

## Integration of Islamic Finance and Green Economy in Realizing Sustainable Finance in Indonesia

### Abstract

Misbachul Munir

Sekolah Tinggi Agama Islam  
At-Tahdzib Rejoagung Ngoro,  
Jombang, Indonesia  
email:  
[misbachul442@gmail.com](mailto:misbachul442@gmail.com)

**Background.** Integrasi keuangan syariah dan ekonomi hijau menjadi isu strategis dalam upaya mewujudkan keuangan berkelanjutan di Indonesia, seiring dengan meningkatnya kebutuhan pembiayaan untuk transisi menuju pembangunan rendah karbon.

**Aim.** This study aims to analyze the role, challenges, and opportunities of Islamic financial integration in supporting the implementation of a green economy in Indonesia, particularly in the context of national policies and the development of the Islamic financial industry.

**Method.** This study employed a descriptive qualitative approach with library research. Data were obtained from secondary sources, including scientific books, accredited journal articles, policy documents, and official reports from national and international institutions such as the Financial Services Authority, Bank Indonesia, the Ministry of Finance, and the Global Green Growth Institute. Data analysis was conducted using content analysis techniques to identify the alignment between Islamic finance principles, green economy objectives, and the applicable regulatory framework.

**Result.** The research findings demonstrate that Islamic finance aligns normatively with green economic principles, particularly in terms of fairness, sustainability, and orientation toward the real sector. Instruments such as green sukuk, profit-sharing financing, and Islamic fintech have significant potential to support inclusive green financing. However, this integration still faces various challenges, including limited green financial literacy, the lack of standardized Sharia-based ESG indicators, and the national economy's dependence on fossil fuels. This research recommends strengthening regulations, innovating green Islamic financial products, and utilizing digital technology as key strategies to accelerate Islamic finance's contribution to green economic development in Indonesia.

**Keywords:** Islamic Finance; Green Economy; Sustainable Finance; Green Sukuk; ESG; Indonesia

## INTRODUCTION

Sustainable development has become a key issue in global economic policy, including in Indonesia. With the increasing threat of climate change and environmental degradation, the government has taken various strategic steps to develop a green economy and a sustainable financial system. One approach gaining increasing attention is the integration of Islamic finance and the green economy.<sup>1</sup> Islamic finance, with its principles of fairness, transparency, and the prohibition of usury, has fundamental values that align with sustainable finance. However, implementing this integration still

---

<sup>1</sup> Nida Humaida Dkk., "Pembangunan Berkelanjutan Berwawasan Lingkungan (Sustainable Development Goals) Dalam Perspektif Islam," *Khazanah: Jurnal Studi Islam Dan Humaniora* 18, No. 1 (16 Juni 2020): 131–54, <https://doi.org/10.18592/khazanah.v18i1.3483>.



faces various challenges, including regulatory aspects, financial infrastructure readiness, and public awareness of the benefits of Sharia-compliant green finance.

As a commitment to green economic development, the Indonesian government has implemented various policies supporting sustainable financial growth. Presidential Regulation No. 98 of 2021 concerning the Implementation of the Nilai Ekonomi Karbon (NEK) marks a strategic step in controlling greenhouse gas emissions and creating a carbon trading mechanism that encourages environmentally-based investment. Furthermore, Presidential Regulation No. 78 of 2020 demonstrates Indonesia's commitment to collaborating with the Global Green Growth Institute (GGGI) to accelerate the transition to a sustainable green economy.<sup>2</sup>

In the context of national economic regulations, Law Number 11 of 2020 concerning Job Creation provides the legal basis for reforms in the business and investment sectors, including sustainability aspects in the financial industry. Through this law, Islamic banking has greater opportunities to engage in green finance projects, such as financing renewable energy and sustainable infrastructure. Furthermore, Indonesia's commitment to climate action is also emphasized through the Enhanced Nationally Determined Contribution (E-NDC), which targets a 32% reduction in greenhouse gas emissions, equivalent to 912 million tons of CO<sub>2</sub>, by 2030.<sup>3</sup>

On the other hand, the Islamic financial system holds significant potential to support this policy. Sharia principles, which emphasize business ethics, welfare-based investments, and prohibit speculative practices, make Islamic banking a potential player in realizing a green economy.<sup>4</sup> However, despite the shared values between Islamic finance and sustainable finance, significant challenges remain in implementing the integration of these two systems. One major obstacle is how Islamic banking can actively support green finance policies without compromising firmly held Islamic principles. Furthermore, the effectiveness of green finance regulations implemented by the Otoritas Jasa Keuangan (OJK) and Bank Indonesia in accommodating Islamic banking practices still requires further study.

Currently, several Islamic banks in Indonesia have begun adopting green finance principles in their products and services, such as the issuance of green sukuk and istisna'-based financing for renewable energy projects.<sup>5</sup> However, this adoption remains limited and uneven across the Islamic finance sector. Therefore, research on the integration of Islamic finance and the green economy is increasingly relevant in efforts to create an inclusive, equitable, and sustainable financial system in Indonesia.

In the context of this research, a Systematic Literature Review (SLR) approach can be used to analyze how sustainable finance is implemented in Islamic banking. SLR allows this research to compile data from various academic studies, regulations, and industry reports to build a more comprehensive understanding of ESG implementation in Islamic finance.<sup>6</sup> Data obtained from the literature review can be categorized and analyzed using software such as Nvivo, which allows information to be grouped based on key themes in Islamic sustainable finance.

Using the SLR approach, this study can identify gaps in the implementation of green finance policies in Islamic banking and propose more concrete solutions to address existing challenges. Several

<sup>2</sup> Ahmad Afif, "Strategi Konsep Keuangan Berkelanjutan (Sustainable Finance) Perbankan Syariah Di Indonesia" (Doctoral thesis, Fakultas EkoNomi Dan Bisnis Uin Jakarta, 2023), <https://Repository.Uinjkt.Ac.Id/Dspace/Handle/123456789/72583>.

<sup>3</sup> Annisa Dinda Soraya, "Kebijakan Investasi Hijau Dalam Perundang-Undangan Indonesia Sebagai Upaya Penurunan Emisi Grk Nasional Menuju E-Ndc 2030," *Unes Law Review* 6, No. 2 (15 Desember 2023): 5321–33, <https://doi.org/10.31933/Unesrev.V6i2.1362>.

<sup>4</sup> Kurniati Karim Dkk., "EkoNomi Hijau dan Pembangunan Berkelanjutan," *Indonesian Research Journal On Education* 4, No. 4 (28 Agustus 2024): 3053–60, <https://doi.org/10.31004/Irje.V4i4.1550>.

<sup>5</sup> Jannatul Rohaini Jannatul Rohaini, Adinda Rifantini, Dan Mashudi, "The Role Of Government Policy In The Development Of Green Sukuk In Indonesia: Peran Kebijakan Pemerintah Dalam Pengembangan Green Sukuk Di Indonesia," *Al-Mahkamah: Jurnal Hukum, Politik Dan Pemerintahan* 1, No. 3 (2024), <https://journal.syamilahpublishing.com/index.php/Mahkamah/Article/View/380>.

<sup>6</sup> Guillaume Lame, "Systematic Literature Reviews: An Introduction," *Proceedings Of The Design Society: International Conference On Engineering Design* 1, No. 1 (Juli 2019): 1633–42, <https://doi.org/10.1017/Dsi.2019.169>.

studies indicate that one of the main factors hindering the implementation of green finance in the Islamic financial system is the lack of specific and supportive regulations. Current regulations, such as POJK No. 51/POJK.03/2017, are still general in nature and do not explicitly address the differences between conventional and Islamic financial systems in implementing ESG.<sup>7</sup>

Beyond regulatory aspects, this research also highlights the crucial role of technology and digitalization in strengthening the integration of Islamic finance and the green economy. Islamic fintech can be a solution for increasing green financial inclusivity, particularly for small and medium enterprises (MSMEs) seeking access to ESG-based financing.<sup>8</sup> With the development of digital technology, products such as Sharia-based crowdfunding, green investment platforms, and social and environmental impact monitoring systems in Sharia finance can be more easily implemented.<sup>9</sup> This research emphasizes that despite various challenges in integrating Islamic finance and the green economy, there are many opportunities that can be utilized to strengthen the role of Islamic banking in promoting sustainable development. The development of the Islamic Sustainable Finance Index (ISFI) as a tool to measure the implementation of sustainable finance in Islamic banking can be a first step in evaluating the extent to which Islamic banks have adopted ESG principles in their operations.

By examining the interaction between national green economy policies and the development of the Islamic finance industry, this research aims to understand the key challenges in integrating these two concepts and explore potential solutions to improve the effectiveness of Islamic finance in supporting the green economy.

