

Research Article

The Role of Green Sukuk in Supporting the Achievement of Sustainable Development Goals (SDGs) in Indonesia

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Abstract: This study examines the role of green sukuk as a Shariah-compliant financing instrument in supporting Indonesia's progress toward the Sustainable Development Goals (SDGs). Since Indonesia issued the world's first sovereign green sukuk in March 2018, valued at US\$1.25 billion, the instrument has become a strategic vehicle for financing renewable energy, low-carbon transportation, waste management, and climate resilience projects. However, several structural challenges still hinder its optimal development, including the limited identification of eligible green projects, low investor literacy, and an underdeveloped regulatory and market infrastructure. This research employs a qualitative descriptive method based on a literature study, analyzing secondary data drawn from academic journals, government reports, and institutional publications related to green sukuk and the SDGs in Indonesia. The findings show that green sukuk contributes significantly to SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action), and SDGs 14 and 15 (Life Below Water and Life on Land) through the financing of environmentally responsible projects. Despite persistent challenges, opportunities remain through strong government support, a maturing Islamic financial market, instrument diversification, and alignment with national development agendas. This study concludes that green sukuk, grounded in the principles of Maqasid al-Shariah, represents a strategic synergy between Islamic finance and sustainable development that can be strengthened through stronger regulation, broader public literacy, and continued cross-sector collaboration.

Keywords: Green Sukuk; Islamic Finance; Maqasid al-Shariah; Sustainable Development; Sustainable Development Goals.

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1. Introduction

Sustainable development is a development concept that aims to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. This concept is embodied in the Sustainable Development Goals (SDGs), established by the United Nations (UN) as the global development agenda until 2030. The SDGs focus not only on economic growth but also emphasize the importance of promoting social and environmental sustainability. In the Indonesian context, implementing the SDGs is crucial given the increasing threat of climate change, environmental degradation, and the various economic and social impacts they cause. Therefore, various strategies and policies are needed to effectively and sustainably support the achievement of sustainable development goals (Kurnia & Suwita, 2024).

With increasing global awareness of environmental issues, the concepts of the green economy and green finance have become important instruments in supporting sustainable development. Green finance plays a role in directing investment and financing towards environmentally friendly economic activities, such as the use of renewable energy, energy

efficiency, carbon emission reduction, and the development of green technology. The implementation of green finance not only benefits the environment but also drives economic growth, creates jobs, and improves social welfare. Therefore, green finance is a crucial part of achieving the SDGs through a transformation towards a low-carbon economy and more sustainable development.

In practice, green finance is a financing approach that balances economic, social, and environmental objectives. Green finance serves to support various projects that contribute to climate change mitigation and adaptation, natural resource protection, pollution control, and biodiversity conservation. However, the implementation of green finance and the achievement of the SDGs in Indonesia still face various challenges, such as limited funding, low sustainable financial literacy, high risks of green investments, and a lack of coordination among stakeholders. Therefore, strong collaboration is needed between the government, the private sector, financial institutions, academia, and the public to strengthen the role of green finance in supporting sustainable development and accelerating the achievement of the SDGs in Indonesia.

Green sukuk, as an innovative Islamic financial instrument, plays a strategic role in supporting the financing of environmentally friendly projects and achieving the Sustainable Development Goals (SDGs) in Indonesia. It differs from conventional sukuk by allocating funds exclusively to projects that positively impact the environment and sustainable development. This instrument is closely conceptually linked to the principles of Sustainable Islamic Economics, based on the *Maqāṣid al-Sharī'ah* (the Principles of Islamic Law), which align with sustainable development goals in terms of poverty alleviation, equitable wealth distribution, social inclusion, and environmental protection. From an Islamic economic perspective, green sukuk represents the implementation of Islamic ethical values that emphasize justice (*'adl*), balance (*tawāzun*), and responsibility (*kalāfah*) towards nature. Therefore, financing green projects is not only an economic strategy but also a form of fulfilling a religious responsibility to preserve the environment.

The contribution of green sukuk to achieving the SDGs is significant, particularly in supporting SDG 7 (Clean Energy), SDG 9 (Sustainable Infrastructure), SDG 11 (Sustainable Cities), SDG 13 (Addressing Climate Change), and SDGs 14 and 15 (Environmental Protection) through funding renewable energy and green economy projects. The Indonesian government has issued the Indonesia Green Bond and Green Sukuk Framework, which regulates the issuance mechanism, green project criteria, and a reporting system to ensure transparency and accountability in green sukuk issuance since its first issuance in 2018. Despite its strategic role in supporting the sustainability-oriented national development agenda, green sukuk development in Indonesia faces challenges such as limited green projects that meet Sharia criteria, low investor literacy, and regulations that need to be continuously strengthened.

