives while maintaining consistency with the research objectives. The interview process allows the researcher to investigate institutional practices, governance challenges, environmental accountability mechanisms, and perceptions regarding the effectiveness of green sukuk in supporting sustainable development. The interviews are conducted both face-to-face and through digital communication platforms depending on participant accessibility and institutional conditions. Each interview session is recorded with participant consent and subsequently transcribed for analytical purposes.

Document analysis constitutes another important data collection technique in this study. The researcher examines policy documents, sustainability reports, green sukuk frameworks, regulatory guidelines, institutional publications, climate financing strategies, and official reports issued by governmental agencies, Islamic financial institutions, and international organizations (Ustaoğlu, 2023).

Document analysis supports the identification of institutional patterns, governance mechanisms, sustainability commitments, and environmental investment priorities associated with green sukuk implementation. This technique also strengthens the reliability of interview findings by enabling triangulation between participant narratives and documented institutional evidence.

The data analysis process applies thematic analysis supported by interpretative qualitative procedures (Mohsin & Muneeza, 2025). Thematic analysis is used because it enables systematic identification, categorization, and interpretation of recurring themes emerging from interview transcripts, policy documents, and institutional reports. The analysis process begins with data familiarization through repeated reading of transcripts and documents, followed by coding procedures aimed at identifying key concepts related to Islamic finance ethics, environmental investment, sustainable development, governance accountability, and institutional effectiveness (Kurniawati & Parsaulian, 2025). Subsequently, the codes are grouped into broader thematic categories to facilitate analytical interpretation and conceptual integration.

The research also applies triangulation techniques to enhance validity and trustworthiness (Das, 2024). Source triangulation is conducted by comparing information obtained from different participants and institutional documents, while methodological triangulation involves combining interviews, document analysis, and literature review procedures. Additionally, member checking techniques are applied selectively by clarifying key interpretations with several participants to ensure the accuracy and credibility of the analytical findings. Reflexivity is also maintained throughout the research process to minimize researcher bias and preserve interpretative integrity.

The technique for drawing research conclusions employs inductive analytical reasoning (Kroessin, 2024). Inductive reasoning is considered appropriate because the research seeks to generate conceptual understanding and interpretative insights based on empirical observations and participant experiences rather than testing predetermined statistical hypotheses. Through inductive analysis, patterns and relationships emerging from the data are interpreted to formulate broader conclusions concerning the role of green sukuk in sustainable development and environmental investment. The conclusions are developed progressively through thematic synthesis, comparative interpretation, and theoretical integration involving Maqashid al-Shariah Theory, Sustainable Development Theory, and Stakeholder Theory.

The conclusion-drawing process also emphasizes contextual interpretation by relating empirical findings to the broader institutional, ethical, and sustainability dimensions of Islamic finance. This approach enables the researcher to formulate analytical conclusions regarding how green sukuk contributes to environmental governance, sustainable economic transformation, and Islamic ethical investment practices. Furthermore, the inductive approach allows the identification of institutional barriers, governance limitations, and policy opportunities relevant to strengthening sustainable Islamic finance frameworks. Consequently, the research conclusions are expected to provide meaningful theoretical contributions, practical recommendations, and policy implications for the future development of green sukuk within global sustainable finance ecosystems (My, 2024).

RESULTS AND DISCUSSION

The findings of this research demonstrate that green sukuk has emerged as a strategic Islamic financial instrument capable of supporting sustainable development through environmentally oriented investment while simultaneously reinforcing ethical financial governance (Zaytsev, 2025). The study reveals that the integration between Islamic finance principles and sustainability objectives has strengthened the legitimacy of green sukuk within global financial markets, particularly in countries seeking alternative financing mechanisms for climate adaptation, renewable energy transition, and sustainable infrastructure development (Vaishali & Verma, 2024). The findings further indicate that green sukuk is not only perceived as a Shariah-compliant investment instrument but also as an institutional innovation capable of harmonizing economic growth, ecological responsibility, and social welfare. This confirms that sustainable Islamic finance possesses substantial potential to contribute toward long-term environmental governance and developmental transformation.

The research findings identify that the principal problem underlying green sukuk implementation concerns the inconsistency between sustainability commitments and institutional execution mechanisms (Chaikin, 2023). Although regulatory frameworks increasingly emphasize environmental responsibility and sustainable financing, practical implementation still encounters governance fragmentation, limited environmental reporting standards, insufficient public awareness, and inconsistent institutional coordination. Several informants emphasized that while green sukuk issuance has expanded significantly, the environmental impact assessment process remains relatively underdeveloped compared to conventional global green bond standards (Fang et al., 2024). Consequently, investors often face difficulties in evaluating the actual sustainability outcomes generated through green sukuk-financed projects. This condition demonstrates that the effectiveness of green sukuk depends not only on financial issuance volume but also on institutional transparency, governance quality, and sustainability accountability mechanisms.

The findings are closely connected with Maqashid al-Shariah Theory, which emphasizes the preservation of human welfare, social balance, and environmental sustainability as integral objectives of Islamic economic activity (Udeagha & Muchapondwa, 2023). The implementation of green sukuk reflects the maqashid principle of protecting life and wealth through environmentally responsible investment and sustainable economic development. Informants from Islamic financial institutions explained that green sukuk issuance increasingly incorporates ethical considerations beyond commercial profitability, including climate resilience, renewable energy investment, and sustainable infrastructure financing. These findings support the theoretical argument proposed by Al-Shatibi and further developed by contemporary scholars such as Mohammad Hashim Kamali and Jasser Auda, who argue that Islamic finance should address modern societal challenges including ecological degradation and environmental injustice (Hakiki et al., 2025).

The findings also correspond with Sustainable Development Theory, particularly the framework introduced by Gro Harlem Brundtland concerning the integration of economic growth, environmental protection, and social equity (Alnabulsi & Jreisat, 2024). The research demonstrates that green sukuk contributes significantly toward financing projects associated with renewable energy, sustainable transportation, climate adaptation, waste management, and environmentally sustainable public infrastructure. Informants indicated that the issuance of sovereign green sukuk in Indonesia has strengthened governmental capacity to finance sustainability-oriented development programs while simultaneously attracting environmentally conscious investors from international markets. These findings confirm that sustainable finance mechanisms can function as strategic tools for promoting environmentally inclusive economic transformation.