## LITERATURE REVIEW

### Green economy in Indonesia

The green economy in Indonesia has become a key focus in efforts to achieve sustainable development that balances economic growth, social welfare, and environmental sustainability. This concept emphasizes the importance of investments that support emission and pollution reduction, increased energy and resource efficiency, and biodiversity and ecosystem conservation. The Indonesian government has demonstrated a strong commitment to mainstreaming the green economy through various strategic policies and initiatives.<sup>10</sup> One such initiative is the integration of green economy principles into Rencana Pembangunan Jangka Panjang Nasional (RPJPN) 2025–2045, which emphasizes the importance of low-carbon development strategies, energy transition, green financing, and a circular economy. This measure aims to ensure that economic growth focuses not only on increasing Gross Domestic Product (GDP) but also considers environmental and social impacts.

In an effort to support the transition to a green economy, Indonesia has developed various policies, including regulations on carbon pricing that encompass both market and non-market mechanisms to strengthen revenues that support the economic transition.<sup>11</sup> Law No. 7 of 2021 concerning Tax Harmonization supports this by detailing a carbon tax plan to reduce emissions incentives from the energy sector. Furthermore, Indonesia has launched its participation in the global carbon credit market, aiming to finance the transition to green energy through the sale of credits linked

---

<sup>7</sup> Barbara Kitchenham Dkk., "Systematic Literature Reviews In Software Engineering – A Systematic Literature Review," *Information And Software Technology* 51, No. 1 (Januari 2009): 7–15, <https://doi.org/10.1016/j.infsof.2008.09.009>.

<sup>8</sup> Sofi Mubarak, "Islam Dan Sustainable Development: Studi Kasus Menjaga Lingkungan Dan EkoNomi Berkeadilan," *Dauliyah: Journal of Islam And International Affairs* 3, No. 1 (5 Maret 2018): 129–46, <https://doi.org/10.21111/Dauliyah.V3i1.1872>.

<sup>9</sup> Awalludin Taufiq Taufiq Dkk., "Peran Keuangan Syariah Dalam Memajukan Pertumbuhan EkoNomi Hijau Di Indonesia," *Jekis: Jurnal EkoNomi Islam* 2, No. 3 (13 Desember 2024), <https://ejournal.stai-mifda.ac.id/index.php/jekis/article/view/693>.

<sup>10</sup> Karim Dkk., "EkoNomi Hijau Dan Pembangunan Berkelanjutan."

<sup>11</sup> Erpan Gunawan, J. Jusniar, Dan Kellin Rossa Mariani, "Peran EkoNomi Syariah Dalam Mendorong Pertumbuhan EkoNomi Hijau Dan Berkelanjutan," *Jurnal EkoNomi & Bisnis* 12, No. 2 (31 Agustus 2024): 255–62, <https://doi.org/10.58406/Jeb.V12i2.1741>.

to energy projects.<sup>12</sup> However, the majority of these credits are tied to fossil fuel projects, raising concerns about their integrity and attractiveness. On the IDX Carbon platform operated by the Indonesia Stock Exchange, 1.78 million credits are available from five energy projects, including hydropower and natural gas plants. Analysts warn that buyers of high-quality carbon credits may prefer credits from renewable sources such as solar or wind power.

The government is also promoting the implementation of a green and circular economy to improve industrial competitiveness in Indonesia. To date, 152 companies have Green Industry Certificates, which provide economic benefits in the form of energy savings worth IDR 3.2 trillion per year and water savings worth IDR 169 billion per year. Long-term implementation of a green economy is projected to stabilize economic growth by an average of 6.22% until 2045, reduce emissions by 86 million tons of CO<sub>2</sub>-equivalent, and create up to 4.4 million jobs.<sup>13</sup> However, despite various initiatives, Indonesia still faces significant challenges in implementing a green economy. One of these is its heavy reliance on coal as its primary energy source. Despite plans to increase renewable energy capacity, Indonesia is still building new coal-fired power plants, which contribute to high carbon emissions. The transition to renewable energy requires significant investment and strong political commitment to overcome these obstacles.<sup>14</sup> Furthermore, the growing global demand for biomass has led to significant deforestation in Indonesia, with forests being cleared to meet this demand. This raises concerns about the environmental impact and sustainability of the practice. Critics argue that biomass production can cause greater carbon emissions than coal, hinder the transition to clean energy, and destroy forests' capacity to absorb carbon.<sup>15</sup> Addressing these challenges requires a comprehensive policy framework and effective implementation. The government needs to ensure that existing policies are well-implemented and supported by a robust regulatory framework. Furthermore, active participation from the private sector and civil society is crucial to foster innovation and the adoption of sustainable practices.

In a global context, Indonesia also needs to ensure that its economic policies align with international commitments regarding climate change and sustainable development. This includes meeting established emission reduction targets and actively participating in global initiatives to mitigate climate change. Overall, a green economy offers Indonesia significant opportunities to achieve sustainable and inclusive economic growth. However, realizing this potential requires a strong commitment from all stakeholders, including the government, the private sector, and civil society, to work together to address challenges and capitalize on opportunities.

### **Sustainable finance**

Sustainable finance is a financial system that considers environmental, social, and governance (ESG) factors in banking operations.<sup>16</sup> According to Scholtens, sustainable finance aims to create a stable financial system that takes into account long-term sustainability, both in terms of financial risks and social and environmental impacts.<sup>17</sup>

---

<sup>12</sup> Richard Jatimulya Alam Wibowo Dan Rasji, "Tinjauan Kebijakan Hukum Insentif Perpajakan Pada Sektor Energi Dan Transportasi Untuk Mendukung Net Zero Emission Tahun 2060 Di Indonesia," *Jurnal Pajak Indonesia (Indonesian Tax Review)* 7, No. 1 (7 Juli 2023): 91–107, <https://doi.org/10.31092/jpi.v7i1.2193>.

<sup>13</sup> Aminah Aminah Dan Yusriyadi Yusriyadi, "Implementasi Program Industri Hijau Dalam Rangka Kebijakan Penurunan Emisi Gas Rumah Kaca," *Bina Hukum Lingkungan* 3, No. 1 (2018): 63–80, <http://bhl-jurnal.or.id/index.php/bhl/article/view/81>.

<sup>14</sup> Taufiq Dkk., "Peran Keuangan Syariah Dalam Memajukan Pertumbuhan EkoNomi Hijau Di Indonesia."

<sup>15</sup> Amelia Nur Safitri, "Analisis Komparatif Kinerja Keuangan Perusahaan Yang Telah Terdaftar Di Bursa Efek Indonesia Antara Sebelum Dan Sesudah Mendapatkan Penghargaan Industri Hijau" (Universitas Gadjah Mada, 2023), <https://etd.repository.ugm.ac.id/penelitian/detail/230944>.

<sup>16</sup> Julius Adi Chandra Chandra, Rian Sactipto, Dan MuktioNo MuktioNo, "Analisis Peranan Pemerintah Terhadap Praktik Greenwashing Dalam Strategi Investasi Keuangan Berkelanjutan Berbasis ESG," *Jurnal PaNorama Hukum* 7, No. 2 (31 Desember 2022): 138–46, <https://doi.org/10.21067/jph.v7i2.7584>.

<sup>17</sup> Bert Scholtens, "Finance As A Driver Of Corporate Social Responsibility," *Journal Of Business Ethics* 68, No. 1 (24 Oktober 2006): 19–33, <https://doi.org/10.1007/S10551-006-9037-1>.

In Indonesia, regulations related to sustainable finance were introduced through POJK No. 51/POJK.03/2017 which requires banks to adopt sustainability principles in their operations.<sup>18</sup> However, the implementation of this regulation in the context of Islamic banking still faces various challenges, including the incompatibility between Islamic principles and global ESG policies.<sup>19</sup> Therefore, it is necessary to develop an Islamic value-based assessment framework that can measure the sustainability of Islamic banking.

Sustainable finance is an approach to the financial system that focuses not only on economic profit but also considers environmental, social, and governance (ESG) impacts. This approach is gaining increasing attention in various countries, including Indonesia, due to its potential to create a more stable and sustainable financial system.<sup>20</sup> Scholtens stated that sustainable finance aims to build a financial system that is not only profitable in the short term, but also takes into account long-term economic sustainability by reducing financial risks, improving social welfare, and maintaining the balance of the environmental ecosystem.<sup>21</sup>

The principles of Islamic finance are based on the concepts of *maslahah* (public benefit), *adl* (justice), and *tawazun* (balance), which actually have similarities with the concept of sustainability in ESG.<sup>22</sup> The prohibition of *riba*-based transactions, *gharar* (uncertainty), and *maysir* (speculation) in Islamic finance can support better risk management and encourage more responsible investment.<sup>23</sup> In addition, Islamic finance emphasizes investment in sectors that are socially and economically beneficial, which is in line with efforts to mitigate climate change and reduce negative impacts on the environment.

