



Policy Hotspots for Islamic Green Finance: Navigating the Global Path to Economic Sustainability

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ABSTRACT

This study examines the implementation of Islamic green finance through a policy hotspot framework that emphasizes synergy among regulators, Islamic financial institutions, and business actors within the green financing ecosystem. Using a qualitative library-based method with normative, conceptual, and content analysis approaches, this research analyzed secondary data from reports and studies published by the United Nations Environment Programme (UNEP), IMF, World Bank, ICMA, UNDP, IPCC, EIU, and relevant prior studies from 2018 to 2025. The data focused on the development of green finance and Islamic green finance in Europe, Asia, and selected Islamic countries, including Saudi Arabia, the United Arab Emirates, Indonesia, and Malaysia. Based on post-Paris Agreement developments (2018–2022), this study proposed an Islamic green finance model for house building as a policy hotspot to navigate the global path toward sustainable development with social, economic, and environmental impacts. The proposed model consists of four key pillars: (1) Islamic values and principles, including *maqāṣid al-sharī'ah*, justice (*adl*), and balance (*mizan*); (2) Islamic financial instruments such as green sukuk, productive zakat, cash waqf, *murabahah*, and green *ijarah*; (3) regulatory and policy support involving green taxonomy, central banks, financial authorities, and ulema councils; and (4) integrated policy implementation grounded in sharia principles. This model is expected to serve as a reference for Indonesia and other countries in developing inclusive and sustainable Islamic green finance.

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INTRODUCTION

In 2018, several countries with the highest volumes of green bond issuance, including the United States, China, and France, ranked among the top issuers, accounting for 47% of global issuance. In 2018, US green bond issuance reached USD 34.1 billion, China USD 30.9 billion, and France USD 14.2 billion (Güçlü, 2019). Global factors play a role in determining the relationships among green, sharia, and conventional financial markets, with the fragmentation of commitments more clearly reflected in the implied volatility of stock, energy, and gold prices (Karim & Naeem, 2022).

According to the annual Global Islamic Finance Report, the total value of assets in the Islamic finance industry has reached an impressive figure. It demonstrates that the Islamic economy is not merely local or sectoral, but has penetrated and integrated into the global financial system. The growth of the Islamic economy is not limited to Muslim-majority regions (Noviarita et al., 2021). In an international context that is increasingly paying attention to the environmental and social impacts of every economic activity, the Islamic financial sector has an excellent opportunity to play a more active role in adopting Environment, Social, and Governance (ESG) principles (Nurmalika et al., 2025). An economy rooted in Islamic ethical values, Islamic economics brings a unique perspective. It has the potential to significantly impact the creation of a more inclusive and sustainable financial system (Bilgies et al., 2023).

Sharia economics, as an attractive alternative, shifts the traditional paradigm by emphasizing fairness, sustainability, and balance in business and financial practices (Mufid, Moh, 2021). Environmental degradation is a significant and worsening problem, and there is a clear need to clean up this toxic environment with a clear focus on green finance. All of these adverse environmental consequences have a corresponding negative impact on ensuring human health, which is the broader goal of human life. The environment is a public, not a private, matter, and it is no secret that humanity is currently facing an environment that is inconsistent with its goal of a better life (Rafiq et al., 2022). The only way to ensure long-term prosperity is to leverage green finance. Green finance is a way to compare environmental conditions with the desires and needs of all living things. Green finance also reflects the impacts of climate change and pollution on human life and demonstrates the social benefits and long-term returns of such financing (Bhattacharyya, 2022).

The climate crisis and the transition to a green economy have spurred the development of green finance instruments across countries. Finance plays a crucial role in enabling the transition to a low-carbon, climate-resilient economy. The Paris Agreement itself commits to aligning financial flows with pathways towards low greenhouse gas emissions and climate-resilient development. However, numerous studies show that substantial financial gaps remain to achieve sustainable economic goals (Buchner et al., 2019). Green finance development is more effective if all sectors adopt the same national policy simultaneously (Zhang, Y. and J. Liu, 2020). All economic sectors, including agriculture, industry, and services, should follow the same national strategy. By encouraging rural regeneration, green finance should be integrated into environmentally friendly and ecologically sustainable projects. In addition, the government should target high environmental quality and encourage other sectors through various financial instruments to accelerate green development. Therefore, the characteristics of green finance development are considered very important (Bashir et al., 2020).

The development of green finance has focused on theoretical frameworks, production functions, and the role of technology in the economy. Environmental quality must be improved because sustainable development is a significant concern in today's world (Nasim et al., 2020). There is a need to save the environment for future generations. Environmental quality determines the quality of life. The costs of advanced industries are increasing, and pollution in various forms affects all living things. Environmental degradation is a significant and worsening problem, and there is a clear need to clean up this toxic environment with a clear focus on green finance. All of these adverse environmental consequences have a corresponding negative impact on ensuring human health, which is the broader purpose of human life. The environment is a public, not a private, matter, and it is no secret that humanity is currently facing an environment that is inconsistent with its goal of a better life (Rafiq et al., 2022).

The results of the literature survey show that most research on sukuk is empirical, and sukuk is ignored chiefly; however, empirical evidence indicates that green sukuk is one of the newest innovative products in the Islamic financial sector (Abdullah, MS, & Keshminder, JS, 2022). In Indonesia, green sukuk is a normative legal alternative for project financing for infrastructure development (Handayani, 2020). Sukuk is part of Islamic Green Finance, but it

differs significantly from conventional sukuk. Vulnerable to interest rate fluctuations. Sharia green sukuk are considered a better option than conventional loans. This success shows that the principles of Islamic economics have an attractiveness and competitive advantage that can contribute to creating a fairer financial system (Azmi, Naelul, 2020). The integration of Islamic economics not only affects market growth and the expansion of the Islamic financial sector, but also promises a complete change in the business and financial paradigm (Soemitra & Andri, 2012). The sustainability of Islamic economics is not focused solely on financial profit, but also on social and environmental impacts (Al-Mustafa & Muhammad, 2023), integrating Islamic principles into the financial system. Islamic finance focuses on the creation of sustainable social value rather than solely on material profits (Karimullah, 2025).

In the concept of Islamic economics, banking is expected to be a party that participates in promoting three elements, namely social welfare, economic growth, and environmental sustainability, in accordance with navigation. Maqashid Sharia protects the soul (*hifdz al-nafs*), maintains religion (*hifdz al-din*), keeps your wits (*hifdz al-aql*), guards property (*hifdz al-maal*), and takes care of the offspring (*hifdz al-nasl*). The basic objective of the Islamic financial sector is to achieve long-term benefits and to be constantly involved in activities beneficial to society (Karina, LA, 2019). Islamic finance and social development goals are carried out, demonstrating the relationship of social impact in SDGs (Lanzara, 2021). Sharia green finance can be applied to build a fair and sustainable financing ecosystem. Green finance in Sharia finance is manifested in Green Sukuk, a sovereign green sukuk fund that adheres to the five main aspects of sharia, protecting religion, life, intellect, descendants, and property. They also note that investors, such as governments and the UN, are becoming more environmentally conscious, which could encourage the issuance of green sukuk (Fitrah & Soemitra, 2022).