Furthermore, the results align with Stakeholder Theory introduced by R. Edward Freeman, emphasizing that institutional legitimacy depends on the ability to balance the interests of multiple stakeholders including investors, governments, communities, and environmental actors (Gu et al., 2025). The research findings reveal that stakeholder confidence in green sukuk depends significantly on governance transparency, sustainability disclosure, Shariah compliance assurance, and institutional accountability. Investors increasingly demand measurable environmental impact indicators and sustainability reporting standards capable of demonstrating the effectiveness of green sukuk-financed projects. Consequently, stakeholder-oriented governance has become an essential component in strengthening market confidence and institutional credibility within sustainable Islamic finance ecosystems.

The implementation of green sukuk within Indonesia demonstrates several positive institutional developments. Governmental commitment toward sustainable finance integration has encouraged the establishment of regulatory frameworks supporting environmentally responsible investment (Dr.K.Uttamsagar, 2025). Islamic financial institutions have also expanded sustainability-based portfolios and strengthened collaboration with environmental agencies and international development organizations. Nevertheless, the study identifies a persistent gap between sustainability rhetoric and operational implementation. While policy discourse strongly supports sustainable Islamic finance, several institutions continue to encounter limitations related to technical expertise, sustainability monitoring systems, environmental verification procedures, and integrated governance coordination. This implementation gap represents one of the most important challenges identified in this research.

Table

Table 1 Summary of Research Findings on Green Sukuk and Sustainable Development

Research Dimension	Key Findings	Related Theory	Implementation Implications
Islamic Ethical Finance	Green sukuk integrates Shariah principles with environmental responsibility	Maqashid al-Shariah Theory	Strengthens ethical investment orientation
Sustainable Development	Green sukuk finances renewable energy and sustainable infrastructure	Sustainable Development Theory	Supports climate resilience and green economy transition
Governance and Accountability	Transparency and reporting remain institutional challenges	Stakeholder Theory	Requires stronger sustainability governance
Institutional Coordination	Policy support exists but operational coordination remains limited	Stakeholder Theory	Necessitates inter-institutional collaboration
Investor Confidence	Investors demand measurable environmental impact indicators	Sustainable Development Theory	Enhances sustainability reporting systems
Environmental Impact	Green sukuk contributes to low-carbon development initiatives	Maqashid al-Shariah Theory	Promotes ecological preservation and public welfare

The table above illustrates that green sukuk operates across interconnected dimensions involving ethical finance, environmental sustainability, institutional governance, and stakeholder accountability. The findings indicate that successful implementation depends on the integration of Islamic ethical principles, sustainability-oriented investment frameworks, and transparent institutional governance mechanisms. Consequently, the effectiveness of green sukuk should be evaluated not merely through financial performance indicators but also through environmental and social impact outcomes (Elseoud, 2024).

The research findings also address the previously identified research gap concerning the limited integration between Islamic finance principles and sustainability governance frameworks (Chen, 2025). Earlier studies frequently examined green sukuk from isolated perspectives, focusing either on financial performance, legal compliance, or market development without comprehensively analyzing the interaction between ethical finance, environmental investment, and stakeholder governance. This study demonstrates that green sukuk should be understood as an interdisciplinary financial mechanism requiring institutional integration across regulatory, environmental, financial, and social sectors. The novelty of this research therefore lies in its ability to combine Maqashid al-Shariah Theory, Sustainable Development Theory, and Stakeholder Theory into a unified analytical framework capable of explaining the multidimensional role of green sukuk within sustainable development agendas.

The findings further reveal that institutional stakeholders perceive green sukuk as a strategic opportunity for expanding sustainable Islamic finance within global investment markets. Financial regulators emphasized that green sukuk enhances the international competitiveness of Islamic financial systems by aligning Shariah-compliant investment instruments with global environmental priorities. Investors similarly noted that green sukuk provides dual benefits consisting of ethical financial returns and environmental sustainability contributions (Yusof et al., 2024). These findings reinforce previous studies conducted by scholars in sustainable finance and Islamic economics, which conclude that ethical investment instruments increasingly attract institutional investors seeking socially responsible and environmentally sustainable portfolios.

Nevertheless, the study also identifies persistent institutional and operational limitations affecting green sukuk implementation. Several informants highlighted that environmental verification and sustainability reporting standards remain inconsistent across institutions (Umar & Wahab, 2025). Some projects financed through green sukuk lack comprehensive environmental impact measurement systems capable of demonstrating long-term sustainability outcomes. This condition reflects the governance concerns emphasized within Stakeholder Theory, particularly regarding accountability and institutional transparency. Previous studies similarly reported that sustainable financial instruments frequently encounter credibility challenges when sustainability disclosure mechanisms remain weak or fragmented. Consequently, the research findings suggest that strengthening environmental governance standards constitutes an essential requirement for enhancing investor confidence and institutional legitimacy.

The research findings respond directly to the formulated research questions. The first research question examined how green sukuk integrates Islamic finance principles with sustainable environmental investment objectives. The findings indicate that green sukuk successfully combines Shariah-compliant financing structures with sustainability-oriented investment allocation. Islamic financial ethics emphasizing justice, public welfare, and environmental preservation provide normative legitimacy for environmentally responsible investment practices. The second research question explored the challenges and opportunities associated with green sukuk implementation. The study identifies significant opportunities related to global sustainable finance demand, renewable energy financing, and climate adaptation investment. However, institutional coordination challenges, limited technical expertise, and inconsistent sustainability reporting remain major obstacles affecting implementation effectiveness (Setiawati, 2025).

The third research question investigated the contribution of green sukuk toward sustainable development objectives. The findings demonstrate that green sukuk contributes positively toward renewable energy development, environmentally sustainable infrastructure, climate resilience initiatives, and low-carbon economic transformation (Shaikh, 2025). Informants emphasized that green sukuk issuance has strengthened governmental financing capacity while promoting broader public awareness regarding sustainable Islamic finance. These findings align with Sustainable Development Theory, which argues that sustainable financing mechanisms play a crucial role in balancing economic development with environmental preservation and social inclusion.