One concrete effort to integrate Islamic finance and the green economy is through the issuance of Green Sukuk, namely Islamic bonds used to finance sustainable projects such as renewable energy, green infrastructure, and waste management.<sup>24</sup> Green Sukuk has become a key instrument in Indonesia's green financing strategy, with several major projects successfully securing funding from these bonds. A study by Andini et al. showed that the implementation of Green Sukuk in Indonesia has helped reduce carbon emissions and supported the development of more environmentally friendly infrastructure.<sup>25</sup> However, despite its significant potential, the implementation of green finance in Islamic banking still faces various obstacles. One of these is limited understanding and literacy of green finance among Islamic financial industry players. Many Islamic financial institutions do not yet fully understand how to apply ESG principles in their operations without violating Sharia law. The lack of widely applicable Sharia-compliant green financing instruments also hinders the expansion of sustainable finance in this sector.

Another challenge facing the implementation of sustainable finance in Islamic banking is the lack of uniform standards for assessing the extent to which Islamic banks have implemented ESG principles in their operations. Therefore, it is necessary to develop an Islamic values-based assessment

---

<sup>18</sup> Fahrizi Noer Fajar Azman, "Analisis Penerapan Sustainable Finance Berdasarkan GRI Standar Dan POJK Nomor 51/POJK.03/2017 Pada Laporan Keberlanjutan Perusahaan Sektor Perbankan," 2019, <https://Repository.Unpar.Ac.Id/Handle/123456789/Repository.Unpar.Ac.Id/Handle/123456789/9417>.

<sup>19</sup> Neneng Hayati, Erwin Yulianto, Dan Syafdinal, "Peranan Keuangan Berkelanjutan Pada Industri Perbankan Dalam Mendukung Sustainable Development Goals: Peranan Keuangan Berkelanjutan Pada Industri Perbankan Dalam Mendukung Sustainable Development Goals," *Jurnal Akuntansi Bisnis Dan EkoNomi* 6, No. 1 (30 September 2020): 1633–52, <https://doi.org/10.33197/Jabe.Vol6.Iss1.2020.473>.

<sup>20</sup> Eddy Susanto Dan Ni Kadek Sirnawati, "Perilaku Keuangan Berkelanjutan: Dampak Investasi Sosial Dan Lingkungan," *Syntax Idea* 5, No. 12 (2023): 2604–19, <https://doi.org/10.46799/Syntax-Idea.V5i12.2851>.

<sup>21</sup> Scholtens, "Finance As A Driver Of Corporate Social Responsibility."

<sup>22</sup> Hery Purwanto, "Integrasi Prinsip ESG (Environmental, Social, Governance) Dalam Perbankan Syariah," *Studia EcoNomica: Jurnal EkoNomi Islam* 10, No. 2 (12 November 2024): 240–50, <https://doi.org/10.30821/Se.V10i2.21738>.

<sup>23</sup> Mubarak, "Islam dan Sustainable Development."

<sup>24</sup> Bunga Quratul Aini, "Analisis Prinsip-Prinsip Environmental, Social and Governance (ESG) Pada Operasional BSI Stabat Kh Zainul Arifin," *Jurnal Ilmiah EkoNomi Islam* 10, No. 2 (15 Juli 2024): 1455–65, <https://doi.org/10.29040/jiei.v10i2.13309>.

<sup>25</sup> Andini Nurul Aini, Citra Sukmadilaga, dan Erlane K. Ghani, "Green Bonds, Investor Attention and Stock Market Reaction: Evidence from ASEAN Countries," *International Journal of Energy Economics and Policy* 13, No. 6 (10 November 2023): 334–43, <https://doi.org/10.32479/ijeeep.15162>.

framework that can measure the level of sustainability in Islamic banking.<sup>26</sup> One approach that can be used is the Islamic Sustainable Finance Index (ISFI), which adapts the ESG concept in the context of Islamic finance.<sup>27</sup>

In his research, Afif developed ISFI by considering three main components: Good Corporate Governance (GCG), Risk Management (RM), and Sustainable Finance (SF). GCG in Islamic banking plays a crucial role in ensuring that banks operate with transparency, accountability, and business ethics in accordance with Islamic principles. A good governance system can ensure that Islamic banks implement sustainability policies consistently and responsibly. RM in Islamic banking must also be strengthened to manage risks associated with green investment and sustainable financing. Better risk management can help Islamic banks channel funds to more environmentally friendly sectors without causing losses to banks and customers. Furthermore, Sustainable Finance in the context of Islamic banking must include investment and financing mechanisms that support the green economy sector, including renewable energy projects, energy efficiency, and sustainable infrastructure. Concepts such as productive waqf and investment-based zakat can also be developed to strengthen the role of Islamic finance in supporting the green economy.<sup>28</sup>

More specific and supportive regulations are also needed to provide clarity for the Islamic finance industry in adopting green finance practices. Furthermore, increasing green financial literacy among Islamic industry players and developing financing instruments that comply with Sharia principles can help accelerate the adoption of sustainable finance in this sector. With synergy between clearer regulations, strengthened governance, and the development of Sharia-compliant green finance instruments, it is hoped that Islamic banking can play a greater role in supporting the green economy and sustainable finance in Indonesia.

### **Integration of Islamic finance and green economy**

The integration of Islamic finance and the green economy is a concept that emphasizes the harmony between Islamic principles in financial transactions with the goal of sustainable economic development.<sup>29</sup> Islamic finance embraces core principles that support sustainability, such as the prohibition of usury (riba), fair transactions, and investment in halal and ethical sectors. These principles align closely with the concept of a green economy, which emphasizes investment in environmentally friendly sectors and responsible business practices.

One initiative that reflects the integration of Islamic finance and the green economy is the implementation of Green Sukuk in Indonesia. Green Sukuk is a Sharia-compliant financing instrument used to finance sustainable projects that contribute to climate change mitigation.<sup>30</sup> Linguistically, the term "Islamic finance" refers to a financial system based on Islamic principles, such as fairness, transparency, and the prohibition of usury. Meanwhile, "green economy" refers to a development paradigm that emphasizes environmentally friendly, low-carbon, and socially inclusive economic growth.<sup>31</sup>

Substantially, experts argue that the principles of Islamic finance align with the goals of a green economy. For example, the prohibition on environmentally damaging activities and the emphasis on social responsibility in Islamic finance support sustainable economic practices. Research by

---

<sup>26</sup> Mulyani dan Octalica, "Keterkaitan Sustainability Report Dengan Kesiapan Implementasi Regulasi Pemerintah Melalui Peraturan Presiden No. 98 Tahun 2021 Tentang Penyelenggaraan Nilai EkoNomi Karbon."

<sup>27</sup> Farhad Taghizadeh-Hesary, ed., *Islamic finance and sustainability: a research companion*, Routledge research companions in business and ecoNomics (Abingdon, Oxon; New York, NY: Routledge, 2025), p.3.

<sup>28</sup> Afif, "Strategi konsep keuangan berkelanjutan (sustainable finance) perbankan syariah di Indonesia."

<sup>29</sup> Tika Widiastuti Dkk., "Toward Developing A Sustainability Index For The Islamic Social Finance Program: An Empirical Investigation," Ed. Oleh Abdul Aziz Khan Niazi, *Plos One* 17, No. 11 (22 November 2022): E0276876, <https://doi.org/10.1371/journal.pone.0276876>.

<sup>30</sup> Inas Afifah Zahra, "Analisis Metode Istinbath Hukum Fatwa Dewan Syariah Nasional Majelis Ulama Indonesia Tentang Sovereign Green Sukuk," *Ar Rasyid: Journal Of Islamic Studies* 1, No. 1 (2023): 13–22, <https://doi.org/10.70367/Arasyiid.V1i1.3>.

<sup>31</sup> Gunawan, Jusniar, Dan Mariani, "Peran EkoNomi Syariah Dalam Mendorong Pertumbuhan EkoNomi Hijau Dan Berkelanjutan."

Mutmainnah confirms that Islamic ecological ethics can serve as a philosophical foundation for implementing a green economy in Indonesia.<sup>32</sup> However, implementing this integration faces various challenges. A lack of understanding and awareness of the principles of Islamic finance and the green economy among business actors and the general public is a major obstacle. Furthermore, the financial infrastructure supporting green investment remains limited, and existing regulations do not fully support the development of sustainability-focused Islamic financial products.<sup>33</sup>

To address these challenges, a clear and consistent regulatory framework is needed. The government needs to develop policies and regulations that support the integration of the green economy and Islamic business. Islamic financial institutions can play a role in providing environmentally friendly and Sharia-compliant financing and encouraging companies to adopt sustainable business practices.<sup>34</sup> Overall, the integration of Islamic finance and the green economy offers an opportunity to create a financial system that is not only economically profitable but also socially and environmentally responsible. By synergizing Islamic principles and sustainability goals, it is hoped that a fair, inclusive, and sustainable economic development model can be created in Indonesia. The integration of Islamic finance and the green economy is increasingly being highlighted in efforts to realize sustainable finance in Indonesia.<sup>35</sup>

### **Integration of Islamic Finance and Green Economy in Sustainable Finance in Indonesia**

Islamic finance and the green economy are closely linked within the concept of sustainable finance in Indonesia. Both prioritize the principles of fairness, transparency, and social welfare, with the goal of building a more sustainable and inclusive economic system. In recent years, Indonesia has adopted various green economy policies to support the transition to more environmentally conscious development. However, significant challenges remain in their implementation, particularly in ensuring that Islamic finance principles align with global green finance policies.<sup>36</sup>