To support climate change programs, green sukuk issuance is prioritized to finance government projects that directly or indirectly contribute to achieving the SDGs agenda. Green sukuk, which has high development potential, faces several challenges. The green sukuk market has been plagued by a weak green taxonomy, difficulties in identifying green assets, and a time-consuming and costly process (Santoso, 2020). Several renewable electricity projects have encountered several major obstacles, including ministerial cooperation and local government capacity. Islamic philosophy views the environment holistically. Allah describes this philosophy as providing comprehensive guidelines for Muslims in maintaining

sustainable development. These principles include environmental responsibility, social justice, and wise resource management QS. Al-Baqarah:164, confirming that the synergy between religion and politics has been proven to influence policies in a country's economic development. The more polarized the ethical-religious and political belief systems are, the more they contribute to a country's economic development (Kian, L., 2018).

The imbalance between economic development and environmental preservation, the growing urgency of green finance in the global financial system, the enormous potential of Islamic finance to encourage ethical and sustainable investment, and the challenges of building an inclusive and equitable green Islamic financing ecosystem in Indonesia. Indonesia, with the largest Muslim population in the world, plays a strategic role in the growth of the global sharia economy (Mahargiyantie,2020). Concrete steps, such as the establishment of Islamic banks and the issuance of Islamic sukuk, have strengthened Indonesia's position as a leader in the Islamic economy (Misra et al, 2021). Based on the data and problems described above, it is necessary to formulate a conceptual problem of Islamic green finance that can be applied to build a fair and sustainable financing ecosystem, the main principles and instruments that support the implementation of Islamic green finance can be implemented well, and there is a need for a synergy model between regulators, Islamic financial institutions, and business actors in the green financing ecosystem. The results of the study on policy hotspots for Islamic green finance can navigate the global path towards economic sustainability and, of course, also provide helpful information for academics to add to the treasury of sustainable Islamic finance theory and, practically, to provide policy recommendations for regulators, Islamic banks, and investors.

The development of green finance has focused on theoretical frameworks, production functions, and the role of technology in the economy. Environmental quality must be improved because sustainable development is a primary global concern today (Nasim et al., 2022; Nisar et al., 2022). There is a need to preserve the environment for future generations. Environmental quality determines the quality of life. The costs of advanced industries are increasing, and pollution in various forms affects all living things. Green finance development is more effective if all sectors adopt the same national policies simultaneously (Zhang et al., 2022). All economic sectors, including agriculture, industry, and services, must follow the same national strategy. By encouraging rural regeneration, green finance should be integrated

into environmentally friendly, ecologically sound projects. Furthermore, the government should target high environmental quality and encourage other sectors through various financial instruments to accelerate green development. Therefore, the characteristics of green finance development are considered crucial (Lee and Min, 2015; Bashir et al., 2020).

The only way to ensure long-term prosperity is to leverage green finance. Green finance is a way to compare environmental conditions with the desires and needs of all living things. Green finance also reflects the impacts of climate change and pollution on human life and demonstrates the social benefits and long-term returns of such financing (Bhattacharyya, 2022). Sustainability in Islamic economics is not only focused on financial profit but also on social and environmental impacts (Muhammad, 2023). Integrating sharia principles into the financial system, sharia finance emphasizes creating sustainable social value rather than solely pursuing material profits (Suud, 2025). This success shows that the principles of Islamic economics have appeal and competitive advantages that can contribute to creating a fairer financial system (Naelul, 2020). The integration of Islamic economics not only affects market growth and the expansion of the Islamic financial sector, but also promises a complete change in the business and financial paradigm (Soemitra, 2012).

METHOD, DATA, AND ANALYSIS

This research is qualitative, based on a literature review. The approach was normative and conceptual, aiming to examine the study's basic concepts. Policy hotspots for Islamic green finance can navigate the global path towards economic sustainability. Islamic green finance can be applied to build a fair and sustainable financing ecosystem. The main principles and instruments that support the implementation of Islamic green finance can be effectively applied, and there needs to be a synergy model among regulators, Islamic financial institutions, and business actors in the green financing ecosystem.

Data collection was conducted through a documentation study, which involved reviewing various relevant documents and literature. This technique allowed researchers to explore data in depth from various written sources. The literature reviewed was selected based on its substantive relevance to the research objectives and its academic validity. Data were analyzed using content analysis, interpreting the meanings contained in texts and documents within the context of Islamic green finance. This technique was conducted

descriptively and qualitatively, through data organization, grouping of key themes, and drawing conclusions based on conceptual synthesis. This analysis aimed to build an integrative conceptual framework and create a model. The data used in this study comes from reports and studies from the United Nations Environment Programme, IMF, ICMA, World Bank, EIU, Panel on Climate Change report (IPCC), UNDP, which covers the period from 2018 to 2025. The data collected covers the development of Green Finance and Islamic Green Finance in Europe, Asia, and Islamic countries such as Saudi Arabia, the United Arab Emirates, Indonesia, and Malaysia.

RESULTS AND DISCUSSION

Green Finance

Green finance, according to the United Nations Environment Program (UNEP, 2023), is an economic system driven by investment to reduce emissions and pollution, increase energy efficiency, and maintain biodiversity. According to the World Bank (2020), Green finance is a banking approach to reducing negative environmental impacts by integrating environmental considerations into operations and financial decision-making. Meanwhile, the IMF (2022) views green finance as a means to finance environmentally friendly investments, in line with the goal of sustainable economic growth, which involves aligning economic, social, and environmental interests.

Green finance has become a hot topic as the current generation recognizes the importance of environmental sustainability (Che et al., 2021). Green finance is defined as the provision of financial services for environmental protection projects, namely, "a set of economic activities that revitalize the environment and optimize resource use" (Peng & Zheng, 2021), which includes energy sustainability, clean and safe energy, environmentally friendly transportation, and green building projects. If only the term "green" is considered, it refers to activities that reduce pollution, conserve natural resources, and promote sustainable development (Shan et al., 2018). The development of green finance includes providing credit to achieve a green, sustainable environment (Xie et al., 2024). Green finance encompasses green securities, green credit sources, green investment, and carbon finance.