This study aims to analyze the development of green sukuk in Indonesia since its initial issuance, examine the contribution of green sukuk to achieving the SDGs through financing green projects and sustainable infrastructure development, and discuss the challenges and opportunities for developing green sukuk.

2. Literature Review

This section must contain a state-of-the-art explanation. It can be explained in several ways. First, you can discuss several related papers, both about objects, methods, and their results. From there, you can explain and emphasize gaps or differences between your research and previous research. The second way is to combine theory with related literature and explain each theory in one sub-chapter.

Green Sukuk

This section According to DSN MUI through Fatwa No. 32/DSN-MUI/IX/2002 on Islamic Bonds, Sukuk or Islamic Bonds are long-term financial instruments issued by an issuer based on Islamic principles. This instrument obliges the issuer to provide compensation to the sukuk holder in the form of profit sharing, margin or fee, and to return the principal investment amount when it reaches its maturity date (Syaiikh et al., 2024). The evolution of global environmental issues and growing attention to sustainable development have spurred innovation in Islamic financial instruments, one of which is the issuance of green sukuk that integrate Sharia principles with the financing of environmentally friendly projects. Green sukuk are Sharia-compliant financial instruments issued specifically to fund various projects that contribute positively to environmental conservation and support the sustainable development agenda. This instrument combines the concept of sukuk a Sharia compliant security with the concept of green finance, ensuring that the funds raised are used to finance sectors such as renewable energy, eco-friendly transportation, waste management, energy efficiency improvements, and efforts to mitigate climate change. Unlike conventional sukuk, green

sukuk are not only oriented toward Sharia finance but also emphasize a commitment to environmental responsibility and sustainability (Musthofa & Nafidzi, 2023). The key characteristic of green sukuk lies in the use of proceeds, which are specifically earmarked to support the financing of environmentally friendly projects (green eligible projects). During the issuance process, the issuer must ensure that the financed projects comply with the green financing framework, meet Sharia principles, and undergo periodic verification and reporting regarding their environmental impact. Generally, the green sukuk issuance mechanism involves several stages, including the identification of environmentally friendly projects, the issuance of sukuk using Sharia contracts such as *ijarah* or *wakalah*, the disbursement of funds to the designated projects, and the transparent reporting of fund usage to investors (Supriyadi et al., 2023). As one of the instruments in Islamic finance, green sukuk must be conducted in accordance with Sharia principles that prohibit *riba* (interest), *gharar* (uncertainty), and *maysir* (excessive speculation). In addition to being grounded in these principles, green sukuk is also linked to the concept of *Maqashid al-Sharia*—the objectives of Sharia that emphasize the protection of religion (*hifdz al-din*), life (*hifdz al-nafs*), intellect (*hifdz al-aql*), lineage (*hifdz al-nasl*), and wealth (*hifdz al-mal*). From a sustainable development perspective, preserving the environment is understood as part of humanity's stewardship as stewards of the earth. Therefore, green sukuk can be viewed as a manifestation of the integration between the Islamic financial system and the responsibility toward sustainability and environmental conservation (Syukri et al., 2026).

Funds raised through the issuance of green sukuk are specifically used to finance various projects that have a positive environmental impact and provide long-term social benefits. In Indonesia, the government directs the use of green sukuk funds toward several strategic sectors, such as the development of new and renewable energy, the construction of low-emission transportation infrastructure, waste management, natural resource conservation, enhancing resilience to climate change, and energy efficiency programs. The utilization of these funds aims to reduce carbon emissions, accelerate the transition to a green economy, and support the national agenda for sustainable development (Qur'an & Akhmadi, 2025). Green sukuk play a vital role as an alternative financing option in supporting sustainable development, as they bridge the gap between the Islamic finance industry and the global sustainability agenda. These instruments provide governments with an opportunity to secure long-term funding for environmental projects without having to rely entirely on the national budget. Furthermore, green sukuk also encourages investor engagement that focuses not only on economic returns but also considers social impacts and environmental sustainability. Therefore, green sukuk plays a major role in driving economic transformation toward a more sustainable, inclusive, and future-oriented development system (Aramintaa et al., 2022).

Sustainable Development Goals (SDGs)

Sustainable Development Goals (SDGs) are a global development agenda designed to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. This concept emphasizes a balance between economic growth, social sustainability, and environmental protection, so that development is not only focused on short-term results but also ensures the quality of life for future generations (Wirianata et al., 2023).