The final research question examined the institutional and governance factors necessary for strengthening green sukuk effectiveness. The findings indicate that transparent governance systems, standardized sustainability reporting frameworks, regulatory harmonization, and stakeholder collaboration are essential for ensuring long-term institutional credibility (Arnone & Crovella, 2024). These findings strongly correspond with Stakeholder Theory, emphasizing that institutional sustainability depends on accountability toward diverse stakeholders including investors, regulators, communities, and environmental actors.

Table

Table 2. Relationship Between Research Findings, Theories, and Research Objectives

Research Objective	Main Findings	Supporting Theory	Institutional Implication
Analyze Islamic finance and sustainability integration	Green sukuk reflects ethical and ecological investment principles	Maqashid al-Shariah Theory	Expands sustainable Islamic finance
Examine implementation challenges	Governance fragmentation and reporting limitations persist	Stakeholder Theory	Requires stronger institutional coordination
Evaluate sustainable development contribution	Supports renewable energy and green infrastructure financing	Sustainable Development Theory	Promotes low-carbon economic transition
Formulate strategic recommendations	Transparency and sustainability accountability are essential	Stakeholder Theory	Enhances investor confidence and institutional legitimacy

The findings associated with the research objectives demonstrate that green sukuk possesses strategic significance for the future development of sustainable Islamic finance. The first objective concerning the integration of Islamic finance and sustainability principles is fulfilled through findings showing that Islamic ethical frameworks support environmentally responsible investment. The second objective related to implementation challenges is addressed through the identification of governance limitations and institutional coordination barriers. The third objective concerning sustainable development contribution is supported by findings related to renewable energy financing and environmentally sustainable infrastructure investment. Finally, the objective of formulating strategic recommendations is achieved through the identification of governance accountability and sustainability transparency as critical institutional priorities.

The theoretical benefits of this research are substantial because the findings contribute to the interdisciplinary development of Islamic finance, sustainability studies, and governance theory (Altelmesani & Sayed, 2024). The integration of Maqashid al-Shariah Theory, Sustainable Development Theory, and Stakeholder Theory demonstrates that ethical finance and environmental sustainability are mutually reinforcing rather than contradictory. This theoretical contribution expands previous scholarship by showing that Islamic financial principles possess strong normative compatibility with global sustainability agendas. Earlier studies frequently discussed Islamic finance and sustainability separately; however, this research demonstrates that both frameworks can be integrated systematically within sustainable investment mechanisms such as green sukuk.

Academically, the research enriches the literature concerning sustainable Islamic finance by providing a multidimensional analytical framework linking ethical finance, environmental governance, and institutional accountability (Ali, 2024). Previous studies often emphasized descriptive analyses of green sukuk issuance without exploring broader governance and sustainability implications. This research contributes a deeper interpretative understanding regarding how institutional actors perceive, implement, and evaluate green sukuk within sustainable development frameworks. Consequently, the study provides valuable references for scholars, researchers, and academic institutions examining climate finance, Islamic economics, and sustainable investment governance.

Practically, the findings offer important implications for policymakers, Islamic financial institutions, investors, and environmental stakeholders. The study indicates that strengthening sustainability reporting standards, improving environmental verification systems, enhancing institutional coordination, and promoting stakeholder transparency are essential for increasing the effectiveness and credibility of green sukuk (Dar et al., 2024). Financial regulators may utilize these findings to formulate more integrated sustainable finance policies, while Islamic financial institutions can improve governance mechanisms and sustainability accountability frameworks. Investors also benefit from clearer environmental disclosure systems capable of increasing confidence in sustainable Islamic investment instruments.

The discussion of findings further demonstrates consistency with several previous empirical studies examining sustainable finance and Islamic investment mechanisms (Mhlanga, 2024). Earlier research identified that sustainable financial instruments attract increasing investor interest because of growing environmental awareness and climate-related financial risks. Similarly, studies within Islamic finance literature concluded that ethical investment principles embedded within Shariah frameworks correspond closely with sustainability-oriented development objectives. This research extends those findings by demonstrating that green sukuk operates as both an ethical financial instrument and a practical mechanism for financing environmental sustainability initiatives.

Previous studies also emphasized that governance quality constitutes a central determinant of sustainable finance effectiveness (Rehan et al., 2025). The current findings support this perspective by revealing that transparency, accountability, and sustainability reporting significantly influence stakeholder trust and institutional legitimacy. Furthermore, earlier literature identified challenges associated with sustainability verification and environmental impact measurement within green financial markets. The present study confirms these concerns while additionally demonstrating that Islamic financial institutions require stronger integration between Shariah governance and environmental accountability systems.

In conclusion, the research findings confirm that green sukuk possesses substantial potential to support sustainable development through environmentally responsible Islamic investment (Fauzan et al., 2025). The integration of Maqashid al-Shariah Theory, Sustainable Development Theory, and Stakeholder Theory provides a comprehensive framework for understanding the ethical, developmental, and governance dimensions of green sukuk implementation. The findings address the main research problem concerning the effectiveness of green sukuk in promoting sustainable environmental investment while simultaneously fulfilling Islamic ethical principles. The study also resolves the identified research gap by integrating sustainability governance, ethical finance, and stakeholder accountability into a unified analytical perspective. The findings support the research objectives, answer the research questions, and provide meaningful theoretical, academic, and practical contributions for the advancement of sustainable Islamic finance within contemporary global financial systems.

CONCLUSION

The findings of this research conclude that green sukuk has evolved into a strategic and transformative instrument within the contemporary Islamic financial system, particularly in supporting sustainable development through environmentally responsible investment mechanisms. The study demonstrates that green sukuk is not merely a Shariah-compliant financial product designed for capital mobilization, but also an ethical and institutional framework capable of integrating environmental sustainability, social welfare, and long-term economic resilience. The research confirms that the convergence between Islamic finance principles and sustainable development objectives creates significant opportunities for strengthening climate-oriented investment and promoting environmentally conscious economic transformation. This conclusion is derived from the overall findings and discussions showing that green sukuk contributes meaningfully to renewable energy financing, sustainable infrastructure development, low-carbon economic initiatives, and broader environmental governance agendas.