From a broader perspective, it is believed that the development of green finance leads to the optimization of the entire economic structure by improving the quality of the supply

side, increasing awareness of the demand side, and maintaining growth (Zhang et al., 2021), development of green finance can enable entrepreneurs to innovate green products through green production processes, provide products in a way that lowers transaction costs, and promote products in a way that aligns with consumers. Green finance development will be more effective if all sectors adopt the same national policies simultaneously (Zhang et al., 2022). All economic sectors, including agriculture, industry, and services, must follow the same national strategy. The government should target high environmental quality and encourage other sectors through various financial instruments to accelerate green development. Therefore, the characteristics of green finance development are considered crucial (Lee & Min, 2015; Bashir et al., 2020). The development of green finance has focused on theoretical frameworks, production functions, and the role of technology in the economy. Environmental quality must be improved because sustainable development is a significant concern in today's world (Nasim et al., 2022; Nisar et al., 2022).

Green Finance in Asia

The related concepts of green finance, sustainable finance, climate finance, and low-carbon finance all refer to the use of financial resources (UNEP and World Bank Group, 2017, 83). Green finance is a narrower concept than sustainable finance, but broader than climate and low-carbon finance. Green finance can only be used to finance projects that provide environmental benefits, including climate change mitigation, climate change adaptation, and other ecological benefits. While there is no uniform definition for a 'green project,' the following projects are typically considered 'green' (ICMA, 2018).

Asia is key to the global transition to low-carbon development and a net-zero greenhouse gas emissions pathway, as well as to achieving the ambitious Paris climate goals. Both the pace and extent of power sector decarbonization are among the most significant policy challenges, with progress needed across all G20 countries, including Asia and major economies such as China, India, Indonesia, Japan, and South Korea. The challenge of the energy transition is particularly pressing in Asia, given its rapid economic growth and associated growth in energy demand, high reliance on coal-fired power plants (the region is the most coal-dependent), and ongoing concerns about energy security and energy access in developing Asian countries (Diaz et al., 2021). As in other regions, green finance has become a significant topic in Asian financial markets in recent years. There is growing awareness that

climate change and associated environmental degradation pose serious risks to economic activity and threaten macro-financial stability across the region. Many Asian countries are among the most vulnerable to climate change, which poses substantial physical risks to both the financial sector and public finances (Beirne et al., 2020; Volz et al., 2020). Most Asian economies are also exposed to significant transition risks due to the changes required in global energy and transportation systems. Therefore, integrating climate-related financial risks into financial decision-making is crucial.

According to Menon (2022), significant financial resources need to be mobilized across Asia for investments in sustainable, climate-resilient infrastructure, including energy, transport, waste management, and health, to achieve the Sustainable Development Goals (SDGs) and the goals of the Paris Climate Agreement. The Asian Development Bank estimates that developing Asia needs US\$1.7 trillion annually for climate-adapted infrastructure investments in transport, electricity, water and sanitation, and telecommunications. Clearly, the key now is to shift this infrastructure spending toward low-carbon, environmentally sustainable systems. The United Nations Economic and Social Commission for Asia and the Pacific estimates that an additional US\$1.5 trillion in annual investment is needed to achieve the Sustainable Development Goals (SDGs) by 2030 (UN ESCAP, 2019). This substantial infrastructure investment estimate reflects a significant and ongoing gap in global basic infrastructure investment globally, particularly in the region.

To align finance with climate and other sustainability goals, and ensure that risks and impacts are adequately accounted for, governments and financial authorities need to establish appropriate framework provisions. Interestingly, central banks and supervisors in developing Asian countries were among the first to introduce green finance policies or incorporate environmental risks into their prudential frameworks (Volz, 2019). Examples include several Asian countries developing green finance for sustainable economies, including China, Bangladesh, Vietnam, India, the Philippines, Malaysia, Indonesia, Singapore, Cambodia, and Thailand. China's monetary and financial authorities have initiated the development of green credit policies since 2007, including green finance practices, environmental testing for the banking sector, and guidelines for greening Chinese overseas investments. The central bank of Bangladesh was also a pioneer when it issued the 'Policy Guidelines for Green Banking' and 'Environmental Risk Management Guidelines' in 2011, which mandated environmental

risk management for both banking and non-banking financial institutions. The State Bank of Vietnam and the Central Bank of India developed policies to encourage green lending.

In the Philippines, the Central Bank recently launched a Sustainable Finance Framework, which sets expectations for banks to develop transition plans and integrate them into their corporate governance and risk management frameworks (Ariyapruchya & Volz, 2022). Bank Negara Malaysia has developed an industry-wide climate risk assessment exercise planned for implementation in 2024. This effort aligns with what central banks and supervisors in Asia have done to promote sustainable finance by engaging the financial industry through multi-stakeholder dialogues, capacity-building, and sustainable finance roadmaps (Ariyapruchya & Volz, 2022). Based on data and information from the Intergovernmental Panel on Climate Change (IPCC) report, implementing the results of the Paris Agreement to achieve this climate target will require green financing of US\$1.5 trillion per year until 2030. Two-thirds of global energy demand growth will occur in Asia's developing countries by 2040.

Therefore, increasing green financing in Asia is very necessary. To align finance with climate and other sustainability goals, and ensure that risks and impacts are adequately accounted for, governments and financial authorities need to establish appropriate framework provisions. Interestingly, central banks and supervisors in developing Asian countries were among the first to introduce green finance policies or incorporate environmental risks into their prudential frameworks (Volz, 2019). The State Bank of Vietnam and the Central Bank of India have developed policies to encourage green lending. In the Philippines, the central bank recently launched a Sustainable Finance Framework, setting expectations for banks to develop transition plans and integrate them into corporate governance and risk management.

Bank Negara Malaysia plans to conduct an industry-wide climate risk stress test in 2024. The Indonesian Financial Services Authority (OJK) established a multi-stakeholder task force in 2015 to promote the Sustainable Finance Roadmap through dialogue and professional capacity-building in sustainability. Singapore initiated its Statement of Intent on Sustainable Finance Principles in 2015. Cambodia began implementing a related framework in 2016. Thailand launched its Sustainable Banking Guidelines on Responsible Lending in 2019. These efforts illustrate how the Asian region is becoming a policy hotspot in green finance, promoting global sustainability. With the active engagement of central banks and financial

supervisors through multi-stakeholder dialogue frameworks, capacity building, and sustainability roadmaps, these steps aim to accelerate the transformation towards a sustainable, green economy (Ariyaprichya & Volz, 2022).

However, significant challenges remain in mainstreaming green finance in Asia. Despite its rapid growth, financial markets, both in Asia and elsewhere, remain focused on short-term returns and ignore long-term risks to nature and society. Therefore, all relevant actors, including governments, central banks and their supervisors, commercial banks, and non-bank financial institutions, need to step up their efforts to ensure that the financial sector becomes part of the solution to climate change and environmental challenges, rather than remaining part of the problem.