Sustainable finance is a financial system that takes into account environmental, social, and governance (ESG) factors.<sup>37</sup> According to Scholtens, the primary goal of sustainable finance is to create long-term stability by taking into account financial risks and social and environmental impacts. Indonesia has sought to integrate ESG aspects into the national financial system through POJK No. 51/POJK.03/2017, which requires banks to implement sustainability principles in their operations.<sup>38</sup> However, implementing these regulations in the context of Islamic banking faces significant challenges. One key challenge is the inconsistency between Sharia principles and global ESG policies, which are often based on a capitalist paradigm and do not fully accommodate Islamic values. Islamic finance embraces fundamental principles such as the prohibition of *riba* (usury), *gharar* (gharar), and *maysir* (gambling), and emphasizes investment in sectors that benefit social and economic well-being. While these values align with ESG objectives, their implementation within green finance policies has yet to be fully integrated.<sup>39</sup>

The green economy in Indonesia is a key pillar in efforts to achieve sustainable development. The government has developed various strategies, including the introduction of a carbon price and a carbon tax through Law No. 7 of 2021, aimed at reducing emissions and supporting investment in the

---

<sup>32</sup> Mutmainnah, Amir Hamzah, Dan Galuh Mustika Agrarini, "Green EcoNomy Perspektif EkoNomi Syari'ah Dalam Meningkatkan Kesejahteraan Masyarakat," *Al-Muttaqin: Jurnal Studi, Sosial, Dan EkoNomi* 5, No. 2 (26 Juni 2024): 111–19, <https://staisam.ac.id/jurnal/index.php/Almuttaqin/article/view/188>.

<sup>33</sup> Taufiq Dkk., "Peran Keuangan Syariah Dalam Memajukan Pertumbuhan EkoNomi Hijau Di Indonesia."

<sup>34</sup> Soraya, "Kebijakan Investasi Hijau Dalam Perundang-Undangan Indonesia Sebagai Upaya Penurunan Emisi Grk Nasional Menuju E-Ndc 2030."

<sup>35</sup> Nur Ika Mauliyah, Hikmatul Hasanah, Dan Miftahul Hasanah, "Potensi Pengembangan Green Sukuk Dan Aspek Hukum di Indonesia," *EkoNomica Sharia: Jurnal Pemikiran Dan Pengembangan EkoNomi Syariah* 8, No. 2 (6 Februari 2023): 221–34, <https://doi.org/10.36908/EsHa.V8i2.701>.

<sup>36</sup> Taufiq Dkk., "Peran Keuangan Syariah Dalam Memajukan Pertumbuhan EkoNomi Hijau Di Indonesia."

<sup>37</sup> Purwanto, "Integrasi Prinsip Esg (Environmental, Social, Governance) Dalam Perbankan Syariah."

<sup>38</sup> Azman, "Analisis Penerapan Sustainable Finance Berdasarkan Gri Standar dan Pojk Nomor 51/Pojk.03/2017 Pada Laporan Keberlanjutan Perusahaan Sektor Perbankan."

<sup>39</sup> Purwanto, "Integrasi Prinsip Esg (Environmental, Social, Governance) Dalam Perbankan Syariah."

green energy sector.<sup>40</sup> However, many companies and the financial sector still face obstacles in adapting to these regulations. Islamic finance has great potential to support a green economy through Sharia-compliant instruments such as Green Sukuk, which are Islamic bonds used to finance sustainable projects such as renewable energy and waste management. Indonesia has been one of the most active countries in issuing Green Sukuk, with significant results in reducing carbon emissions and encouraging green infrastructure projects. A study by Mauliyah et al. shows that the implementation of Green Sukuk has helped finance various environmentally friendly projects, such as the construction of solar power plants and forest rehabilitation.<sup>41</sup>



Sukuk Development as of December 2024 in Indonesia (Source: Ojk.go.id)

Overall, this data reflects a positive trend in corporate sukuk issuance in Indonesia. The increase in the outstanding value and number of issuances indicates strong investor demand, while the stability of the outstanding sukuk indicates the continued use of sukuk as a corporate financing tool. This trend also demonstrates that policies related to sukuk and the Islamic financial market in Indonesia support stable growth in this sector.<sup>42</sup> In Islamic finance, sukuk plays a crucial role because it is based on the principles of prohibition of riba (usury), gharar (gharar), and maysir (gambling). Furthermore, sukuk focuses on financing based on tangible and productive assets. This makes sukuk a suitable tool to support sustainable development, particularly in financing green infrastructure projects such as renewable energy, waste management, and the development of environmentally friendly areas. Data showing increasing outstanding and accumulated sukuk issuances demonstrates investor confidence in this instrument as a financing tool that complies with Sharia principles while supporting sustainability.

In the context of a green economy, sukuk can play a further role as an instrument supporting the transition to low-carbon development. Sukuk used to finance green projects, such as the Green Sukuk issued by the government and corporate sector, demonstrates the integration of Sharia principles with sustainability goals.<sup>43</sup> Green Sukuk has successfully supported the financing of renewable energy projects and green infrastructure, which aligns with global sustainability goals such as carbon emission reduction. The increase in sukuk issuances, as seen in this data, indicates that corporations are increasingly recognizing the potential of this instrument in supporting the green transition.

This context also highlights both opportunities and challenges in integrating Islamic finance and the green economy. The increase in outstanding sukuk indicates stable market demand, but also highlights the need for more supportive regulations to encourage more green sukuk issuances. Currently, regulations such as POJK No. 51/POJK.03/2017 have provided the foundation for the implementation

<sup>40</sup> Imam Susanto Dan Robi Ulpa, "Analisis Kesiapan Implementasi Pajak Karbon Di Indonesia," *Transparansi: Jurnal Ilmiah Ilmu Administrasi* 6, No. 2 (2023): 213–20, <https://doi.org/10.31334/transparansi.v6i2.3450>.

<sup>41</sup> Mauliyah, Hasanah, dan Hasanah, "Potensi Pengembangan Green Sukuk dan Aspek Hukum di Indonesia."

<sup>42</sup> Rohaini, Rifantini, Dan Mashudi, "The Role Of Government Policy In The Development Of Green Sukuk In Indonesia."

<sup>43</sup> Mohammad Romli, "Integrasi Prinsip-Prinsip EkoNomi Syariah Dalam Pengembangan EkoNomi Hijau (Green EcoNomy) Di Indonesia," *Ekomadania: Journal of Islamic EcoNomic and Social* 8, No. 1 (11 September 2024): 1–14, <https://ejournal.kopertais4.or.id/madura/index.php/ekomadania/article/view/7471>.

of sustainable finance, but in practice, a more specific policy framework is still needed to facilitate the development of green sukuk in the corporate sector.<sup>44</sup> From a sustainable finance perspective, sukuk can be a key catalyst in bridging the financing needs for green projects. This is crucial given that Indonesia faces significant challenges in its transition to clean and low-carbon energy. Sukuk offers a financing alternative that is not only environmentally friendly but also socially inclusive, given its nature based on justice and equality.

To strengthen the role of sukuk in sustainable finance, the integration between Islamic finance and the green economy must be further optimized. One way to achieve this is through the development of specific standards that combine ESG principles and Islamic values. This way, sukuk issuance can be more focused on sectors that have a positive impact on the environment and society. Furthermore, increasing green financial literacy among Islamic finance industry players is also key to accelerating the adoption of sukuk as a sustainable financial instrument.<sup>45</sup> This corporate sukuk development data reflects the significant potential of Islamic finance in supporting the green economy and sustainable finance in Indonesia. With the increase in the outstanding value and number of sukuk issuances, it is clear that this instrument is increasingly accepted by the market as a financing solution that not only complies with Sharia principles but also contributes to sustainability goals. However, to achieve its full potential, synergy between policy, product innovation, and industry awareness of the importance of integrating Islamic finance and the green economy within a sustainable finance framework is needed.

Despite the success of Green Sukuk in promoting a green economy, numerous challenges remain. One major challenge is the lack of specific standards and regulations for Islamic banking in implementing green finance. Many Islamic banks still struggle to align ESG policies with Sharia principles, particularly in terms of risk management and investment transparency. Furthermore, there remains a gap in green finance literacy among Islamic industry players, resulting in limited adoption of green finance practices.

### **Challenges and opportunities in integrating Islamic finance and the green economy**

While there are many opportunities in integrating Islamic finance and the green economy, challenges remain to be overcome. One of the biggest challenges is Indonesia's reliance on fossil fuels, particularly coal, as its primary energy source. Although Indonesia has begun investing in renewable energy, coal-based power plants are still under construction. This demonstrates that the transition to a green economy still requires significant investment and stronger policy support.