The Sustainable Development Goals (SDGs) are a global development agenda that emerged as both a continuation and an improvement upon the Millennium Development Goals (MDGs). Unlike the MDGs, which had a more limited scope, the SDGs are designed to encompass all countries—whether developed, developing, or least developed—making their implementation universal (Magfiroh & Nugraheni, 2024). This agenda was subsequently adopted by the 193 member states of the United Nations (UN) at the UN General Assembly on September 25, 2015, as a shared commitment to address various global challenges, such as poverty, social inequality, climate change, and environmental degradation.

In practice, the SDGs serve as a global development framework comprising 17 goals, 169 targets, and 241 indicators, all of which are set to be achieved by 2030. This agenda is built on the principles of universality, integration, and inclusivity, guided by the spirit of “No One Left Behind” ensuring that all segments of society benefit from the development process without anyone being left behind. Therefore, achieving the SDGs requires collaboration among governments, the private sector, academia, civil society, and financial institutions to provide financing that supports sustainable development (Wirianata et al., 2023).

In Indonesia, the implementation of the Sustainable Development Goals (SDGs) has become part of national development policy. The implementation of the SDGs is aimed at a comprehensive effort to accelerate development through community empowerment and the utilization of various available resources to achieve sustainable development goals. Thus, the SDGs are not only a global commitment but also serve as a guideline for the formulation of development policies and instruments in Indonesia, including the development of green financing such as green sukuk that support sustainable development (Mahin, 2024). To realize

the vision of sustainable development, the SDGs set forth 17 main goals as global policy directions that all countries must achieve by 2030. Each goal is interconnected and designed to create a balance between economic growth, social well-being, and environmental conservation. In the context of this study, understanding the SDGs as a whole is important because green sukuk is a financing instrument that has the potential to support the achievement of several of these goals by funding projects oriented toward sustainable development.

The Sustainable Development Goals (SDGs) consist of 17 goals covering social, economic, and environmental aspects to achieve sustainable development by 2030.

- a. No Poverty
- b. Zero Hunger
- c. Good Health and Well-being
- d. Quality Education
- e. Gender Equality
- f. Clean Water and Sanitation
- g. Affordable and Clean Energy
- h. Decent Work and Economic Growth
- i. Industry, Innovation and Infrastructure
- j. Reduced Inequalities
- k. Sustainable Cities and Communities
- l. Responsible Consumption and Production
- m. Climate Action
- n. Life Below Water
- o. Life on Land
- p. Peace, Justice and Strong Institutions
- q. Partnerships for the Goals (Setiyo, n.d.).

The 17 SDGs provide a comprehensive development roadmap for every country, but the implementation of each goal requires appropriate policy support and funding sources. In this regard, green sukuk serves as a financial instrument designed to finance environmentally friendly and sustainable projects. Essentially, green sukuk functions not only as a Sharia-compliant financing instrument but also as a tool that integrates economic, social, and environmental values to support sustainable development. Unlike conventional sukuk, which can be used for various financing needs, funds raised through green sukuk are specifically allocated to projects that contribute to environmental conservation and community well-being. Therefore, green sukuk are closely linked to the achievement of the Sustainable Development Goals (SDGs) as a global development agenda focused on sustainability (Fadillah, 2026).

Although the SDGs consist of 17 goals, not all of them are directly related to the characteristics of green sukuk. Based on various studies, this instrument is most relevant in supporting SDG 7 (Affordable and Clean Energy), SDG 13 (Climate Action), and SDG 15 (Life on Land). This is because green sukuk financing is directed toward projects that can expand the use of clean energy, reduce the impacts of climate change, and preserve ecosystem sustainability through more responsible management of natural resources (Nurlaili, 2026).

In Indonesia, the proceeds from green sukuk issuances have been used to finance various strategic projects that support sustainable development, such as the development of renewable energy, sustainable transportation, and waste management. Financing these sectors demonstrates that green sukuk are not only a Sharia-compliant investment alternative but also an instrument capable of driving the transition to a green economy while strengthening the national sustainable development agenda (Jannah, 2024).

In addition to supporting environmentally friendly projects, green sukuk also provide a solution to the growing need for development financing amid increasing global attention to sustainability issues. These instruments are designed to finance sectors such as renewable energy, forest conservation, and waste management, in line with global commitments to environmental protection. Thus, green sukuk hold a strategic position as a financing mechanism that bridges the principles of Islamic economics with the implementation of SDG targets through development focused on environmental sustainability and community well-being (Fadillah, 2026).