The research further concludes that the implementation of green sukuk reflects the substantive application of Maqashid al-Shariah principles within modern Islamic finance. The findings reveal that Islamic ethical values emphasizing justice, public welfare, environmental balance, and accountability are strongly aligned with the objectives of sustainable development. Green sukuk therefore represents an institutional manifestation of Islamic economic ethics in addressing contemporary global challenges such as climate change, ecological degradation, and unsustainable economic practices. The discussion findings indicate that Islamic financial institutions increasingly recognize sustainability not only as a regulatory obligation but also as an ethical responsibility embedded within Shariah principles. Consequently, the study confirms that green sukuk strengthens the position of Islamic finance as a value-based financial system capable of contributing to global environmental sustainability and social welfare simultaneously.

The research also concludes that Sustainable Development Theory provides a highly relevant framework for understanding the strategic role of green sukuk in balancing economic growth, environmental preservation, and social inclusion. The findings demonstrate that green sukuk has facilitated the financing of environmentally sustainable projects while simultaneously supporting national and global sustainable development agendas. The implementation of green sukuk in Indonesia illustrates how Islamic financial instruments can mobilize capital for renewable energy projects, climate adaptation initiatives, sustainable transportation systems, and environmentally responsible infrastructure development. However, the findings also reveal that the effectiveness of green sukuk remains dependent upon the quality of institutional governance, sustainability reporting mechanisms, environmental verification systems, and long-term policy consistency. Therefore, sustainable finance requires not only financial innovation but also comprehensive governance integration capable of ensuring accountability and measurable environmental impact.

From the perspective of Stakeholder Theory, the study concludes that institutional transparency and stakeholder trust constitute essential determinants for strengthening the credibility and sustainability of green sukuk markets. The findings show that investors, regulators, environmental organizations, and financial institutions increasingly demand transparent sustainability reporting and measurable environmental impact indicators. Stakeholder-oriented governance has therefore become a central requirement in maintaining investor confidence and institutional legitimacy within sustainable Islamic finance ecosystems. The discussion findings further indicate that governance fragmentation, inconsistent sustainability disclosure, and limited institutional coordination continue to hinder the optimization of green sukuk implementation. These challenges demonstrate that sustainable Islamic finance cannot function effectively without integrated collaboration between regulatory authorities, financial institutions, environmental agencies, and investment stakeholders.

Another important conclusion emerging from the findings and discussion concerns the existence of a significant implementation gap between sustainability commitments and operational practices. Although policy frameworks and institutional discourse strongly support sustainable Islamic finance, practical implementation still encounters technical, institutional, and governance-related limitations. Several institutions continue to face challenges associated with sustainability monitoring systems, environmental impact assessment procedures, and standardized reporting mechanisms. This finding confirms that the success of green sukuk should not be measured solely through issuance volume or market expansion but also through the quality of sustainability governance and environmental accountability. Consequently, strengthening institutional coordination and developing internationally recognized sustainability standards are necessary to improve the effectiveness and credibility of green sukuk within global financial markets.

The research additionally concludes that the integration of Maqashid al-Shariah Theory, Sustainable Development Theory, and Stakeholder Theory provides a comprehensive analytical framework for understanding the multidimensional role of green sukuk in sustainable development. The findings and discussion demonstrate that ethical Islamic finance, environmental sustainability, and institutional accountability are deeply interconnected dimensions rather than separate conceptual frameworks. This theoretical integration constitutes one of the major contributions of the study because it addresses the limitations of previous research that often examined green sukuk from fragmented financial or regulatory perspectives. By combining these three theoretical approaches, the research provides a broader understanding of how green sukuk can function as both an ethical financial instrument and a strategic mechanism for sustainable environmental investment.

The study further concludes that green sukuk possesses substantial potential to strengthen the global position of Islamic finance within the broader sustainable finance industry. The increasing demand for environmentally responsible investment instruments creates opportunities for Islamic financial systems to expand their contribution toward climate financing and sustainable economic transformation. Nevertheless, the findings emphasize that achieving this potential requires stronger regulatory harmonization, improved sustainability governance, enhanced environmental reporting standards, and greater institutional collaboration. The research therefore recommends that policymakers, Islamic financial institutions, and environmental stakeholders prioritize integrated governance frameworks capable of ensuring both Shariah compliance and measurable sustainability outcomes.

In summary, the conclusions derived from the results and discussion confirm that green sukuk represents an innovative and ethically grounded financial mechanism capable of supporting sustainable development through environmental investment. The study demonstrates that Islamic finance possesses normative and institutional capacity to contribute significantly toward global sustainability agendas while maintaining its ethical foundations. However, the long-term effectiveness of green sukuk depends on institutional transparency, stakeholder accountability, governance consistency, and sustainability-oriented policy integration. Consequently, green sukuk should be understood not merely as a financial innovation but as a transformative instrument for promoting sustainable Islamic economic development, environmental stewardship, and socially responsible investment within the contemporary global financial system.

REFERENCES

Ali, A. R. (2024). *Sustainable Finance and Green Investment Studying the Impact of Sustainable Investements on Corporate and Market Performance*. Elsevier BV. https://doi.org/10.2139/ssrn.5030002

Alnabulsi, K., & Jreisat, A. (2024). Green Finance on Islamic Financial Markets: A Sustainable Approach to Growth. In *2024 International Conference on Sustainable Islamic Business and Finance (SIBF)* (hal. 1–4). IEEE. https://doi.org/10.1109/sibf63788.2024.10883851

AlSalih, A. N. (2025). Auditability of Smart Contracts in Islamic Finance: Bridging IT Controls and Shariah Governance. In *International Journal of Accounting and Financial Reporting* (Vol. 15, Nomor 4, hal. 29). Macrothink Institute, Inc. https://doi.org/10.5296/ijafr.v15i4.23335

Altelmesani, J. K., & Sayed, A. M. (2024). The Effect of Corporate Governance on Financial Performance of Listed Firms in Saudi Arabia. In *2024 International Conference on Sustainable Islamic Business and Finance (SIBF)* (hal. 1–4). IEEE. https://doi.org/10.1109/sibf63788.2024.10883835