Furthermore, the emergence of a carbon market in Indonesia through the IDX Carbon platform is also an important step in supporting a green economy. However, concerns remain that many projects listed on this carbon market are still linked to fossil fuels. To ensure that Islamic finance can play a role in this carbon market mechanism, Sharia-compliant certification standards are needed to ensure that traded carbon credits originate from green projects that comply with Islamic principles. In terms of regulation, the government needs to ensure that implemented green economy policies are not only relevant to the conventional banking sector but can also be adopted by Islamic banking. Several steps that can be taken include providing incentives for Islamic banks investing in green projects, increasing green financial literacy among Islamic industry players, and developing ESG-compliant accounting and reporting standards within the Islamic finance context.

The integration of Islamic finance and the green economy into sustainable finance in Indonesia is a strategic step in supporting more equitable, inclusive, and sustainable development. Islamic finance has significant potential to support a green economy, particularly through instruments such as Green Sukuk and productive waqf-based financing. However, to realize this potential, clearer standards and supportive regulations are needed to enable Islamic banks to more actively implement ESG principles in their operations. As the country with the largest Muslim population in the world, Indonesia has significant potential to become a leader in Sharia-compliant green financial innovation. With synergy

---

<sup>44</sup> Chandra, Sacıpto, Dan MuktioNo, "Analisis Peranan Pemerintah Terhadap Praktik Greenwashing Dalam Strategi Investasi Keuangan Berkelanjutan Berbasis Esg."

<sup>45</sup> Aini, "Analisis Prinsip-Prinsip Environmental, Social And Governance (ESG) Pada Operasional BSI Stabat Kh Zainul Arifin."

between clearer regulations, strengthened governance, and the development of Sharia-compliant green financial instruments, Indonesia can play a greater role in supporting the global transition to a greener and more sustainable economy.

## **METHOD**

This research employs a qualitative-descriptive approach with library research oriented toward policy analysis and conceptual framework development. This approach was chosen because the focus of the research is not on quantitatively testing causal relationships, but rather on an in-depth understanding of the integration of the green economy and Islamic finance within the context of sustainable development policy in Indonesia.

The research data is sourced from secondary sources, including national policy documents such as Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2025-2029, government fiscal and green financing reports, institutional publications from Bank Indonesia and the OJK, as well as white papers and strategic reports related to the green economy, energy transition, and green MSME development. Furthermore, this research utilizes articles from reputable national and international scientific journals discussing the green economy, Islamic finance, Islamic sustainable finance, and sustainable development financing.

Data collection was conducted through documentation studies, selecting and categorizing sources based on their thematic relevance and contribution to the research questions. Data analysis employed content analysis and policy analysis, identifying patterns, narratives, and conceptual relationships between green economy policies, financing challenges, and the potential of Islamic finance. The analysis was interpretive and comparative, linking empirical findings from Indonesian policies to the theoretical frameworks of green economy and Islamic finance.

Through this approach, this study produced an analytical synthesis that explains the position, challenges, and opportunities of Islamic finance in supporting the green economy transition in a contextual and policy-oriented manner.

## **RESULT**

The findings of this study were compiled to directly answer three research questions regarding the position of Islamic finance in the national green economy, the challenges of its integration, and potential policy opportunities. All findings are based on an analysis of national policy documents, institutional reports, and white papers on Indonesia's green economy transition. The findings indicate that the green economy has been formally institutionalized in national development policies, particularly through the RPJMN 2025-2029 and the Low Carbon Development Initiative (LCDI) framework. In these documents, the green economy is positioned as part of the national economic transformation, while Islamic economics and finance are recognized as supporting pillars of sustainable development. However, the role of Islamic finance remains at the normative and macro-level, primarily through capital market instruments such as government green sukuk. Islamic finance has not been explicitly positioned as the primary financing architecture for the green economy transition, particularly in the MSME sector and medium-scale green projects. Thus, the position of Islamic finance in green economy policy is formally legitimate, but has not yet been mobilized strategically and operationally.

The main findings of the study identify a structural green financing gap. The national investment needs for the green economy transition far exceed the financing capacity of the Anggaran Pendapatan dan Belanja Negara (APBN) Indonesia, while the financial system – both conventional and Islamic – is not yet fully prepared to provide long-term financing and risk sharing. In the MSME sector, integration challenges are even more complex. MSMEs are positioned as key actors in the green economy and significant contributors to emissions, yet support for green financing remains limited. Existing financing schemes tend to be debt- and collateral-based, thus not suited to the characteristics of green MSMEs, which require flexible and performance-based financing. Furthermore, findings indicate that the energy transition in Indonesia carries systemic risks (fiscal, financial, and institutional). Without appropriate financing design, the green transition has the potential to cause economic instability. Regulatory

challenges are also evident in the absence of a specific framework that explicitly integrates Islamic finance principles into green economy policies.

Despite these challenges, this study identifies strong and contextual policy opportunities. First, empirical evidence shows that the green economy and circular economy do not reduce productivity and even increase business efficiency in the long term. This provides a rational economic basis for Islamic-based green financing. Second, the success of the government's green sukuk demonstrates that Islamic financial instruments can be effective in financing large-scale green projects. This experience can be extended to other sectors, including green MSMEs and community-based energy transitions. Third, policy documents demonstrate initial readiness on the part of business actors (green MSMEs) and national planning, but this has not been matched by an inclusive financing design. This situation opens up opportunities for Islamic finance – with its profit-sharing principles, asset-based financing, and real-sector orientation – to act as a bridge between green economic policies and the real needs of business actors.

#### Summary table of research findings based on research questions

Key findings	Analytical meaning
Green economy and Islamic finance are recognized in the RPJMN and national policies.	Legitimasi kebijakan telah tersedia
The role of Islamic finance is still macro and declarative.	Not yet operational.
The financing gap is large and structural in nature.	The financial system is not ready.
Green MSME financing is weak and not inclusive.	Implementation barriers.
Systemic risks of energy transition.	Need for risk-sharing design.
Green economy increases productivity.	Strong economic justification.
Green sukuk proven effective.	Instruments can be replicated.
Policy readiness has not been matched by financing,	There is space for the role of Islamic finance.

The summary table demonstrates the consistent research findings that the integration of Islamic finance and the green economy in Indonesia is not hampered by the absence of policy, but rather by limitations in financing and institutional design. Policy legitimacy is in place, but implementation and financing challenges remain. At the same time, there are strong, data-driven policy opportunities to strengthen the role of Islamic finance as a financing instrument for an inclusive and sustainable green economy.

## DISCUSSION

### The position and role of islamic finance in Indonesia's green economy policy framework

Key findings indicate that the green economy in Indonesia has reached the institutional stage (recognized in planning and strategy), but the role of Islamic finance remains predominantly as a supporting component, not yet an operational green financing architecture. In the 2025–2029 RPJMN, the national investment requirement for 2025–2029 is projected at IDR 47,573.45 trillion, with government investment accounting for 7.22% (IDR 3,435.04 trillion) and private/community investment accounting for 86.65%. This indicates that the execution of the transformation agenda – including the green economy – is heavily dependent on the mobilization of non-state budget financing.<sup>46</sup> In the financing sources section, RPJMN emphasizes the target contribution of the financial sector (banking, stocks, corporate bonds) and encourages the deepening of the financial sector, both conventional and sharia, including strengthening the role of sharia social funds such as zakat and waqf as alternative financing.<sup>47</sup> This means that, in policy terms, Islamic channels are recognized as part of the transformation funding solution. However, this recognition does not automatically translate into a

<sup>46</sup> Kementerian PPN/Bappenas, Ringkasan RPJMN Tahun 2025–2029, bagian “Kebutuhan Investasi Tahun 2025–2029”.

<sup>47</sup> Kementerian PPN/Bappenas, Ringkasan RPJMN Tahun 2025–2029, bagian “Sumber Pembiayaan Investasi Tahun 2025–2029” (pendalaman sektor keuangan termasuk syariah; peran zakat dan wakaf).

"strategic role" in terms of clear instrumentation and mechanisms. Findings from the Green MSMEs document reinforce this. MSMEs are recognized as the backbone of the economy, but their green transformation still faces barriers to adoption and financing. Within this framework, Islamic finance has not been positioned as a primary driver of MSME transition financing, even though MSMEs sit at a crucial intersection between growth targets and climate targets.

On this point, contemporary literature tends to align: conceptual studies position Islamic finance as having value compatibility with the green economy (ethics, prohibition of speculation, linkage to real assets), but implementation often stops at the level of "normative compatibility" without adequate institutional design. Siregar et al., for example, emphasize the philosophical intersection of the green economy and Islamic finance as a pathway to sustainable development, but the challenge lies in institutionalizing the integrated model in a country context like Indonesia.<sup>48</sup> Taufiq also pointed out the role of sharia instruments (especially green sukuk) that are relevant for green development, but underlined that this potential has not been fully realized due to limitations in the ecosystem and policy integration.<sup>49</sup>

Thus, the position of Islamic finance in Indonesia's green economic policy can be concluded as "legitimate in terms of policy direction," but still requires strengthening to level up to become an "operational green financing mechanism," particularly in the MSME sector and community-based transition financing.