3. Proposed Method

This study employs a qualitative approach using a literature study (library research) method. This approach was selected to provide an in-depth analysis of the role of green sukuk in supporting the achievement of the Sustainable Development Goals (SDGs) in Indonesia. The study relies on secondary data obtained from various sources, including academic journals, books, research articles, government reports, publications from Islamic financial institutions, and official documents related to green sukuk and sustainable development. Data collection was conducted through the identification, selection, and review of literature relevant to the research topic. The collected data were then analyzed using a descriptive qualitative

analysis technique by examining, comparing, and interpreting findings from the selected literature. Through this method, the study aims to provide a comprehensive understanding of the development of green sukuk in Indonesia, its contribution to achieving the SDGs, and the challenges and opportunities associated with its future development from the perspective of sustainable Islamic economics.

4. Results and Discussion

The Development of Green Sukuk in Indonesia

Place Sustainable development and eco-friendly Islamic finance are expected to tackle people's worries about pollution and environmental damage. The World Bank introduced the concept of "Green Bonds" in the "Strategic Framework for Development and Climate Change" back in 2008. It provided an innovative way for investors to support renewable energy, public transport, and low-carbon projects. In 2015, the World Bank issued Green Bonds worth USD 8.5 billion in 15 currencies worldwide. What's really interesting is that these Green Bonds are seen as high-quality, low-risk investment instruments (Fahlevi, Muhammad Fauzan 2024). Once Green Bonds became a popular choice for environmental investment globally, financial products based on renewable and sustainable energy in Islamic finance, called Green Sukuk, started to appear. This is a sharia investment product that adopts a similar idea.

The idea of Green Sukuk came up as an initiative from developed countries whose people are already very aware of sustainable development. Sustainable development-based investments not only focus on boosting the economy but also on how economic activities can ensure the healthy and sustainable use of natural resources while still delivering maximum results. In developing countries like Indonesia, which are focusing on building various sectors, excessive use of natural resources and minerals in infrastructure and economic development can have a negative impact on the environment.

The issuance of Green Bonds and the Green Sukuk framework is guided by Islamic Law and reviewed by the international independent reviewer CICERO (Center for International Climate Research). These innovative financial instruments are meant to support Indonesia's commitment to reducing greenhouse gas emissions. Before the green bond and green sukuk initiatives, the Indonesian government had issued several retail bonds (ORI), some of which were considered prototypes of green bonds. Most of them are three-year bonds that pay about 7% interest monthly, which is considered competitive compared to other financial instruments.

In March 2018, Indonesia issued a five-year Green Sukuk worth US\$1.25 billion or about Rp16.75 trillion, making it a pioneer in green bond issuance in Southeast Asia. This series set a yield of 3.75% and will mature in 2023. This transaction was the world's first sovereign green sukuk issued by a country, with investors spread across the globe: 32% in Islamic markets, 25% in Asia, 15% in the European Union, 18% in the United States, and 10% in Indonesia (Ministry of Finance of the Republic of Indonesia) (Karina 2019).

Even though Indonesia's green sukuk potential shows a bright future, there are various complex challenges that hinder the optimal use of this instrument in the domestic Islamic capital market. First, there's a lack of comprehensive regulatory frameworks to combine environmental, social, and governance (ESG) aspects with Sharia principles in sukuk structures. Second, local market players still have limited understanding and awareness of the features and benefits of green sukuk compared to other conventional instruments. Third, the role of Islamic financial institutions as a link in developing and introducing green sukuk products to both retail and institutional investors hasn't been maximized. Fourth, the number of sustainable projects that meet Sharia criteria and can be financed through green sukuk is still limited. Fifth, there's no formal performance measurement standard to assess the environmental impact of green sukuk investments, and there's a lack of transparency in reporting how the funds are used and the results of the financed projects (Jannah 2024).

Green Sukuk's Contribution to Achieving the SDGs

Green Sukuk is an Islamic financial instrument used to fund environmentally friendly projects. The presence of Green Sukuk not only supports sustainable development but also directly contributes to achieving the Sustainable Development Goals (SDGs) Some of Green Sukuk's contributions to achieving the SDGs include Supporting Action on Climate Change (SDG 13)

Funds raised through Green Sukuk are used to finance projects that can reduce greenhouse gas emissions, such as renewable energy development, low-carbon transportation, and waste management. This helps efforts to mitigate climate change. Supporting Sustainable Infrastructure and Innovation Green Sukuk financing is used for building greener and more eco-friendly infrastructure, like sustainable transportation systems, energy-efficient buildings, and green technology. Realizing Sustainable Cities and Settlements Green Sukuk funds can be used for public transportation projects, waste management, as well as building urban facilities

that support environmental quality and community life Protecting Land and Ocean Ecosystems.