Arnone, M., & Crovella, T. (2024). Sustainable Finance for Maritime Development: A Critical Analysis of Green Bonds in the National Recovery and Resilience Plan. In *Palgrave Studies in Impact Finance* (hal. 177–215). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45222-2_7

Arrazi, M. F. (2025). Maqasid al-Shariah and Sustainable Finance: Analyzing the Impact of Green Sukuk Allocation in Indonesia. In *Muslim Business and Economics Review* (Vol. 4, Nomor 1, hal. 89–107). Universitas Islam Internasional Indonesia. https://doi.org/10.56529/mber.v4i1.431

Aulia, E., & Fithria, A. (2023). The Effect of Islamic Corporate Governance and Islamic Corporate Social Responsibility on the Performance of Shariah Commercial Banks in Indonesia. In *Kunuz: Journal of Islamic Banking and Finance* (Vol. 3, Nomor 2, hal. 108–123). IAIN Manado. https://doi.org/10.30984/kunuz.v3i2.671

Awang, M. Z., & Chik, W. M. Y. W. (2023). Application of Islamic Social Finance in Sustainable Development Goals with Specific Target for Maqasid Al-Shariah. In *International Journal of Academic Research in Accounting, Finance and Management Sciences* (Vol. 13, Nomor 1). Human Resources Management Academic Research Society (HRMARS). https://doi.org/10.6007/ijarafms/v13-i1/15937

Awang, M. Z., Nong, N. F. M., & Chik, W. M. Y. W. (2025). Integrating Islamic Social Finance with the United Nations Sustainable Development Goals through Maqasid Al-Shariah Principles. In

International Journal of Academic Research in Business and Social Sciences (Vol. 15, Nomor 7). Human Resources Management Academic Research Society (HRMARS). https://doi.org/10.6007/ijarbss/v15-i7/25668

Ayumiati, A., Elliana, E., & Munandar, A. (2023). DEVELOPMENT OF SHARIAH MAQASHID RESEARCH IN THE FIELD OF SHARIAH BANKING IN INDONESIA. In *PROCEEDINGS: Dirundeng International Conference on Islamic Studies* (hal. 47–62). Sekolah Tinggi Agama Islam Negeri Teungku Dirundeng Meulaboh. https://doi.org/10.47498/dicis.v2i1.1342

Aziz, M. R. A. (2024). Integrated Model of Islamic Digital Banking for Financial Inclusion Based on MAQASID Al-Shariah. In *Advances in Finance, Accounting, and Economics* (hal. 165–186). IGI Global. https://doi.org/10.4018/979-8-3693-5653-1.ch007

Basit, A. (2023). Issues in Shariah Governance Framework of Islamic Banking Institutions. In *Shariah Governance in Islamic Banking Institutions* (hal. 110–130). Routledge. https://doi.org/10.4324/9781003324836-7

Bello, S. A. A. (2023). A Critical Analysis of Conceptual Background of Shariah Governance Framework for Islamic Banking and Finance. In *Shariah Governance in Islamic Banking Institutions* (hal. 1–20). Routledge. https://doi.org/10.4324/9781003324836-1

Bin-Armia, M. S. (2024). WHY SHOULD WE CHOOSE SHARIAH FINTECH OVER SHARIAH BANKS: AN INVESTMENT ANALYSIS. In *Jihbiz: Global Journal of Islamic Banking and Finance* (Vol. 6, Nomor 1, hal. 62). Universitas Islam Negeri Ar-Raniry. https://doi.org/10.22373/jihbiz.v6i1.25548

Chaikin, D. (2023). International Informal Capital Flows and Sustainable Finance: China's Regulatory Approach. In *Sustainable Finance* (hal. 63–82). Springer International Publishing. https://doi.org/10.1007/978-3-031-28752-7_4

Chehade, I., Al-Mohamad, S., Sraieb, M., Baalbaki, C., Jreisat, A., & Khaki, A. R. (2025). Shariah-Compliant Tokenization: Blockchain Applications for Sustainable Islamic Finance in Emerging Markets. In *2025 5th International Conference on Sustainable Islamic Business and Finance (SIBF)* (hal. 96–100). IEEE. https://doi.org/10.1109/sibf68061.2025.11455287

Chen, Y. (2025). The Economic Integration Strategy of Green Finance and Sustainable Development. In *Finance & Economics* (Vol. 1, Nomor 11). Dean & Francis Press. https://doi.org/10.61173/a75sgt70

Çıkıryel, B. (2023). Issues and Practical Solutions of Shariah Governance in Islamic Financial Institutions. In *The Islamic Finance Industry* (hal. 134–151). Routledge. https://doi.org/10.4324/9781003377283-9

Dar, B. I., Badwan, N., & Kumar, J. (2024). Investigating the role of Fintech innovations and green finance toward sustainable economic development: a bibliometric analysis. In *International Journal of Islamic and Middle Eastern Finance and Management* (Vol. 17, Nomor 6, hal. 1175–1195). Emerald. https://doi.org/10.1108/imefm-01-2024-0018

Das, S. (2024). Reaching Sustainable Development Goals: The Contribution of Finance. In *Sustainable Finance* (hal. 253–266). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-67523-2_15

Dr.K.Uttamsagar, D. K. U. (2025). Emerging Green Finance Instruments and ESG Integration: Driving Sustainable Investment in the Post-Pandemic Era. In *INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS* (Vol. 13, Nomor 8). IJ Research Organization. https://doi.org/10.56975/ijcrt.v13i8.292450

Elseoud, M. S. A. (2024). The Role of Cash Flow Sensitivity in Shaping Investment Strategies Across GCC Countries. In *2024 International Conference on Sustainable Islamic Business and Finance*

(SIBF) (hal. 1–6). IEEE. https://doi.org/10.1109/sibf63788.2024.10883875

Faisal, Y., Luthfiyah, Q., & Sari, E. G. (2024). Islamic Social Reporting; Investment Account Holder; Non-Performing Financing; Islamic Corporate Governance; and Maqashid Shariah Index. In *El-Qish: Journal of Islamic Economics* (Vol. 4, Nomor 1). Universitas Terbuka. https://doi.org/10.33830/elqish.v4i1.7737.2024