### **Key challenges of integrating islamic finance and the green economy**

The most striking finding is that Indonesia's integration challenges are structural, not merely technical. Three interconnected problems exist: the financing gap, mismatched instrument design, and the capacity/adoption of actors (especially MSMEs). First, the financing gap is evident at two levels. At the macro level, RPJMN emphasizes limited fiscal space, requiring private/public financing to dominate.<sup>50</sup> At the micro level (MSMEs), the Green MSME White Paper projects that MSME financing needs will reach IDR 4,300 trillion by 2026, while the available financing supply is estimated at only IDR 1,900 trillion, leaving a gap of IDR 2,400 trillion. This is not a small gap, he explains, explaining why "green" integration is easy to use as a slogan but difficult to implement in daily business practice.

Second, there is a mismatch between the needs of the green transition and available financing designs. The white paper emphasizes that many MSMEs are unable to meet bank requirements such as collateral and formal financial records, while the majority also operate informally and are unregistered, thus barring access to formal schemes like the Kredit Usaha Rakyat (KUR).<sup>51</sup> As the green transition demands investment in equipment, technology, and changes to production processes, MSMEs require more flexible, medium- to long-term, and performance-based financing. At this point, Islamic finance theoretically offers the logic of risk-sharing and linkages to the real sector, but research findings reveal a policy-instrument gap: there has been no mainstreaming of Islamic products specifically designed as transition finance for MSMEs.

Third, integration challenges also stem from adoption. The white paper notes that less than 5% of MSMEs integrate renewable energy, sustainable procurement, or environmental certification. Low adoption is not simply a matter of "intention," but rather related to sustainability literacy, managerial capacity, access to technology, and market incentives. At the same time, MSMEs are not marginal actors in emissions issues: field research referenced by the document estimates MSME sector emissions reach 216 million tons of CO<sub>2</sub>, approximately two-thirds of national industrial emissions. This finding shifts the position of MSMEs: from mere objects of development to key actors in climate targets.

<sup>48</sup> White Paper: Unveiling the Future of Sustainable Business through Empowering Green MSMEs (Strategic Framework), temuan emisi UMKM 216 juta ton CO<sub>2</sub>; adopsi <5%; tantangan regulasi dan peluang.

<sup>49</sup> Awalludin Taufiq, "The Role of Islamic Finance in Advancing Green EcoNomic Development in Indonesia," *Jurnal Ilmiah EkoNomi Islam* 11, No. 1 (2025).

<sup>50</sup> Muhammad Rafi Siregar, Indra Martian Permana, dan Puti Khairani Rijadi, "Green EcoNomy and Islamic Finance: Crossing a Sustainable Path in EcoNomic Development," *Al-Infaq: Jurnal EkoNomi Islam* (2023).

<sup>51</sup> White Paper: Unveiling the Future of Sustainable Business through Empowering Green MSMEs, proyeksi kebutuhan pembiayaan UMKM Rp4.300 triliun, suplai Rp1.900 triliun, gap Rp2.400 triliun.

Recent literature clarifies the nature of these integration challenges. Faizi et al. mapping the climate finance landscape in Indonesia and finding that the development of Islamic green finance can proceed through several channels – the Islamic capital market, Islamic social finance, and green banking services for inclusion – but the challenge lies in coordinating actors and aligning the ecosystem to avoid instrument fragmentation.<sup>52</sup> Syarifuddin (Bank Indonesia working paper) emphasized that green economic transformation requires policy coordination and risk management, because the green agenda is not only an environmental issue but also an issue of real and financial sector stability.<sup>53</sup> At the global level, Harahap et al.'s systematic review shows that the Islamic finance–SDGs literature is scattered and its effectiveness is still debated; one key message is the need for a more operational framework so that Islamic finance's contributions go beyond mere normative claims.

Based on the findings and literature, the integration of Islamic finance–green economy in Indonesia faces a “design gap”: policies are already geared toward a green economy, financing needs are substantial, but integration instruments and governance (standards, incentives, impact assessment mechanisms) are not yet mature enough to make Islamic green finance work at the MSME level.

### **Opportunities to Strengthen the Role of Islamic Finance in the Green Economy**

Research findings actually point to strong opportunities because Indonesia has three assets: policy legitimacy, financing urgency, and a large real economic base (MSMEs). The key is to make Islamic finance a solution that fits the context, rather than simply attaching the "Sharia" label to green instruments.

The first opportunity is to make the mandate for deepening the financial sector—including Sharia—the foundation for mainstreaming transition financing. RPJMN emphasizes the need to deepen the conventional and Sharia financial sectors and to increase the role of Sharia social funds (zakat and waqf) as alternative investment financing. This can be translated into a blended Sharia finance design: social funds as a risk buffer/incentive, Sharia commercial financing as a scaling-up mechanism, and fiscal intervention as a trigger. Policy-wise, the directions are compatible; the main challenge lies in instrument design, not legitimacy.

The second opportunity is to develop Sharia green financing that truly targets both "emissions engines and economic engines," namely MSMEs. The white paper recommends economic and financial incentive schemes for MSMEs, such as performance-based grants, blended finance, transition credit facilities, and strengthening the green MSME roadmap. These recommendations can be combined with sharia-compliant principles: asset-based contracts for equipment investments (e.g., *ijarah muntahiyah bit tamlik*), manufacturing/custom financing (*istisna'*) for green equipment/technology, and profit-sharing schemes for promising businesses with weak collateral. If designed as transition finance, "green" would no longer be a compliance burden but a productivity-boosting scheme.<sup>54</sup>

The third opportunity is to link the digitalization agenda with Islamic green financing. The literature emphasizes the synergy between digital innovation and sustainable Islamic finance, particularly to expand inclusion and facilitate monitoring of sustainability impacts.<sup>55</sup> In the context of the vast MSME financing gap, Islamic digital channels (Islamic fintech, Islamic crowdfunding, Islamic supply-chain financing) have the potential to address the last-mile problem—reaching unbankable but economically viable MSMEs. The white paper's findings on challenges with record-keeping, literacy, and business formalities suggest that additional funding is not the only solution; it requires mechanisms that lower transaction costs, simplify verification, and clarify incentives.

<sup>52</sup> Faizi Faizi, Airlangga Surya Kusuma, dan Purwanto Widodo, “Islamic Green Finance: Mapping the Climate Funding Landscape in Indonesia,” *International Journal of Ethics and Systems* 40, No. 4 (2024).

<sup>53</sup> Syarifuddin, “Towards Green EcoNomy Transformation through Islamic Green Financing: Managing Risk and Fostering Sustainable Growth for the Real and Financial Sectors,” *Bank Indonesia Working Paper* (WP/05/2022).

<sup>54</sup> Abdul Rashid dan M. Abubakar Siddique, “Circular EcoNomy, Green EcoNomy, and Sustainable Development: Establishing the Interconnections and Discoursing the Role of Islamic Finance,” dalam *Islamic Finance and Circular EcoNomy* (Springer, 2021).

<sup>55</sup> White Paper: Unveiling the Future of Sustainable Business through Empowering Green MSMEs, uraian hambatan akses pembiayaan (agunan, pencatatan formal, informalitas, hambatan akses KUR).

The fourth opportunity is to develop standards and governance to prevent Islamic green finance from becoming a form of Sharia-compliant "greenwashing." The white paper cites the absence of national green MSME standards and the limited ESG reporting requirements for the MSME segment. Here, lessons from the conceptual literature on the circular/green economy emphasize the importance of measurable indicators and linking instruments to impact targets. In the Sharia context, these standards need to measurably integrate Sharia compliance and environmental impact to enhance the instrument's credibility and prevent investors from viewing it as merely a label.<sup>56</sup> Summarizing the opportunities outlined above, research and study findings indicate that the key role of Islamic finance in Indonesia's green economy lies in its ability to simultaneously fill two gaps: the financing gap and the design gap (instruments suited to the characteristics of MSMEs and transition projects). If these gaps are filled, Islamic finance will not only be "value-aligned" with the green economy but will also become a truly transformative mechanism for achieving development and climate targets.

### **Theoretical contributions**

This research makes a theoretical contribution to the development of the discourse on the green economy and Islamic finance by offering an integrative framework that positions Islamic finance not merely as an ethical instrument compatible with sustainability principles, but as a transformative financing mechanism within the green economy development agenda in developing countries, particularly Indonesia. This contribution is important because the existing literature is still dominated by normative and conceptual approaches that emphasize the value alignment between Islam and the green economy, but are relatively limited in explaining how this alignment can be operationalized within the framework of national financial policies and systems.