Financing projects for natural resource conservation, forest rehabilitation, coastal area management, and biodiversity protection also contributes to environmental preservation. Encouraging Sustainable Economic Growth Investing through Green Sukuk creates new jobs in the renewable energy sector, green construction, and eco-friendly industries, so it can improve people's well-being. Strengthening Partnerships for Sustainable Development The issuance of Green Sukuk involves cooperation between the government, investors, financial institutions, and various other parties in supporting development financing.

Challenges and Opportunities for the Development of Green Sukuk in Indonesia

Limited Identification of Eligible Green Projects

One of the main challenges in the development of green sukuk in Indonesia is the limited identification of sustainable assets and projects that qualify as underlying assets. This results in a very limited pipeline of green projects that can serve as the basis for green sukuk issuance, particularly from the private sector. As noted by (Saffa' & Marwan, 2024), there are a number of structural challenges faced in the development of green sukuk, including the limited identification of sustainable assets, the readiness of issuing companies, and the scarcity of parties conducting independent environmental assessments.

These limitations are also related to the absence of uniform standards regarding green project criteria that can serve as the basis for sukuk issuance. Without clear standards, issuers face difficulties in classifying their projects as "green" in accordance with market expectations and international regulations, such as the Green Bond Principles published by the International Capital Market Association (ICMA). This situation directly hinders the expansion of green sukuk, particularly at the corporate level.

Low Investor Literacy and Awareness

The next challenge is the low level of public and investor literacy regarding green sukuk instruments. Pujiantoro, Dindalila, and Fakhruddin (Pujiantoro et al., 2021) identified several key barriers to the development of green sukuk in Indonesia, including low public literacy regarding green sukuk, a lack of widespread public outreach, and investor characteristics that are not yet fully oriented toward environmentally conscious investments.

The public's limited understanding of the Environmental, Social, and Governance (ESG) concept within the context of Islamic finance has resulted in suboptimal demand for green sukuk. Domestic investors generally still prioritize returns over environmental impact as the primary consideration in their investment decisions. This situation contrasts with the trend toward sustainable investing in developed countries, where the market is far more mature.

Regulatory and Market Infrastructure Challenges

The third challenge relates to the suboptimal regulatory framework and market infrastructure supporting the comprehensive development of green sukuk. (Saffa' & Marwan, 2024) emphasize that strengthened cooperation between the Financial Services Authority (OJK) and various stakeholders is needed to create supporting infrastructure, as well as the development of Sharia indices focused on environmentally conscious investments.

Without a comprehensive regulatory framework and an adequate market ecosystem, it will be difficult to accelerate the growth of green sukuk from the corporate sector. This also includes the need for green sukuk verification and certification mechanisms that are transparent, affordable, and accessible to medium-sized issuers not just large corporations with sufficient resources.

Growth B. Opportunities for Green Sukuk Development

Strong Government Support and International Recognition

Indonesia holds a strategic position as a pioneer in green sukuk issuance on a global scale. The Indonesian government has taken concrete steps by issuing green sukuk since 2017 as a response to environmental challenges and as a financing solution for sustainable development. These issuances have received widespread appreciation from the international financial community and have served as a reference for other countries in developing similar instruments.

International market confidence in Indonesia's green sukuk is evident from the high demand from foreign investors in each issuance series. This situation opens opportunities for the development of a more diverse range of green sukuk, both in terms of issuers (corporate and regional entities) and in terms of instrument structures that can be tailored to specific needs.

Growth of the Sharia Financial Market and Rising Environmental Awareness

As noted by (Pujiantoro et al., 2021), there is significant potential for Indonesia to develop green sukuk, supported by a Sharia financial market that continues to grow over time, increasing investor awareness of environmental issues, and high demand for financing renewable energy projects. As the country with the world's largest Muslim population, Indonesia

possesses a vast potential investor base for financial instruments that are both Sharia-compliant and sustainable.

The global trend toward ESG investing also provides strong momentum for the development of green sukuk in Indonesia. The growing awareness among the younger generation regarding climate change, coupled with the increasing number of retail investors using digital platforms, opens up a new and promising market segment for sharia-compliant green investment instruments.

Diversification of Sharia-Compliant Green Instruments

(Arifudin Arifudin et al., 2024) highlight opportunities for developing a more diverse range of Sharia-compliant green instruments. Products such as Sharia-compliant green mutual funds need to be developed to provide a broader range of investment options for environmentally conscious investors. Additionally, the potential for developing blue sukuk focused on financing marine ecosystems and water resources is highly relevant, given that Indonesia is the world's largest archipelago.