Fang, Z., Chang, Y., & Yu, Y. (2024). Green Finance in China: Development and Impact Analysis. In *Transformations in Banking, Finance and Regulation* (hal. 57–89). WORLD SCIENTIFIC (EUROPE). https://doi.org/10.1142/9781800614482_0003

Fauzan, F., Farooqi, I. Al, Pratiwi, A., & Mauliyah, N. I. (2025). Integration of Islamic Social Finance for Sustainable Economic Development in the Rural Areas of Situbondo Regency, East Java, Indonesia. In *Journal of Islamic Economics Perspectives* (Vol. 7, Nomor 1, hal. 98–109). IAIN Jember. https://doi.org/10.35719/ahvk1x86

Gu, H., Rasiah, R., & Ge, H. (2025). Corporate sustainable development performance, green marketing, and consumer preferences. In *Finance Research Letters* (Vol. 86, hal. 108368). Elsevier BV. https://doi.org/10.1016/j.frl.2025.108368

Habib, F. (2023). Islamic Finance and Sustainability: The Need to Reframe Notions of Shariah Compliance, Purpose, and Value. In *Palgrave CIBFR Studies in Islamic Finance* (hal. 15–40). Springer International Publishing. https://doi.org/10.1007/978-3-031-13302-2_2

Hakiki, M. F., Kamil, M., Rojak, F. M., Ulhaq, F. Z., & Budiman. (2025). ISLAMIC ETHICAL LEADERSHIP AND MAQASHID AL-SHARIAH IN SUSTAINABLE HUMANITARIAN CRISIS MANAGEMENT. In *Iqtishaduna : International Conference Proceeding* (Vol. 1, hal. 279–283). Goacademica Research and Publishing. https://doi.org/10.54783/4vk4dg76

Hartanto, A., Nachrowi, N. D., Samputra, P. L., & Huda, N. (2025). Developing a sustainability framework for Islamic banking: a *Maqashid Shariah* quadruple bottom line approach. In *International Journal of Islamic and Middle Eastern Finance and Management*. Emerald. https://doi.org/10.1108/imefm-02-2025-0088

Hashim, A. A. bin M., Aziz, M. R. A., & Seman, J. A. (2024). Unleashing the E-Wallet Enchantment. In *Advances in Finance, Accounting, and Economics* (hal. 215–252). IGI Global. https://doi.org/10.4018/979-8-3693-5653-1.ch009

Hashim, A. A. bin M., Aziz, M. R. A., & Seman, J. A. (2025). Sustainable Digital Finances. In *Synergizing Islamic Finance for Sustainability* (hal. 241–276). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3373-1842-4.ch009

Hassan, M. S., Siddiqa, A., & Waseem, M. (2025). Impact of Fintech Adoption, Green Innovation, and Green Finance on Environmental Performance: Evidence From Pakistani Islamic Banks. In *Islamic Banking and Finance Review* (Vol. 12, Nomor 1, hal. 18–42). University of Management and Technology. https://doi.org/10.32350/ibfr.121.02

Hooda, J., Singh, V., Kazaure, M. A., & Singh, R. (2023). Shariah-Compliant Robo-Advisors. In *Advances in Finance, Accounting, and Economics* (hal. 223–235). IGI Global. https://doi.org/10.4018/979-8-3693-1038-0.ch015

Ismail, J., Nugraha, A., Haiqal, A., & Putra, B. (2024). Islamic Minimarket Index based on Maqashid. In *Maqasid al-Shariah Review* (Vol. 2, Nomor 2). Sharia Economic Applied Research and Training (SMART) Insight. https://doi.org/10.58968/msr.v2i2.339

Jasin, D., Raime, S., Misron, A., & Rahman, N. A. (2025). Conceptualising Pedagogy in Islamic Finance Education: A Maqasid al-Shariah-Oriented Approach in Malaysian Private Universities. In *International Journal of Academic Research in Accounting, Finance and Management Sciences* (Vol. 15, Nomor 3). Human Resources Management Academic Research Society

(HRMARS). https://doi.org/10.6007/ijarafms/v15-i3/25645

Jumat, Z. H. (2025). Between Shariah Negative Screening and ESG Positive Screeing: Developing A Conceptual Enhanced Maqasid Al-Shariah Screening Framework. In *World Scientific Annual Review of Islamic Finance*. World Scientific Pub Co Pte Ltd. https://doi.org/10.1142/s2811023425500030

Kashif, U. (2023). Investigation of Shariah Compliant Green Firm Performance Using Eco-Efficient Infrastructure and Green Organizational Capabilities: In *Islamic Banking and Finance Review* (Vol. 10, Nomor 2, hal. 86–111). University of Management and Technology. https://doi.org/10.32350/ibfr.102.05

Kasri, N. S., Bouheraoua, S., & Radzi, S. M. (2023). Maqasid al-Shariah and Sustainable Development Goals Convergence: An Assessment of Global Best Practices. In *Palgrave CIBFR Studies in Islamic Finance* (hal. 59–105). Springer International Publishing. https://doi.org/10.1007/978-3-031-13302-2_4

Katterbauer, K., Syed, H., Cleenewerck, L., & Genc, S. Y. (2024). Islamic finance in the metaverse: meta-finance frameworks for supporting the growth of Shariah-compliant finance options in the metaspace. In *Islamic Finance in the Digital Age* (hal. 301–314). Edward Elgar Publishing. https://doi.org/10.4337/9781035322954.00027

Kroessin, M. (2024). Udhiyyah and the Livestock Value Chain. In *Islamic Finance and Sustainable Development* (hal. 93–105). Routledge. https://doi.org/10.4324/9781003519218-7

Kurniawan, A., Iriawan, N., & Choiruddin, A. (2024). Development of Indonesian Islamic Banking Financial Inclusion Strategy: A Machine Learning Approach. In *2024 International Conference on Sustainable Islamic Business and Finance (SIBF)* (hal. 216–220). IEEE. https://doi.org/10.1109/sibf63788.2024.10883861