Alignment with SDGs

Maqāṣid Al-Sharī'ah provides five core objectives that map out the various SDGs goals, offering an ethical perspective and aiming for sustainable development. The literature finds broad convergence between the objectives of *Maqāṣid* and SDGs themes, suggesting that the *Maqāṣid* framework can complement and deepen SDGs implementation in a Muslim context (Nurcahyo, et al., 2024). The integration of Zakat and social work interventions aligns closely with the Sustainable Development Goals (SDGs), particularly SDGs 1 (No Poverty), SDGs 8 (Decent Work and Economic Growth), SDGs 10 (Reduced Inequalities), and SDGs 17 (Partnerships for the Goals). By combining faith-based financial mechanisms with professional social work practices, this approach addresses poverty holistically and sustainably through empowerment, social inclusion, and equitable resource distribution. The significant findings of this study reinforce the relevance of integrated Zakat–social work frameworks as a locally grounded yet globally relevant strategy that supports the achievement of the SDGs within Kano State's socio-economic context.

Table 1. Relationship between *Maqāṣid Al-Sharī'ah* Goals and SDGs

The Purpose of <i>Maqāṣid Al-Sharī'ah</i>	SDGs Linkages	Reason
Protecting religion (<i>hifz addin</i>)	SDGs 16 inclusive governance and institutions; cultural rights	Emphasis on freedom, pluralism, and values-based governance that supports social cohesion and participation

The Purpose of <i>Maqāṣid Al-Sharī'ah</i>	SDGs Linkages	Reason
Protecting life (<i>hifz annafs</i>)	SDGs 3 health, SDG 2 hunger, SDG 6 water	Prioritize the preservation of life and public health, in line with the targets of nutrition, water, and universal health coverage.
Protecting the mind (<i>hifz al-aql</i>)	SDGs 4 education, SDG 8 decent work	Focus on knowledge, capacity, and ethical reasoning supports quality education and productive employment.
Protecting the bloodline (<i>hifz annasl</i>)	SDGs 5 gender equality, SDG 1 poverty	Protecting family welfare and social reproduction, which intersects with gender objectives, poverty reduction, and social protection.
Protecting property (<i>hifz al-mal</i>)	SDGs 1 poverty, SDG 8 economic growth, SDG 10 inequality	Promote equitable resource management, responsible finance, and social safety nets that reflect the SDG economic targets.

Source: Author, 2025

Table 1 illustrates the conceptual alignment between the objectives of *Maqāṣid Al-Sharī'ah* and the Sustainable Development Goals (SDGs), demonstrating that Islamic ethical principles are inherently compatible with the global sustainability agenda. Each *Maqāṣid* objective corresponds to specific SDGs that address human well-being, social justice, and economic balance. The protection of religion (*hifz al-dīn*) aligns with SDGs 16 by promoting inclusive governance, cultural rights, and social cohesion rooted in moral values. The protection of life (*hifz al-nafs*) supports SDGs related to health, food security, and access to clean water, emphasizing the preservation of human life and public welfare. Protecting intellect (*hifz al-'aql*) reinforces quality education and decent work through knowledge development and ethical reasoning. The protection of lineage (*hifz al-nasl*) intersects with gender equality and poverty reduction by safeguarding family welfare and social continuity. Finally, the protection of property (*hifz al-māl*) aligns with economic growth, poverty alleviation, and reduced inequality by encouraging fair resource distribution and responsible financial practices. Overall, the table highlights how *Maqāṣid Al-Sharī'ah* provides a normative

framework that supports the achievement of the SDGs holistically and in a values-based manner.

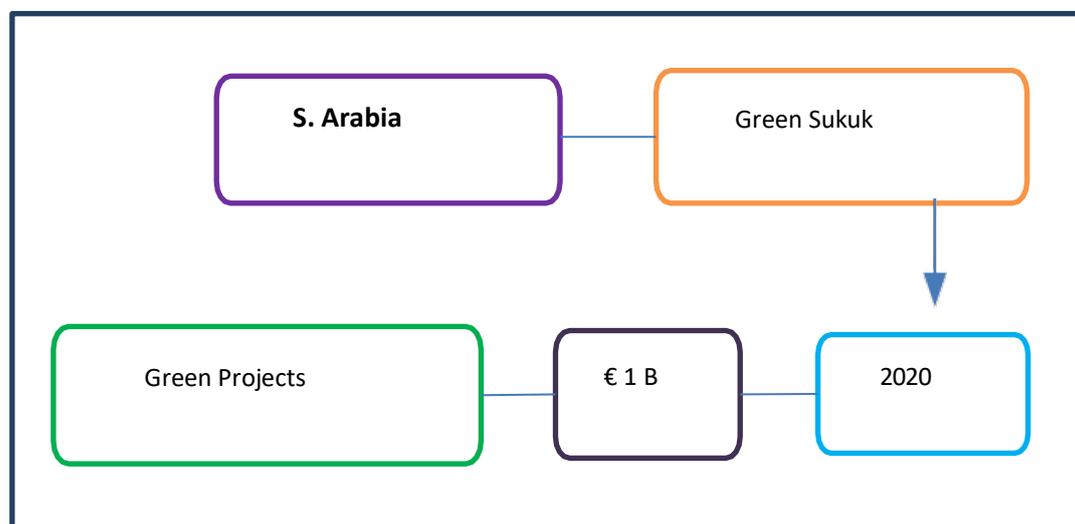


Figure 1. Green Sukuk in Saudi Arabia

Figure 1 illustrates the structural framework of Green Sukuk implementation in Saudi Arabia within the broader context of Islamic Green Finance. The diagram highlights the interaction between key stakeholders, financial instruments, and sustainability outcomes. Green Sukuk serves as a Sharia-compliant financing mechanism that mobilizes funds for environmentally sustainable projects, such as renewable energy, clean infrastructure, and climate-resilient development. The flow depicted in the figure shows how regulatory support, Islamic financial institutions, and project implementation entities are interconnected to ensure that funds raised through Green Sukuk are effectively channeled to green initiatives. Overall, the framework demonstrates Saudi Arabia's strategic use of Green Sukuk as a policy instrument to support environmental objectives, promote sustainable economic growth, and align national development goals with global sustainability agendas.

Green Sukuk Policy in Islamic Countries

Islamic bonds, often known as sukuk, are one of the most recently developed financial instruments (Fadzlurrahman, F., & Abubakar, L., 2019). Sukuk has become an essential instrument for raising funds in the global financial markets through arrangements that comply with Sharia principles. The following sukuk policies have been implemented in Islamic countries.