Diversifying these instruments will not only broaden investor segmentation but also strengthen the overall Sharia-based sustainable finance ecosystem. Integrating zakat, productive waqf, and Sharia fintech instruments into the green financing framework could also be a significant innovation in expanding the social and environmental impact of green sukuk.

Alignment with the SDGs and the National Development Agenda

Green sukuk are highly relevant to Indonesia's national development agenda, particularly in supporting the achievement of the Sustainable Development Goals (SDGs) and Indonesia's Nationally Determined Contribution (NDC) targets for reducing greenhouse gas emissions. The green sukuk development strategy is explicitly aimed at realizing the SDGs in Indonesia, in line with the government's commitments in the National Medium-Term Development Plan (RPJMN).

This alignment provides a strong policy foundation for the future development of green sukuk. The government can utilize this instrument as one of the primary financing mechanisms for strategic projects in the fields of renewable energy, environmentally friendly transportation, clean water management, and climate resilience, all of which simultaneously contribute to the achievement of the SDGs.

Comparison

Author	Research Focus	Method	Main Findings	Difference from This Study
Fitrah & Soemitra (2022)	Green Sukuk and SDGs in Indonesia	Literature Review	Green sukuk supports SDGs and aligns with maqashid sharia	Focuses on literature review and maqashid sharia aspects
Endri, Hania, & Ma'ruf (2022)	Corporate Green Sukuk	ANP	Identifies potential, barriers, and development strategies for corporate green sukuk	Focuses on corporate green sukuk issuance
Ziarmal (2025)	Green Sukuk and SDGs in Indonesia-Malaysia	Descriptive Qualitative	Green sukuk contributes to SDGs achievement in both countries	Focuses on cross-country comparison
Current Study	The Role of Green Sukuk in Supporting SDGs Achievement in Indonesia	Literature Study	Analyzes the development, contribution, challenges, and opportunities of green sukuk	Provides a comprehensive Sustainable Islamic Economics perspective

Based on the review of previous studies, green sukuk plays an important role in supporting sustainable development and achieving the Sustainable Development Goals (SDGs). Fitrah and Soemitra (2022) found that green sukuk financing is aligned with maqashid sharia principles and contributes to various green sectors. Endri, Hania, and Ma'ruf (2022) highlighted the potential of corporate green sukuk as a sustainable financing source in Indonesia. Meanwhile, Ziarmal (2025) demonstrated that both Indonesia and Malaysia have utilized green sukuk as a strategic instrument for advancing sustainable development.

Although these studies have different focuses, they consistently recognize green sukuk as an Islamic financial instrument capable of supporting sustainable projects and contributing to SDGs achievement. However, each study examines a specific aspect and does not

comprehensively explain the overall development of green sukuk in Indonesia and its contribution to SDGs achievement.

Unlike previous studies, this research examines the role of green sukuk in Indonesia more comprehensively by analyzing its development, contribution to SDGs achievement, and future challenges and opportunities. Furthermore, this study adopts a Sustainable Islamic Economics perspective that integrates economic, social, and environmental dimensions of sustainable development.

The comparison also reveals a research gap in the existing literature. Previous studies mainly focus on literature reviews and maqashid sharia aspects, corporate green sukuk issuance, or cross-country comparisons. Limited studies comprehensively analyze the development of green sukuk in Indonesia, its contribution to SDGs achievement, and its challenges and opportunities from a Sustainable Islamic Economics perspective.

5. Conclusions

Based on the discussion presented, it can be concluded that green sukuk has played a strategic role in supporting the achievement of the Sustainable Development Goals (SDGs) in Indonesia since its first issuance as a sovereign green sukuk in March 2018. As a Shariah-compliant financial instrument that exclusively allocates funds to environmentally friendly projects, green sukuk has primarily contributed to SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action), and SDGs 14 and 15 (Life Below Water and Life on Land) through the financing of renewable energy, low-carbon transportation, waste management, and natural resource conservation projects. Despite this strategic contribution, the development of green sukuk in Indonesia continues to face several challenges, namely the limited availability of eligible green projects, low investor literacy and awareness, and an underdeveloped regulatory and market infrastructure. On the other hand, significant opportunities remain open, including strong government support and international recognition, the growth of the Islamic financial market, the potential diversification of Shariah-compliant green instruments such as green mutual funds and blue sukuk, and close alignment with national.