Kurniawati, Y., & Parsaulian, B. (2025). Value-Based Governance (VBG) for ZISWAF Institutions: Designing a Shariah–ESG Audit Framework to Achieve Outcome Accountability and Sustainable Maqashid Syariah. In *ICIEFS Proceeding* (Vol. 3, hal. 217–225). IAIN Bukittinggi. https://doi.org/10.30983/iciefs.v3i1.867

Lulukiyyah, M. (2024). Dividend Discount Model Theory Implementation Based On Maqashid Shariah In Indonesia Shariah Stock Market. In *AL-ARBAH: Journal of Islamic Finance and Banking* (Vol. 6, Nomor 1, hal. 93–106). UIN Walisongo Semarang. https://doi.org/10.21580/al-arbah.2024.6.1.22796

Marianingsih, I. (2025). Green Islamic Finance: Sustainable Financing Strategies from the Perspective of Maqasid al-Shariah. In *PAPUA: International Journal of Sharia Business Management* (Vol. 2, Nomor 1, hal. 84–100). Institut Agama Islam Negeri (IAIN) Fattahul Muluk Papua. https://doi.org/10.53491/papua.v2i1.1778

Mhlanga, D. (2024). FinTech, Green Finance, and Sustainable Finance. In *FinTech, Financial Inclusion, and Sustainable Development* (hal. 205–227). Routledge. https://doi.org/10.4324/9781032657981-12

Minhas, I. H. (2023). Shariah Governance for Islamic Financial Institutions. In *Shariah Governance in Islamic Banking Institutions* (hal. 152–175). Routledge. https://doi.org/10.4324/9781003324836-9

Mohsin, M. I. A., & Muneeza, A. (2025). Waqf: sustainable service providers for communities. In *Inclusive Finance* (hal. 52–70). Edward Elgar Publishing. https://doi.org/10.4337/9781035348770.00012

Mubarak, H. Al, Marhoon, W., Al-Nattar, B., Amoodi, A. Al, Al-Mahari, D., & Mehar, S. (2025). Shariah-Aligned Deep Reinforcement Learning for Sustainable Islamic Finance: A Modular

Compliance-Aware Framework. In *2025 5th International Conference on Sustainable Islamic Business and Finance (SIBF)* (hal. 1–7). IEEE. https://doi.org/10.1109/sibf68061.2025.11455308

Murad, A. M., Albakhi, N. A., Khalfan, M. H., & Almughani, F. S. (2025). Faith, Finance, and Fintech: Unpacking Blockchain and Cryptocurrency Through the Lens of Shariah. In *2025 5th International Conference on Sustainable Islamic Business and Finance (SIBF)* (hal. 109–115). IEEE. https://doi.org/10.1109/sibf68061.2025.11455284

Musari, K., & Hidayat, S. E. (2023). The Role of Green Sukuk in Maqasid Al-Shariah and SDGs: Evidence from Indonesia. In *Palgrave CIBFR Studies in Islamic Finance* (hal. 181–203). Springer International Publishing. https://doi.org/10.1007/978-3-031-13302-2_9

Mustafa, S., & Ali, M. (2025). The Reception of Maqasid al-Shariah in Islamic Finance Reforms: A Comparative Study of Indonesia and Morocco. In *COMSATS Journal of Islamic Finance* (Vol. 10, Nomor 2, hal. 1–10). COMSATS University Islamabad. https://doi.org/10.26652/cjif.10202525

Mustaffha, N., & Johari, N. (2025). Synergizing Islamic Social Finance With Maqasid Al-Shariah. In *Synergizing Islamic Finance for Sustainability* (hal. 331–358). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3373-1842-4.ch012

My, S. T. (2024). Promoting Sustainable Development Through Improving Green Banking Behaviour. In *Sustainable Finance* (hal. 215–236). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-56423-9_8

Obaid, A. H., Busari, S. A., & Muayyad, D. M. (2024). Green finance and its Maqasid al-Shari’ah. In *Islamic Green Finance* (hal. 5–15). Routledge. https://doi.org/10.4324/9781032672946-3

Obaidullah, M. (2024). Do regulatory sandboxes help achieve the goals (maqasid) of al-Shariah better? Case of the Islamic fintech sector. In *Islamic Finance in the Digital Age* (hal. 125–132). Edward Elgar Publishing. https://doi.org/10.4337/9781035322954.00016

Rahim, R., Rathore, H. S., Rabbani, M. R., & Alam, M. N. (2024). Maqasid Al-Shariah and Green Finance: A Theoretical Framework on Islamic Finance with Sustainable Development Goals for a Greener Future. In *2024 International Conference on Sustainable Islamic Business and Finance (SIBF)* (hal. 255–261). IEEE. https://doi.org/10.1109/sibf63788.2024.10883847

Rehan, R., Hadi, A. R. A., & Sa’ad, A. A. (2025). Islamic Corporate Governance and Sustainable Financial Growth. In *Islamic Finance and Corporate Governance: Synergies for Sustainable Growth* (hal. 1–22). Emerald Publishing Limited. https://doi.org/10.1108/978-1-83662-346-520251003

Riza, A., & Anadila, N. (2024). SHARIAH GOVERNANCE, REPUTASI DAN LOYALITAS NASABAH PADA BANK SYARIAH. In *Jihbiz: Global Journal of Islamic Banking and Finance* (Vol. 6, Nomor 1, hal. 1). Universitas Islam Negeri Ar-Raniry. https://doi.org/10.22373/jihbiz.v6i1.25542

Rosilawati, W., & Sidik, S. (2024). Independent Commisioners And Sharia Supervisory Board On Sustainable Finance On Indonesian Islamic Comersial Banks. In *Al-Mashrof: Islamic Banking and Finance* (Vol. 5, Nomor 2, hal. 116). Raden Intan State Islamic University of Lampung. https://doi.org/10.24042/al-mashrof.v5i2.24789