1. Green Sukuk in Saudi Arabia. The Saudi Arabian government wants to use these funds for green projects that use energy-efficiency methods and build renewable energy infrastructure. They use fossil fuels for power generation, with the highest energy consumption for air conditioning and water desalination. Sustainable development of such power plants requires significant funding. Therefore, the Saudi Arabian government aims to reduce emissions by developing renewable energy infrastructure (Rani et al., 2022).
2. Green Sukuk in the UAE. The United Arab Emirates has issued two Government Securities (GS) for investment in property projects. The first was issued on May 14, 2019, and the second on October 30, 2019. Both are estimated to be worth \$600 million. The proceeds from both GS will be used to develop two hotels, two offices, and 10 shopping malls. In line with their green strategy, they plan to use these funds (\$1.2 billion) to mitigate environmental impacts, including property certification levels, energy efficiency, greenhouse gas emissions reduction, annual energy savings, and annual water savings.

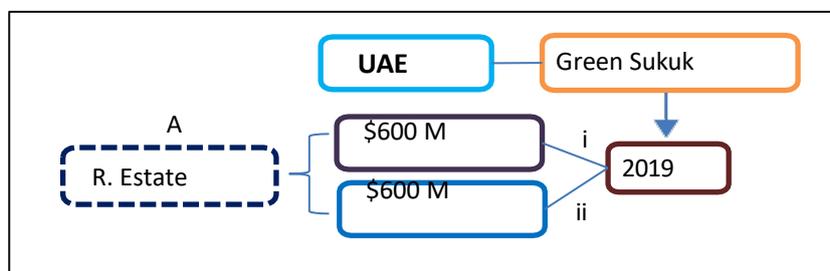


Figure 2. Green Sukuk in the UAE

Figure 2 illustrates the mechanism of Green Sukuk implementation in the United Arab Emirates (UAE), showing how Islamic financial instruments are structured to support environmentally sustainable projects. The figure generally depicts the flow of funds from investors to green projects via a Sharia-compliant sukuk structure, involving key stakeholders such as issuers, special-purpose vehicles (SPVs), regulators, and project beneficiaries. Funds raised from green sukuk are explicitly allocated to environmentally friendly sectors, including renewable energy, sustainable infrastructure, energy efficiency, and climate-resilient projects. The structure ensures compliance with Islamic principles, such as asset backing, risk sharing, and the prohibition of *riba*, while also adhering to green finance standards through project

screening, use-of-proceeds criteria, and impact reporting. In the UAE context, green sukuk play a strategic role in mobilizing ethical capital, supporting national sustainability agendas, and positioning the country as a global hub for Islamic green finance by integrating sharia principles with international environmental, social, and governance (ESG) frameworks.

They have stated that specific stretches will benefit from engineering, equipment, track construction, safety, damage, and other plan reassessments to achieve successful future outcomes (Majid Al Futtaim, 2020). This investment is allocated for two hotels (Aloft Hotel and Hilton Garden Inn), two offices (Majid Al Futtaim Tower 1 and 2), and ten shopping centers (City Center Almaza, Beirut, Fujairah, Me'aisem, Mirdif, Suhar, Mall of Egypt, My City Center Al Barsha, Al Dhait, and Sur).

3. Green Sukuk in Indonesia. Indonesia has seen broader adoption of government bonds (SUN) across sectors than Malaysia. The first SUN was issued in 2018 for \$750 million, making it the world's first sovereign bond. In 2019, there were two issuances of government sukuk (SUN) worth \$1.25 billion and \$103 million, respectively. Both Sukuk were also sovereign bonds. In 2020, two more government sukuk were issued, totaling \$750 million and \$381 million, respectively. These five SUNs form the framework for government sukuk issued to support renewable energy and create alternatives to reduce carbon emissions and promote sustainable energy consumption.

Indonesia has issued five Sovereign Green Sukuk with the aim of mitigating problems in five important sectors, namely renewable energy, green real estate, transportation, energy efficiency, renewable energy, energy from waste to energy, and waste management, as well as resilience to climate change for disaster-risk areas (Munir Syahrul, et.al, 2020). Although they faced some obstacles in communicating with government agencies, local governments, and project stakeholders, the positive side was that they received broad support through funds raised from GS (Karina, 2019). Indonesia has also emphasized the application of GS funding opportunities in the renewable energy sector and energy efficiency. Therefore, the Indonesian government has taken steps to reduce greenhouse gas emissions by 29% by 2030 and has submitted the plan to the UNFCCC (United Nations Framework Convention on Climate Change). To achieve this, the Ministry of Forestry has developed a plan for crucial sectors that need financing (UNDP, 2020).

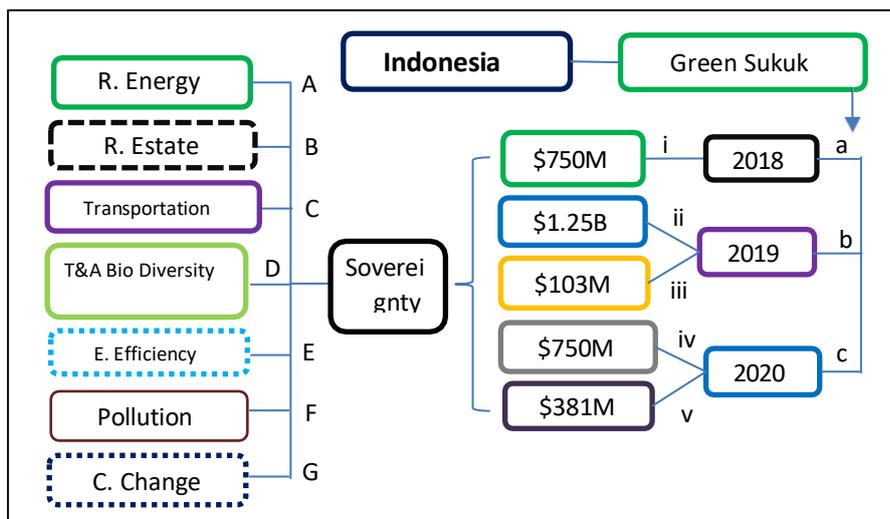


Figure 3. Green Sukuk in Indonesia

In Figure 3, five sectors require financial support, demonstrating significant need and urgency. The Indonesian government (a combination of the Ministries of Agriculture, Environment, Transportation, Home Affairs, Health, Industry, and others) has issued various plans listing the required funds, including the energy sector needs \$236 billion, the forestry sector needs \$5.6 billion, waste management groups need \$2.9 billion, the agricultural sector needs \$2.1 billion, and industrial processes and products across various industries require \$379 million. Since the Indonesian Ministry of Finance in 2019 separated activities and factors related to climate change, global warming, and a sustainable green environment, they planned to address many issues effectively through strategic cooperation.