Theoretically, this research broadens the understanding of the green economy by emphasizing that the green economy cannot be treated solely as an environmental agenda or sectoral policy, but rather as a development regime that demands changes in financing structures, risk governance, and investment orientation. In this context, Islamic finance is positioned as part of the green economy architecture, not simply a complement to the conventional financial system. These findings enrich the literature, which has tended to position Islamic finance as an ethical overlay on green finance, without examining its role in addressing the structural limitations of development financing. The first theoretical contribution of this research is a reconceptualization of the relationship between the green economy and Islamic finance, moving from a mere normative fit to a functional-structural relationship. Previous studies have confirmed that Islamic financial principles—such as the prohibition of *riba* (usury), *gharar* (gharar), and *maysir* (gambling), as well as an orientation toward the real sector—align with the goals of a green economy that rejects speculation and excessive exploitation.<sup>57</sup> However, this research demonstrates that this value alignment only becomes theoretically meaningful when placed within the context of the green financing gap facing developing countries. Therefore, the theoretical contribution of this research lies in shifting the analytical focus from "is Islamic finance compatible with a green economy" to "how Islamic finance can function as a structural solution to the limitations of green economy financing."

The second contribution is strengthening the argument that Islamic finance has theoretical advantages in transition finance, particularly in the MSME sector and medium-scale green projects. The green finance literature generally starts from the assumption of mature capital markets and bankable business actors, making it less sensitive to the context of developing countries with high levels of informality.<sup>58</sup> This research enriches theory by demonstrating that Islamic finance, through its risk-sharing principles, asset-based financing, and direct linkages to productive activities, is more suited to the characteristics of the green economy transition in Indonesia, which relies heavily on MSMEs as the

---

<sup>56</sup> Surya Kusuma, dan Purwanto Widodo, "Islamic Green Finance: Mapping the Climate Funding Landscape in Indonesia," *International Journal of Ethics and Systems* (2024).

<sup>57</sup> Muhammad Rafi Siregar, Indra Martian Permana, dan Puti Khairani Rijadi, "Green EcoNomy and Islamic Finance: Crossing a Sustainable Path in EcoNomic Development," *Al-Infaq: Jurnal EkoNomi Islam* 14, No. 2 (2023).

<sup>58</sup> Abdul Rashid dan M. Abubakar Siddique, "Circular EcoNomy, Green EcoNomy, and Sustainable Development: Establishing the Interconnections and Discoursing the Role of Islamic Finance," dalam *Islamic Finance and Circular EcoNomy* (Singapore: Springer, 2021).

backbone of the economy and a significant contributor to emissions. Thus, this research broadens the scope of green economy theory to be more contextual and inclusive.

The third theoretical contribution lies in the integration of national policy frameworks into theoretical analyses of the green economy and Islamic finance. Most literature discusses the integration of the green economy and Islamic finance at a global or conceptual level, without deeply linking it to national development planning.<sup>59</sup> This research fills this gap by positioning RPJMN, green fiscal policy, and the net-zero emissions agenda as the institutional context shaping the scope of Islamic finance. Theoretically, this approach reinforces the view that the effectiveness of Islamic finance in a green economy is determined not only by Islamic principles themselves, but also by institutional alignment between the financial system and development policies.

The fourth contribution is the enrichment of Islamic finance theory through a risk-based sustainable development perspective. Islamic finance literature often emphasizes fairness and ethics, but relatively under-elaborates on the risk management dimension in the context of climate change and the energy transition.<sup>60</sup> This research demonstrates that the green economy transition carries systemic risks—fiscal, financial, and institutional—that cannot be addressed solely through debt-based financing approaches. Theoretically, these findings support the argument that the principle of risk-sharing in Islamic finance is not only a normative value but also a relevant economic mechanism for managing green transition risks. Thus, this research contributes to the development of Islamic green finance theory that places risk management at its core, not merely a derivative implication.

The fifth contribution of this research is the sharpening of the concept of sustainable Islamic finance as a bridge between the fiscal and real sectors. Green economy literature often separates fiscal analysis (green state budgets, tax incentives) from financial analysis (green bonds, green banking).<sup>61</sup> This research enriches the theoretical framework by demonstrating that Islamic finance can serve as a bridge between green fiscal policy and the financing needs of the real sector, particularly through instruments that combine commercial and social financing (zakat, productive waqf). This concept provides a theoretical contribution to the blended finance discourse by adding a sharia dimension as a basis for social legitimacy and long-term sustainability.

Overall, this research's theoretical contribution lies in the development of an integrative green economy-Islamic finance framework contextualized in Indonesia, emphasizing three key points: (1) shifting from normative conformity to structural functions; (2) positioning Islamic finance as a relevant transitional financing mechanism for MSMEs and the real sector; and (3) integrating national policy analysis into green economy and Islamic finance theory. Thus, this research not only enriches the academic literature but also provides a more realistic theoretical foundation for the development of sustainable Islamic finance policies in developing countries.

## CONCLUSION

This research confirms that the green economy in Indonesia has gained strong legitimacy within the national development policy framework. However, the effectiveness of its implementation is still largely determined by the readiness of the financing system. In this context, Islamic finance has strategic potential to contribute more substantively to supporting the transition to an inclusive and sustainable green economy. The research findings indicate that the current role of Islamic finance remains dominant at the normative and macro levels, primarily through instruments such as green sukuk, while its involvement in financing the real sector and green MSMEs remains limited.

This research also identifies that the main challenges to integrating Islamic finance and the green economy are structural, including a large green financing gap, a mismatch in the design of financing

---

<sup>59</sup> Awalludin Taufiq, "The Role of Islamic Finance in Advancing Green EcoNomic Development in Indonesia," *Jurnal Ilmiah EkoNomi Islam* 11, No. 1 (2025).

<sup>60</sup> Ferry Syarifuddin, "Towards Green EcoNomy Transformation through Islamic Green Financing: Managing Risk and Fostering Sustainable Growth for the Real and Financial Sectors," Bank Indonesia Working Paper WP/05/2022.

<sup>61</sup> Faizi Faizi, Airlangga Surya Kusuma, dan Purwanto Widodo, "Islamic Green Finance: Mapping the Climate Funding Landscape in Indonesia," *International Journal of Ethics and Systems* 40, No. 4 (2024).

instruments with the characteristics of business actors—particularly MSMEs—and the systemic risks inherent in the energy transition and changes in economic structure. These conditions demonstrate that the success of a green economy cannot rely solely on fiscal policy or environmental commitments, but requires a financing architecture that is capable of sharing risks, is long-term oriented, and directly connected to the real sector.

Theoretically, this research contributes by shifting the discourse on Islamic finance from merely aligning its values with the green economy to its functional role as a transition financing mechanism. By placing Islamic finance within the context of national policies and real development needs, this study confirms that the integration of green economy and Islamic finance in Indonesia is not only possible but also necessary to bridge the financing gap and ensure long-term development sustainability.

## REFERENCES

- Afif, Ahmad. “Strategi Konsep Keuangan Berkelanjutan (Sustainable Finance) Perbankan Syariah Di Indonesia.” Doctoral thesis, Fakultas Ekonomi dan Bisnis UIN Jakarta, 2023. <https://Repository.Uinjkt.Ac.Id/Dspace/Handle/123456789/72583>.
- Aini, Andini Nurul, Citra Sukmadilaga, Dan Erlane K. Ghani. “Green Bonds, Investor Attention And Stock Market Reaction: Evidence From Asean Countries.” *International Journal Of Energy Economics And Policy* 13, No. 6 (10 November 2023): 334–43. <https://Doi.Org/10.32479/Ijeep.15162>.
- Aini, Bunga Quratul. “Analisis Prinsip-Prinsip Environmental, Social And Governance (Esg) Pada Operasional Bsi Stabat Kh Zainul Arifin.” *Jurnal Ilmiah Ekonomi Islam* 10, No. 2 (15 Juli 2024): 1455–65. <https://Doi.Org/10.29040/Jiei.V10i2.13309>.
- Aminah, Aminah, Dan Yusriyadi Yusriyadi. “Implementasi Program Industri Hijau Dalam Rangka Kebijakan Penurunan Emisi Gas Rumah Kaca.” *Bina Hukum Lingkungan* 3, No. 1 (2018): 63–80. <http://Bhl-Jurnal.Or.Id/Index.Php/Bhl/Article/View/81>.
- Azman, Fahrizi Noer Fajar. “Analisis Penerapan Sustainable Finance Berdasarkan Gri Standar Dan Pojk Nomor 51/Pojk.03/2017 Pada Laporan Keberlanjutan Perusahaan Sektor Perbankan,” 2019. <https://Repository.Unpar.Ac.Id/Handle/123456789/Repository.Unpar.Ac.Id/Handle/123456789/9417>.
- Chandra, Julius Adi Chandra, Rian Sacipto, Dan Muktiono Muktiono. “Analisis Peranan Pemerintah Terhadap Praktik Greenwashing Dalam Strategi Investasi Keuangan Berkelanjutan Berbasis Esg.” *Jurnal Panorama Hukum* 7, No. 2 (31 Desember 2022): 138–46. <https://Doi.Org/10.21067/Jph.V7i2.7584>.
- Fadliyat, Yenni, Dan Ety Murwaningsari. “Kinerja Limbah Dan Ketentuan Lingkungan Terhadap Pengungkapan Lingkungan Dengan Pertumbuhan Hijau Sebagai Pemoderasi.” *Jurnal Ekonomi Trisakti* 3, No. 2 (1 September 2023): 3025–34. <https://Doi.Org/10.25105/Jet.V3i2.17930>.
- Gunawan, Erpan, J. Jusniar, Dan Kellin Rossa Mariani. “Peran Ekonomi Syariah Dalam Mendorong Pertumbuhan Ekonomi Hijau Dan Berkelanjutan.” *Jurnal Ekonomi & Bisnis* 12, No. 2 (31 Agustus 2024): 255–62. <https://Doi.Org/10.58406/Jeb.V12i2.1741>.
- Hayati, Neneng, Erwin Yulianto, Dan Syafdinal. “Peranan Keuangan Berkelanjutan Pada Industri Perbankan Dalam Mendukung Sustainable Development Goals: Peranan Keuangan Berkelanjutan Pada Industri Perbankan Dalam Mendukung Sustainable Development Goals.” *Jurnal Akuntansi Bisnis Dan Ekonomi* 6, No. 1 (30 September 2020): 1633–52. <https://Doi.Org/10.33197/Jabe.Vol6.Iss1.2020.473>.
- Humaida, Nida, Miftahul Aula Sa’adah, Huriyah Huriyah, Dan Najmunnur Hasanatun Nida. “Pembangunan Berkelanjutan Berwawasan Lingkungan (Sustainable Development Goals) Dalam Perspektif Islam.” *Khazanah: Jurnal Studi Islam Dan Humaniora* 18, No. 1 (16 Juni 2020): 131–54. <https://Doi.Org/10.18592/Khazanah.V18i1.3483>.
- Karim, Kurniati, Firdaus Firdaus, Ali Ramatni, M. Yusuf Bahtiar, Fredrik Bastian Kawani, Dan Dhiraj Kelly Sawlani. “Ekonomi Hijau Dan Pembangunan Berkelanjutan.” *Indonesian Research Journal On Education* 4, No. 4 (28 Agustus 2024): 3053–60. <https://Doi.Org/10.31004/Irje.V4i4.1550>.