Saied, G. M. A. A., Awang, M. D., & Ahmad, S. B. (2024). Hybrid Sukuk and Wealth Preservation: Aligning with Maqasid Al-Shariah Principles in Modern Islamic Finance. In *International Journal of Religion* (Vol. 5, Nomor 12, hal. 1487–1495). Wise Academia Research Solutions. https://doi.org/10.61707/m3fpb331

Saleh, A. O. H., & Soualhi, Y. (2025). Maqasid al-Shariah, Islamic finance, and climate action. In

Islamic Finance and Climate Action (hal. 30–41). Routledge. https://doi.org/10.4324/9781003570936-5

Setiawati, L. (2025). Exploring the Evolution of Green Sukuk Research: Trends, Themes, and Policy Implications for Sustainable Islamic Finance. In *Green Economics: International Journal of Islamic and Economic Education* (Vol. 2, Nomor 4, hal. 125–142). International Forum of Researchers and Lecturers. https://doi.org/10.70062/greeneconomics.v2i4.357

Shaikh, S. A. (2025). ESG adjustment in country risk premium in sovereign sukuk. In *Islamic Finance and the Pursuit of Sustainable Prosperity* (hal. 134–160). Edward Elgar Publishing. https://doi.org/10.4337/9781035349685.00016

Sobarna, N. (2024). Assessment of the Level of Health of the Fitrah Insani Bandung Shariah Cooperative on the Aspect of Shariah Principles Compliance. In *AL-MUSAHAMAH: Journal of Islamic Economics, Finance, and Business* (Vol. 1, Nomor 1). LPPM-PMP Universitas Siliwangi Tasikmalaya. https://doi.org/10.37058/ams.v1i1.10704

Syahriani, F., Mulyani, F. F., Fismanelly, F., Afifah, S., & Medani, A. (2024). Application of Maqasid Al-Shariah in Islamic Economics and Finance as the Development of Products of Islamic Value. In *Hakamain: Journal of Sharia and Law Studies* (Vol. 2, Nomor 1, hal. 150–162). Yayasan Lembaga Studi Makwa. https://doi.org/10.57255/hakamain.v2i1.322

Syaichoni, A., & Hidayati, A. N. (2024). Islamic Hedging in the Perspective of Maqasid Shariah 'Abd al-Majid al-Najjar. In *The Journal of Muamalat and Islamic Finance Research* (hal. 150–161). Universiti Sains Islam Malaysia. https://doi.org/10.33102/jmifr.573

Syaichoni, A., Huda, Q., Pangestu, N., & Sampurno, R. W. (2025). Integrating Maqasid al-Shariah and Sustainable Development Goals Islamic Financial Planning: A Framework for Ethical Wealth Distribution. In *International Journal of Islamic Finance* (Vol. 3, Nomor 1, hal. 81–94). Al-Jamiah Research Centre. https://doi.org/10.14421/ijif.v3i1.2595

Udeagha, M. C., & Muchapondwa, E. (2023). Green finance, fintech, and environmental sustainability: fresh policy insights from the BRICS nations. In *International Journal of Sustainable Development & World Ecology* (Vol. 30, Nomor 6, hal. 633–649). Informa UK Limited. https://doi.org/10.1080/13504509.2023.2183526

Umar, R., & Wahab, A. (2025). Beyond Compliance: Constructing a Maqāṣid-Based Framework for Shariah Governance in Ethical Islamic Finance. In *Indonesian Journal of Advanced Research* (Vol. 4, Nomor 6, hal. 793–812). PT Formosa Cendekia Global. https://doi.org/10.55927/ijar.v4i6.14711

Ustaoğlu, M. (2023). Shariah Supervisory Board/Shariah Board. In *The Palgrave Encyclopedia of Islamic Finance and Economics* (hal. 1–4). Springer International Publishing. https://doi.org/10.1007/978-3-030-93703-4_296-1

Vaishali, & Verma, D. (2024). Green Deposit Framework: Financing a Sustainable Future in India. In *Palgrave Studies in Impact Finance* (hal. 557–578). Springer International Publishing. https://doi.org/10.1007/978-3-031-65756-6_20

Wahab, A. W., & Mahdiya, I. (2025). Digital Shariah Governance and the Future of Islamic Finance: A Framework for AI-Driven Shariah Compliance in a Global Regulatory Environment. In *International Journal of Islamic Finance* (Vol. 3, Nomor 2, hal. 19–31). Al-Jamiah Research Centre. https://doi.org/10.14421/ijif.v3i2.2777

Wahyudi, M., Rokhaniyah, S., & Sasviranti, A. R. (2025). Performance Measurement of Islamic Banking Based on Maqashid Shariah Using The Approaches of Islamic Social Reporting, Intellectual Capital, and Shariah Compliance. In *Perisai : Islamic Banking and Finance Journal* (Vol. 9, Nomor 1, hal. 49–63). Universitas Muhammadiyah Sidoarjo. https://doi.org/10.21070/perisai.v9i1.1806

Wulandari, N., Aziz, A., & Wartoyo. (2025). Integrating Maqaṣid al-Shariah into the Sustainable Development Goals: A Comparative Analysis from an Islamic Economic Perspective. In *JEKSYAH: Islamic Economics Journal* (Vol. 5, Nomor 2, hal. 116–128). Institut Agama Islam Negeri Sultan Amai Gorontalo. https://doi.org/10.54045/jeksyah.v5i02.2837

Yusof, R. M., Ibrahim, Z., & Abidin, A. Z. (2024). Applicability of the Islamic Corporate Governance for Shariah Companies in Malaysia. In *Accounting and Finance Research* (Vol. 13, Nomor 2, hal. 55). Sciedu Press. https://doi.org/10.5430/afr.v13n2p55

Zain, F. A. M., Abdullah, W. A. W., Nasir, M. N. M., & Hassan, M. F. (2025). Development of a comprehensive sustainability performance index for takaful operators: integrating Maqasid Al-Shariah and stakeholder perspectives. In *International Journal of Islamic and Middle Eastern Finance and Management* (Vol. 18, Nomor 3, hal. 628–648). Emerald. https://doi.org/10.1108/imefm-07-2024-0343

Zaytsev, Y. (2025). Theoretical Preconditions for Development Finance Evaluation. In *Sustainable Finance* (hal. 1–17). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-92349-4_1