Therefore, they developed priority plans. There were significant differences in funding allocation between 2018 and 2019, such as 2018: sustainable transport 62%, Energy Efficiency 6%, Renewable energy 8%, Waste to energy and waste management 7%, and Climate change resilience 17%. 2019: sustainable transport 48%, Energy Efficiency 27%, Renewable energy 5%, Waste to energy and waste management 9%, and Climate change resilience 11%. In 2020, the Ministry of Finance of the Republic of Indonesia allocated funds for transportation, with a clear focus on reducing air pollution. Inefficient energy consumption forces the government to spend heavily on subsidies. Other sectors can be allocated based on available funds. Priority is given to hydroelectric, solar, and bioenergy because they are the most important issues to be resolved. Ministry of Finance of the Republic of Indonesia, 2019. This effort is part of the Indonesian government's initiative to issue government securities (SUN). The government will

manage these funds effectively, and investors will receive a guaranteed return on their investment.

4. Green Sukuk in Malaysia. Malaysia has taken a significant initiative by issuing Government Securities (SBN) in the renewable energy sector (A) amounting to RM 250 million and RM 1 billion in 2017 alone. In addition, SBN worth RM2 billion has been approved for the green property concept (B). It shows that renewable energy and green property initiatives are necessary to realize a green environment. Furthermore, in 2018, two SBN reissues totaling RM 245 million and RM 240 million, respectively, were issued for the renewable energy sector. There is little difference between the two. In 2019, four SPNs were issued for two renewable energy projects (RM 17 million & RM 470 million) and two real estate projects (RM 445 million and RM 435 million). In 2020, a new issuance of Government Securities (SBN) for the renewable energy sector (RM260 million) was issued. It appears that Malaysia is experiencing significant issues in these two sectors, so ten SBN were issued to minimize factors affecting the Green Environment. Therefore, the question arises: why is Malaysia prioritizing only these two sectors, and what about the other sectors? Do they have different plans for other sectors? Because SBN needs to be expanded and can benefit other sectors as well (World Bank, 2020).

Green Sukuk in Malaysia represents a pioneering model for Islamic Green Finance, positioning the country as a global leader in Sharia-compliant sustainable financing. Malaysia was among the first jurisdictions to introduce a comprehensive regulatory framework for Green Sukuk through the Sustainable and Responsible Investment (SRI) Sukuk Framework, which provides clear guidelines on eligible green projects, governance standards, and reporting requirements. This framework enables the mobilization of Islamic capital market instruments to finance environmentally friendly initiatives such as renewable energy, green buildings, sustainable transportation, and climate-resilient infrastructure, while ensuring compliance with both Sharia principles and environmental sustainability criteria.

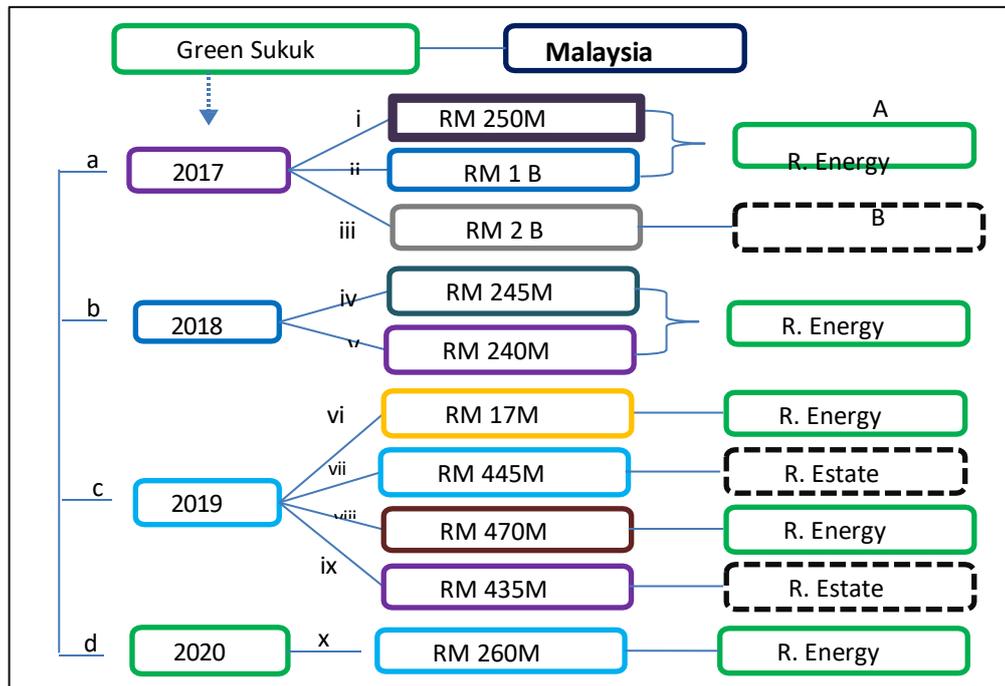


Figure 4. Green Sukuk in Malaysia

In Figure 4, seven issuers are investing in the Renewable Energy sector: five in photovoltaic solar power projects and the rest in hydroelectric power projects. The progress of most projects shows good performance, and they therefore obtain good ratings from rating agencies (UNDP, 2020). It is a healthy practice that makes investors feel comfortable with their investments and expect better returns. Property projects that issue Green Sukuk are oriented towards developing a green environment, including a healthy environment, waste management, water purification, energy consumption, the materials used in the project, quality, sustainability, and so on (Azhgaliyeva, 2020). The Paris Agreement on Climate Change was initiated in 2015, and the green bond market has since emerged. Green bonds have proven to be among the most commonly used sustainable investment instruments (Panetta, 2021). Conventional green bonds aim to secure loans as additional capital, with investors receiving interest or returns over a predetermined period. In contrast, green bonds focus primarily on financing environmentally friendly projects. Green bonds operate similarly to conventional bonds in terms of pricing, rating, processing, and execution (Abakah, 2023).

Meanwhile, in Islamic finance, bonds, known as sukuk, are one of the most recently developed financial instruments (Abubakar, 2019). Sukuk has become an important instrument for raising funds in the global financial market through arrangements that comply

with Sharia principles (Rani, 2022). The issuance of green bonds has proven to be a successful vehicle for developing green finance. Its popularity continues to increase, and the growth of green sukuk has helped promote the Islamic finance sector, one of which is in Malaysia (Liu et al., 2021) which has boosted Kuala Lumpur's position as an innovative hub for Islamic banking and finance. Factors such as legitimacy, competitiveness, and environmental responsibility play an important role in the issuance of green sukuk in Malaysia (Abdullah et al., 2022).