References

- Aramintaa, D. V., Qudziyahb, & Timurc, Y. P. (2022). The Role Of Green Sukuk In Realizing The Sustainable Development Goals 2030 Agenda. *JEBIS: Jurnal Ekonomi Dan Bisnis Islam*, 8(2), 251–266. <https://doi.org/10.20473/jebis.v8i2.37531>
- Arifudin Arifudin, Neli Anjani, Neneng Serliana, Mia Auliah, & Amaliah Amaliah. (2024). Green Sukuk: Challenges and Development Strategies for Sustainable Development and the Transition to a Green Economy. *SANTRI: Journal of Islamic Economics and Finance*, 2(3), 12–20. <https://doi.org/10.61132/santri.v2i3.555>
- Fadillah, M. H. (2026). DALAM MENDUKUNG EKONOMI BERKELANJUTAN pembiayaan yang mendukung keberlangsungan lingkungan yang sejalan dengan tujuan dari United Nations Framework Convention on Climate Change (UNFCCC). Proyek ini juga mengarah untuk mengembangkan bidang keuangan islam. 4(2), 142–153.
- Fahlevi, Muhammad Fauzan, Wirdyaningsi. 2024. “ANALISIS TANTANGAN DAN PELUANG PERKEMBANGAN GREEN SUKUK DI INDONESIA.” *Syntax Literate: Jurnal Ilmiah Indonesia* 9 (10).
- Hutasoit, A., & Abdiyanto. (2024). Model Green Consumption Dan Green Finance Di 5-Emma Countries. *Jurnal Ekonomi Bisnis Manajemen Prima*, 5(2), 73–88. <https://doi.org/https://doi.org/10.34012/jebim.v5i2.4766>
- Jannah, N. M. M. A. F. (2024). Green Sukuk dan Sustainable Finance: Potensi Pengembangan di Pasar Modal Syariah Indonesia | Sahmiyya: Jurnal Ekonomi dan Bisnis. 4(2), 488–499. <https://e-journal.uingusdur.ac.id/sahmiyya/article/view/12700>
- Jannah, Nabila Maydina M.A.Farotul. 2024. “Green Sukuk Dan Sustainable Finance: Potensi Pengembangan Di Pasar Modal Syariah Indonesia.” *Jurnal Sahmiyya* 4 (2): 488–99.
- Karina, Luthfia Ayu. 2019. “Peluang Dan Tantangan Perkembangan Green Sukuk Di Indonesia Pendahuluan” 9:259–65.
- Kian, L. (2025). Green Finance: Konsep, Teori, dan Implikasi bagi Pembangunan Berkelanjutan. *Sociale : Journal of Social and Political Sciences*, 1(2), 199–221. <https://doi.org/10.69836/sociale.v1i2.532>
- Kurnia, F., & Suwita, L. (2024a). ANALISIS PERAN DAN KONTRIBUSI GREEN SUKUK TERHADAP IMPLEMENTASI SUSTAINABLE DEVELOPMENT GOALS (SDG 'S) DI INDONESIA. *Menara Ekonomi*, X(2), 118–125.
- Kurnia, F., & Suwita, L. (2024b). Analisis Peran Dan Kontribusi Greensukuk Terhadap Implementasi Sustainable Development Goals (SDG's) Di Indonesia. *Jurnal Menara Ekonomi*, 10(2), 118–125. <https://doi.org/https://doi.org/10.31869/me.v10i2.5319>
- Magfiroh, A., & Nugraheni, N. (2024). Analisis Penerapan Sustainable Development Goals (SDGs) dalam Upaya Peningkatan Pendidikan berkualitas di Indonesia. *Socius: Jurnal Penelitian Ilmu-Ilmu Sosial*, 1(10), 52–57. <https://ojs.daarulhuda.or.id/index.php/Socius/article/view/283>
- Mahin, M. (2024). Penerapan Kebijakan Sustainable Development Goals (SDGs) Dalam Meningkatkan Kesejahteraan Masyarakat. *Jurnal Ilmiah Universitas Kapuas Sintang*, 22(1), 224–230.