- Kitchenham, Barbara, O. Pearl Brereton, David Budgen, Mark Turner, John Bailey, Dan Stephen Linkman. "Systematic Literature Reviews In Software Engineering – A Systematic Literature Review." *Information And Software Technology* 51, No. 1 (Januari 2009): 7–15. <https://doi.org/10.1016/j.infsof.2008.09.009>.
- Lame, Guillaume. "Systematic Literature Reviews: An Introduction." *Proceedings Of The Design Society: International Conference On Engineering Design* 1, No. 1 (Juli 2019): 1633–42. <https://doi.org/10.1017/dsi.2019.169>.
- Mauliyah, Nur Ika, Hikmatul Hasanah, Dan Miftahul Hasanah. "Potensi Pengembangan Green Sukuk Dan Aspek Hukum Di Indonesia." *Ekonomica Sharia: Jurnal Pemikiran Dan Pengembangan Ekonomi Syariah* 8, No. 2 (6 Februari 2023): 221–34. <https://doi.org/10.36908/esh.v8i2.701>.
- Mubarok, Sofi. "Islam Dan Sustainable Development: Studi Kasus Menjaga Lingkungan Dan Ekonomi Berkeadilan." *Dauliyah: Journal Of Islam And International Affairs* 3, No. 1 (5 Maret 2018): 129–46. <https://doi.org/10.21111/dauliyah.v3i1.1872>.
- Mulyani, Hendarti Tri Setyo, Dan Caecilia Octalica. "Keterkaitan Sustainability Report Dengan Kesiapan Implementasi Regulasi Pemerintah Melalui Peraturan Presiden No. 98 Tahun 2021 Tentang Penyelenggaraan Nilai Ekonomi Karbon." *Jurnal Media Akuntansi (Mediasi)* 6, No. 1 (30 September 2023): 79–86. <https://doi.org/10.31851/jmediasi.v6i1.13175>.
- Mutmainah, Amir Hamzah, Dan Galuh Mustika Agrarini. "Green Economy Perspektif Ekonomi Syari'ah Dalam Meningkatkan Kesejahteraan Masyarakat." *Al-Muttaqin : Jurnal Studi, Sosial, Dan Ekonomi* 5, No. 2 (26 Juni 2024): 111–19. <https://staisam.ac.id/jurnal/index.php/almuttaqin/article/view/188>.
- Purwanto, Hery. "Integrasi Prinsip Esg (Environmental, Social, Governance) Dalam Perbankan Syariah." *Studia Economica : Jurnal Ekonomi Islam* 10, No. 2 (12 November 2024): 240–50. <https://doi.org/10.30821/se.v10i2.21738>.
- Rohaini, Jannatul Rohaini Jannatul, Adinda Rifantini, Dan Mashudi. "The Role Of Government Policy In The Development Of Green Sukuk In Indonesia: Peran Kebijakan Pemerintah Dalam Pengembangan Green Sukuk Di Indonesia." *Al-Mahkamah: Jurnal Hukum, Politik Dan Pemerintahan* 1, No. 3 (2024). <https://journal.syamilahpublishing.com/index.php/mahkamah/article/view/380>.
- Romli, Mohammad. "Integrasi Prinsip-Prinsip Ekonomi Syariah Dalam Pengembangan Ekonomi Hijau (Green Economy) Di Indonesia." *Ekomadania : Journal Of Islamic Economic And Social* 8, No. 1 (11 September 2024): 1–14. <https://ejournal.kopertais4.or.id/madura/index.php/ekomadania/article/view/7471>.
- Safitri, Amelia Nur. "Analisis Komparatif Kinerja Keuangan Perusahaan Yang Telah Terdaftar Di Bursa Efek Indonesia Antara Sebelum Dan Sesudah Mendapatkan Penghargaan Industri Hijau." Universitas Gadjah Mada, 2023. <https://etd.repository.ugm.ac.id/penelitian/detail/230944>.
- Scholtens, Bert. "Finance As A Driver Of Corporate Social Responsibility." *Journal Of Business Ethics* 68, No. 1 (24 Oktober 2006): 19–33. <https://doi.org/10.1007/s10551-006-9037-1>.
- Soraya, Annisa Dinda. "Kebijakan Investasi Hijau Dalam Perundang-Undangan Indonesia Sebagai Upaya Penurunan Emisi Grk Nasional Menuju E-Ndc 2030." *Unes Law Review* 6, No. 2 (15 Desember 2023): 5321–33. <https://doi.org/10.31933/unesrev.v6i2.1362>.
- Susanto, Eddy, Dan Ni Kadek Sirnawati. "Perilaku Keuangan Berkelanjutan: Dampak Investasi Sosial Dan Lingkungan." *Syntax Idea* 5, No. 12 (2023): 2604–19. <https://doi.org/10.46799/syntax-idea.v5i12.2851>.
- Susanto, Imam, Dan Robi Ulpa. "Analisis Kesiapan Implementasi Pajak Karbon Di Indonesia." *Transparansi : Jurnal Ilmiah Ilmu Administrasi* 6, No. 2 (2023): 213–20. <https://doi.org/10.31334/transparansi.v6i2.3450>.
- Taghizadeh-Hesary, Farhad, Ed. *Islamic Finance And Sustainability: A Research Companion*. Routledge Research Companions In Business And Economics. Abingdon, Oxon ; New York, Ny: Routledge, 2025.
- Taufiq, Awalludin Taufiq, Ikin Asikin, Aditya Dharmawan, Dan Inna Khoridatul Bahiyah. "Peran Keuangan Syariah Dalam Memajukan Pertumbuhan Ekonomi Hijau Di Indonesia." *Jekis: Jurnal*

- Ekonomi Islam 2, No. 3 (13 Desember 2024). <https://Ejournal.Stai-Mifda.Ac.Id/Index.Php/Jekis/Article/View/693>.
- Wibowo, Richard Jatimulya Alam, Dan Rasji. "Tinjauan Kebijakan Hukum Insentif Perpajakan Pada Sektor Energi Dan Transportasi Untuk Mendukung Net Zero Emission Tahun 2060 Di Indonesia." *Jurnal Pajak Indonesia (Indonesian Tax Review)* 7, No. 1 (7 Juli 2023): 91–107. <https://doi.org/10.31092/jpi.v7i1.2193>.
- Widiastuti, Tika, Arie Prasetyo, Anidah Robani, Imron Mawardi, Rida Rosida, Dan Muhammad Ubaidillah Al Mustofa. "Toward Developing A Sustainability Index For The Islamic Social Finance Program: An Empirical Investigation." Disunting Oleh Abdul Aziz Khan Niazi. *Plos One* 17, No. 11 (22 November 2022): E0276876. <https://doi.org/10.1371/journal.pone.0276876>.
- Zahra, Inas Afifah. "Analisis Metode Istinbath Hukum Fatwa Dewan Syariah Nasional Majelis Ulama Indonesia Tentang Sovereign Green Sukuk." *Ar Rasyiid: Journal Of Islamic Studies* 1, No. 1 (2023): 13–22. <https://doi.org/10.70367/arrasyiid.v1i1.3>.