In Indonesia, sukuk Islamic securities are a key component of Islamic financial development, offering significant potential for absorbing public funds post-crisis. The development of Islamic capital market instruments, including Islamic stocks, sukuk, and mutual funds, has experienced rapid growth year after year. This rapid growth has undoubtedly impacted the development of the capital market in general and, in turn, the Indonesian economy. One strategic fiscal instrument used to support national economic recovery is the SBSN project. Development through SBSN in 2020 reached IDR 27.35 trillion. In 2021, SBSN project financing was allocated IDR 27.58 trillion, reaching 847 projects in 34 provinces. The SBSN project is a key pillar of the State Budget (APBN) for national infrastructure development and a key instrument in the national financial market (Kasnelly, 2021).

Indonesia is the world's first Green Sukuk issuer. Since its first issuance in 2018, Green Sukuk has been issued seven times over four years to finance eligible green sector projects or programs. Furthermore, to support the development of social investment and productive waqf, the Indonesian government also issued Cash Waqf Linked Sukuk (CWLS), combining Islamic finance and impact investment to advance the Sustainable Development Goals (SDGs). CWLS is the first hybrid Islamic financial instrument for fiscal purposes in Indonesia, integrating Islamic commercial finance and Islamic social finance (Musari, 2022). Islamic finance can play a significant role in addressing societal challenges and has the potential to contribute to achieving the SDGs through creative and productive financing methods. Unlocking the potential of Islamic social finance instruments such as waqf, zakat, and sadaqah will increase financial inclusion and financial sector stability, and ultimately enhance Islamic finance's contribution to the SDGs. Furthermore, integrating waqf and zakat with the financial sector can play a significant role in achieving the SDGs, including reducing the vulnerability of people on low incomes. The integration of the SDGs and *maqāṣid al-sharī'ah* should also be

considered to address the challenges facing the Islamic finance industry in implementing the SDGs (Laldin & Djafri, 2021).

In 2020, Saudi Arabia allocated 1 billion euros to green infrastructure development projects through the Green Sukuk financing scheme. Based on the data described above regarding Green Sukuk policies in Malaysia, Indonesia, Saudi Arabia, and the United Arab Emirates, it can be articulated that Islamic Green Finance through the Green Sukuk scheme in the Islamic financial industry, which began in 2018 and will continue until 2025, can be interpreted as the financial industry has made a real contribution to improving the fairness of sustainable development. The four largest Islamic countries have provided concrete examples and actions in developing and implementing a financial instrument called Green Sukuk (GS). It is evident in a 2020 World Bank report. This capital market instrument, which combines green and Islamic finance, was launched in 2017. The Green Sukuk, an Islamic Green Finance instrument, can serve as a viable model for governments in their decision-making processes for development budgets and public spending.

This effort is part of a strong drive for inspiration and motivation, in which this instrument expands through the creation of choices (Syahrul et al., 2020). However, it can also be the primary choice because this has been proven real for Islamic countries as a real example that Saudi Arabia, the United Arab Emirates, Indonesia, and Malaysia have done. This has also been clearly stated in research by Mudassar & Hakim (2020), the four Islamic countries have provided the option to innovate and invest in environmentally friendly projects, and have implemented and responded very seriously. To support this idea, the Islamic Finance Industry such as Malaysia continues to lead the industry by creating new ideas, verifying innovation techniques, continuously supporting the industry and organizing events to educate stakeholders (Amri, 2021). This has also been done in Indonesia which successfully issued the first SUN in the world in 2018 which managed to raise funds of US\$ 2.75 billion from three annual issuances (UNDP, 2020).

Green finance is conducted in line with six environmental objectives: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems. The related concepts of green finance, sustainable finance, climate finance, and low-carbon finance all refer to the utilization of

financial resources. Green finance can only be used to finance projects that provide environmental benefits, including climate change mitigation, adaptation, and other environmental benefits. Based on this study, financial sector policies designed with consideration of the SDGs and Maqasid al-Shariah are an ideal collaboration for financial systems in implementing government budget policies, which are certainly worth considering. These. These policies must still pay attention to four general policies as follows (D'Orazio, P, 2023).

This policy can enhance transparency and information policy, improve the efficiency and integrity of the financial system, and increase the accessibility of information, thereby strengthening the foundation for sound financial decisions. Prudential policy, these policies have been mainly implemented by central banks, in line with their broader mandate to maintain financial system stability. Credit allocation policy: SDG-related credit allocation policies directly drive credit measures and investments. Such policies can be adopted by a variety of policymakers, including governments, but have been adopted most widely by central banks. The goal of monetary policy is to maintain price stability. SDG-related monetary policy generally aims to reflect better climate risks in standard monetary policy instruments, such as collateral frameworks and central bank portfolios.

Green finance is a way to increase financial flows (banking, microcredit, insurance, and investment) from the public, private, and nonprofit sectors to promote sustainable development priorities (Ahmad, M, 2022). Thus, green finance plays a crucial role in achieving sustainable development goals that consider green growth. Therefore, inclusive green growth can be achieved through inclusive green finance, which helps mitigate and build resilience against the negative impacts of climate change. Based on the concept of inclusive green finance, financial institutions are mandated to provide vital financial support to those facing uncertain environments by promoting green products in savings, credit, insurance, money transfers, and new digital delivery channels. Therefore, overall investment strategies must shift towards green, as they play a key role in enabling the implementation of the Sustainable Development Goals (SDGs), particularly SDG 1 (no poverty), SDG 7 (affordable and clean energy), and SDG 13 (climate action), all of which intentionally promote green growth.

The general goal of inclusive green growth is to expand access to sustainable socio-economic opportunities for more people, regions, or countries while protecting vulnerable

groups. All this is done within an environment of justice, equality, and political plurality (Dmuchowski, 2021). Promoting inclusive green growth is an important tool for achieving sustainable development goals, as it addresses the three pillars of sustainable development: economic, environmental, and social sustainability. However, we cannot assume that green growth is inherently inclusive, as it is difficult to maximize benefits and minimize costs for people in poverty, who are vulnerable to environmental degradation (Naz, 2020).

Poor people are expected to use natural resources to survive (Cai et al., 2021), the ongoing loss of nature has become a systemic risk for the global economy; the New Nature Economy report found that more than half of the world's GDP depends on nature (UNEP, 2021), evidently, 12 million hectares of land have been degraded due to unsustainable use every year, and human actions have significantly altered three-quarters of land and two-thirds of marine environments. Among the structural barriers and systemic rigidities that hinder this transition, one of the most important techniques to open a sustainable path is to generate green finance, which can drive green growth (UNEP, 2022). These facts pose a practical challenge that requires substantial financing for sustainability. Research by Zenghelis (2012) indicated that one of the most significant issues in green finance is the poor coordination between financial and environmental policies, which is poorly regulated. This is shown in a cross-country study conducted by Polzin (2015), which found that financial institutions are unable to report and disclose their environmental risks. This needs to be improved, and environmental risks must be disclosed in the financial statements of the banking sector, because banking sector assets account for a significant portion of global financial assets (Giramkar, 2018).