- Musari, K., & Hidayat, S. E. (2021). The role of green sukuk in maqasid al-shari'a and SDGs: Evidence from Indonesia. *Proceedings of the International Conference on Islamic Finance (ICIF 2021)*.
- Musthofa, K., & Nafidzi, E. (2023). The Existence Of Green Sukuk As A Sustainable Islamic Financial Investment Instrument. *Jurnal Ilmu Akuntansi Dan Bisnis Syariah*, 5(1), 113–126. <https://doi.org/10.15575/aksy.v5i1.25535>
- Nurlaili, Y. (2026). INSTRUMEN KEUANGAN SYARIAH DALAM MENDUKUNG SUSTAINABLE DEVELOPMENT. 11(204), 839–852.
- Pujiantoro, A. S. G., Dindalila, D., & Fakhruddin, N. (2021). Narrative Review: Opportunities and Challenges of Green Sukuk in Indonesia. *Diponegoro Journal of Islamic Economics and Business*, 1(4), 208–219. <https://doi.org/10.14710/djeb.20242>
- Qur'an, N., & Akhmadi, M. H. (2025). Green Sukuk: Instrumen Pembiayaan Sektor Hijau Untuk Mendukung Pembangunan Berkelanjutan Tahun 2018 - 2023. *Jurnal Bisnis Net*, 8(1), 464–476. <https://doi.org/10.46576/bn.v8i1.5695>
- Rabani, D. T. (2025). Green Sukuk sebagai Instrumen Hukum Ekonomi Syariah untuk Pembangunan Berkelanjutan di Indonesia. *Ekonomi Keuangan Syariah Dan Akuntansi Pajak*, 2.
- Rahawati, F. T., Floranitarifa'i, claudia celsia, Jupantoro, muhammad maulana, Pranasya, azizah eka, & Hidayati, amalia nuril. (2025). Sinergi Maqashid Syariah dan SDGs : Model Pembangunan Berkelanjutan Berbasis Nilai-Nilai Islam. *Jurnal Ilmiah Ekonomi Manajemen Bisnis Dan Akuntansi*, 2(6), 745–756.
- Rofianto, A., Prasetya, A. K., & Hayati, S. R. (2026). *The role of green sukuk in achieving the Sustainable Development Goals (SDGs) in Indonesia*. *International Journal of Economics and Development*, 2(1), 57–69. <https://doi.org/10.71305/ijed.v2i1.1624>
- Rosewanti, K. E., & Yazid, M. (2026). KONTRIBUSI GREEN SUKUK SEBAGAI INSTRUMEN SYARIAH DALAM MENDUKUNG PEMBIAYAAN PEMBANGUNAN BERKELANJUTAN DI INDONESIA. *JEBI Juenal Ekonomi Dan Bisnis Islam*, 06, 147–159.
- Saffa', S., & Marwan, S. (2024). Green Sukuk. *Islamic Green Finance*, 9(10), 182–192. <https://doi.org/10.4324/9781032672946-23>
- Santoso, I. R. (2024). *Green sukuk and sustainable economic development goals: Mitigating climate change in Indonesia*. *Global Journal Al-Thaqafah*. <https://doi.org/10.7187/GJAT072020-3>
- Setiyo, M. (n.d.). Apa itu SDGs? LPPM Universitas Muhammadiyah Magelang. Retrieved <https://lppm.unimma.ac.id/sdgs/apa-itu-sdgs/>
- Supriyadi, A. P., Fidhayanti, D., Ramadhita, & Noh, M. S. bin M. (2023). Green Sukuk In Indonesian: Unraveling Legal Frameworks for Sustainable Islamic Bonds. *El-Mashlahah*, 13(2), 151–180. <https://doi.org/10.23971/el-mashlahah.v13i2.7372>
- Syaikh, I., Siddik, A., & Belitung, B. (2024). Peranan Obligasi Syari ' ah (Sukuk) sebagai Lembaga Keuangan Syari ' ah. *EjeshJurnal of Islamic Economics and Social*, 2(2), 136–141. <https://doi.org/10.32923/ejesh.v2i2.4265>
- Syukri, M., Mulazid, A. S., & Rodoni, A. (2026). Green Sukuk as a Manifestation of Islamic Ecotheology : The Integration of Maqasid al-Shariah and Environmental Sustainability in Indonesia. *International Journal of Islamic Economics and Finance (IJIEF)*, 9(January), 1–20. <https://doi.org/10.18196/ijief.v9i1.29161>
- Takengon, R. F., & Soemitra, A. (2022). *Green sukuk for Sustainable Development Goals in Indonesia: A literature study*. *Jurnal Ilmiah Ekonomi Islam*, 8(1). <https://doi.org/10.29040/jiei.v8i1.4591>
- Wirianata, H., Tanaya, C. C., & Ivana, F. (2023). PENGENALAN YOUTH AND SUSTAINABLE DEVELOPMENT GOALS (SDGs) BAGI SISWA / I SMA KRISTEN YUSUF Pelaksanaan pencapaian Tujuan Pembangunan Berkelanjutan atau Sustainable Development Goals (SDGs) di Indonesia diatur dalam Peraturan Presiden (Perpres) Nomor. *Jurnal Serina Abdimas*, 1(3), 1368–1377.