The green finance development gap can be minimized by encouraging global coordination among all relevant stakeholders (Lv et al., 2021). However, existing green finance methods (i.e., climate finance, climate credits, green bonds, and green funds) have proven to be inadequate strategies to fill the financing gap, as their financing methods are similar and heavily dependent on financial institutions and governments (e.g., issuing green bonds and providing green credits). Therefore, the enhancement of green finance needs further consideration. Investing in climate change requires significant financial commitment; estimates range from USD 1.6 to 3.8 trillion per year for the supply side of the global energy system until 2050. In developing countries alone, the financing gap to achieve the SDGs is

estimated at USD 2.5 trillion per year (Clark, 2018). Domestic credit from banks is insufficient to achieve this level of green financing. Capital mobilization for green investment remains limited due to several microeconomic challenges, such as the mismatch in maturity between long-term green investments and relatively short-term investment horizons.

A significant green finance gap exists globally. Previous studies have highlighted a green finance gap, suggesting that countries must increase private investment in green projects. However, the risk-return ratio trend and regulatory issues are key barriers to private investors' participation in green investments (Gesalegn & Tangl, 2022). Public financial policies for sustainable development still face various problems; many challenges remain. Amid the existing problems, issues, and challenges, there are also opportunities for Islamic green finance, which remains an alternative financing and budgeting approach for sustainable development and is being considered by policymakers in many countries, including Indonesia. Islamic Green Finance is a form of *maqāṣid al-sharī'ah*, and Islamic principles show strong conceptual convergence with the SDGs, which are closely related to human dignity, justice, governance, and welfare. Challenges and opportunities can be overcome by many countries that focus on sustainable Green Finance; especially in this case, Islamic Green Finance can be considered as a navigational tool for decision-making in formulating public financial policies. Challenges in its implementation still exist (Nurcahyo et al., 2024).

Standardization Gaps, Institutional Capacity, and Regulatory Fragmentation

Based on previous studies conducted by Zenghelis (2012), Polzin (2015), Clark (2018), Giramkar (2018), Karina (2019), Dmuchowski (2021), Ariyapruchya & Volz (2022), UNEP (2022), Gesalegn & Tangl (2022), research results provide a model as a navigation home to become part of the public finance policy hotspots for the government, especially for policymakers in formulating or formulating Islamic Green Finance policies in Indonesia. The model referred to in this study is shown in the Figure.

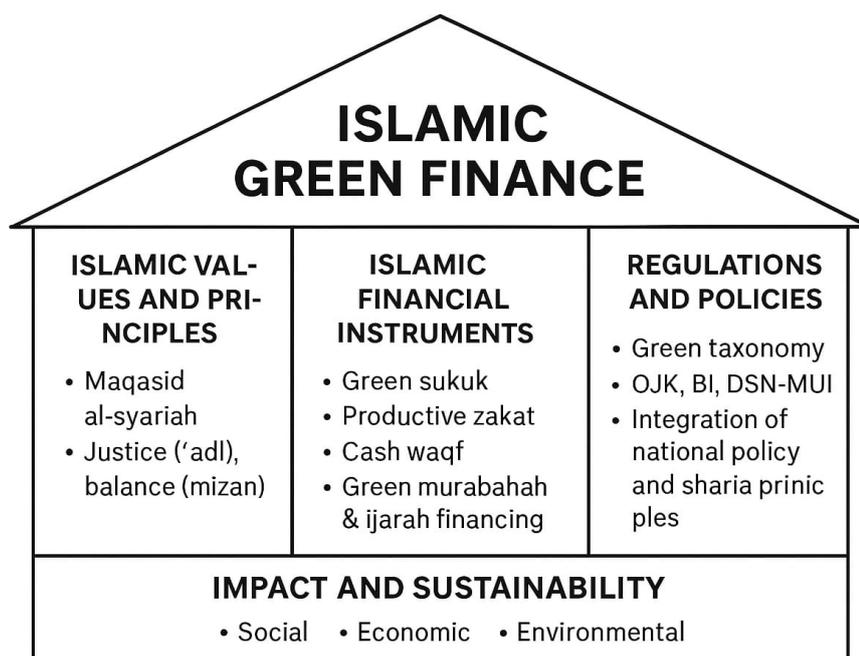


Figure 5. Model Policy Hotspots for Islamic Green Finance: Navigating the Global Path to Economic Sustainability

Figure 5 from this model suggests that building Islamic Green Finance houses in Indonesia can even become a house. For the consideration of other countries worldwide, Green Finance is built inclusively better to serve environmental, social, and economic interests, and is just and for the benefit of humanity. The model in the study, policy hotspots for Islamic green finance, navigates the global path towards economic sustainability, with social, financial, and environmental impacts. There are three hotspots worth considering: Islamic values and principles; *maqāṣid al-sharī'ah*; and justice (*adl*) and balance (*mizan*). Financial instruments include green sukuk, productive zakat, cash waqf, murabahah, and green ijarah. Regulation and policy: Green taxonomy, Central Bank, Financial Services Authority, Ulema Council, Policy integration, Sharia principles, religiosity.

CONCLUSION AND SUGGESTIONS

Islamic green finance is a form of *maqāṣid al-sharī'ah*, and Islamic principles show strong conceptual convergence with the SDGs, which are closely related to human dignity, justice, governance, and welfare. Challenges and opportunities can be overcome by many countries

that focus on sustainable Green Finance; in this case, Islamic Green Finance can be considered in formulating public financial policies and in navigating decision-making. Green Finance is built inclusively to serve better environmental, social, and economic interests that are just and beneficial to humanity worldwide. House-building model as a policy hotspot, a tool to navigate the global path towards economic sustainability, with social, financial, and environmental impacts, based on the results of previous research from 2018 to 2022, after the 2015 Paris Agreement. Existing literature studies and surveys still find many findings. Cross-country studies conducted show that financial institutions are unable to report and disclose environmental risks. Financial markets, both in Asia and elsewhere, are still focused on short-term returns and ignore the long-term risks to nature and society. Significant green finance gaps remain globally. Risk-return ratios and regulatory issues are key barriers hindering private investors from investing in green initiatives. Communication with government agencies, local governments, and project stakeholders remains a common obstacle. Structural barriers and systemic rigidities hinder the technical transition, hindering the development of green finance.

Financial industry regulation, with a lack of coordination between financial and environmental policies, remains problematic. Investing in climate change requires a significant financial commitment. This needs to be addressed, and environmental risks must be disclosed in the financial statements of the banking sector. The general objective of inclusive green growth is to expand economic growth by increasing access to sustainable socio-economic opportunities for more people, regions, or countries, while protecting vulnerable groups. All this is done in an environment of justice, equality, and political plurality.

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