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## Enhancement of the Role of Islamic Social Finance for Renewable Energy Project Financing in Indonesia

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### **Abstract:**

*Renewable energy, being environmentally friendly, needs to see increased utilisation due to the detrimental effects of fossil fuel usage on human life. The government has promoted the Energy Transition programme, yet the adoption of renewable energy remains limited, primarily due to financing challenges and the economic viability of projects. The government cannot tackle this alone; it requires the support of financing schemes backed by social funds from the community. In this regard, aligning with the objectives of Shariah (maqasid syariah), the role of Islamic Social Finance can be enhanced within the concept of Islamic Blended Finance to fund renewable energy projects that have social and environmental impacts. The aim of this paper is to develop the role of Islamic Social Finance within Islamic Blended Finance and the necessary regulations, making it a feasible financing scheme that can offer an alternative solution to the funding challenges faced by renewable energy projects. Previous research is limited due to the relative novelty of the topic. This study employs a mixed-methodology approach, incorporating literature review supported by secondary data, as well as primary data from interviews with competent informants.*

**Keywords:** Islamic Social Finance, Islamic Blended Finance, Blended Finance, Renewable Energy, Energy Transition

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## **1. Introduction**

Renewable energy is environmentally friendly and its usage needs to be expanded. However, energy consumption is still predominantly reliant on fossil fuels such as oil, coal, and gas, which are not environmentally friendly (Fader et al., 2018). This is particularly concerning given that the continued use of fossil fuels poses a threat to human life (Pambudi et al., 2023). Evidence shows that climate change has led to global temperature increases, which have altered the Earth's climate, affecting the

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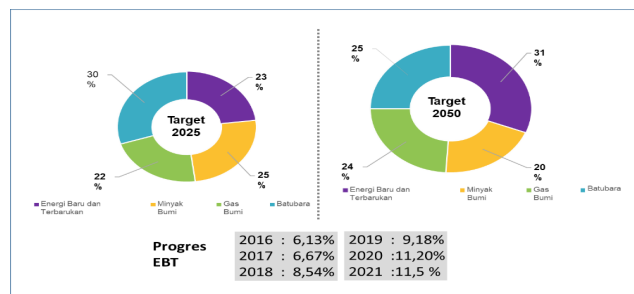
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quality and quantity of ecosystems and disrupting both nature and human life (ICCTF, 2021).

The government, through Government Regulation, *PP* No. 79/2014 (National Energy Policy), has encouraged the Energy Transition by increasing the utilisation of renewable energy and reducing the use of fossil fuel-based energy. This initiative is part of Indonesia's commitment to climate change mitigation efforts, as stipulated by Law, *UU* No. 16/2016 on the Ratification of the Paris Agreement to The UN Framework Convention on Climate Change.



**Figure 1. Proportion of Renewable Energy Usage in the Energy Mix**

However, the utilisation of renewable energy remains minimal. The target for renewable energy usage by 2025 is 23%, yet by December 2022, only 14.11% had been achieved (KESDM, 2023). Renewable energy projects face significant challenges, primarily due to limited financing (Lestari, 2021). Additionally, the economic viability of renewable energy projects is still lacking. The sale price of electricity generated from renewable sources struggles to compete with that from fossil fuels. Furthermore, immature technology leads to high costs and other associated risks (Ashwin Kumar et al., 2016).

To ensure the successful implementation of renewable energy projects, an attractive financing scheme is necessary (KPPN/Bappenas, 2018). Such a scheme should not rely solely on the government but require support from funds outside the national budget. One innovative approach is to formulate a scheme supported by social funds from the community, thereby improving the economic viability of renewable energy projects (Pusat Kebijakan, 2020). In this context, Islamic Social Finance, as an Islamic social financial instrument, can play a crucial role in supporting the financing of renewable energy projects, provided they have social and environmental impacts (Tahiri Jouti, 2019).

Islamic Social Finance, comprising zakat and waqf instruments, holds significant potential both nationally and globally. However, it has not yet played a role in supporting the achievement of the Sustainable Development Goals (SDGs), where renewable energy utilisation is a key component (Cinar, 2022). The concept of Blended Finance, introduced by the UN since the launch of the Sustainable

Development Goals (SDGs) in September 2015, is a mixed financing approach that funds projects using various financing sources and instruments, both commercial and social. This can enhance the economic viability of renewable energy projects (IDFC, 2019).

Renewable energy is essential for a better quality of life and protecting human life from environmental damage, aligning with *maqasid syariah* in the aspect of preserving human life (Sukardi et al., 2019). Therefore, the Blended Finance concept can be developed using Islamic Social Finance into an Islamic Blended Finance scheme to finance renewable energy projects (Khan & Badjie, 2022; Musari, 2022; Tahiri Jouti, 2019).

This paper aims to develop the role of Islamic Social Finance within the Islamic Blended Finance concept, making it an alternative for financing renewable energy projects and other socially and environmentally relevant projects. This research will use a mixed-method approach based on initial data from scientific journals, books, reports, papers, articles, and relevant internet data. The findings will be validated through in-depth interviews with competent experts, and a model will be created based on variable relationships. This model is expected to provide an alternative financing scheme in the form of Islamic Blended Finance, offering a solution to the funding challenges faced by renewable energy projects. In the Islamic Blended Finance scheme, Islamic Social Finance can play a more significant role, improving the economic viability of renewable energy projects and accelerating the Energy Transition programme.

## **2. Theoretical Background**

The research on enhancing the role of Islamic Social Finance within Islamic Blended Finance for renewable energy financing is relatively new, especially in the context of Indonesia. From the author's review of previous studies, research on this topic is still very limited. Previous studies have primarily focused on Islamic Finance, specifically the use of Islamic Commercial Finance (ICF) instruments for business purposes or the use of Islamic Social Finance (ISF) instruments for social purposes. However, to date, the author has not found research that combines Islamic Commercial Finance and Islamic Social Finance instruments within a single financing scheme for renewable energy projects. Therefore, this paper will specifically discuss some of the previous studies as references to support the development of the role of Islamic Social Finance in financing renewable energy projects using the Islamic Blended Finance concept.

### **Renewable Energy**

Renewable Energy is part of New and Renewable Energy, which is environmentally friendly. However, the energy currently in use predominantly comes from fossil fuels such as petroleum, natural gas, and coal, which are not environmentally friendly. New and Renewable Energy consists of New Energy and Renewable Energy.

New Energy comes from energy sources generated by new technology, which can originate from both renewable and non-renewable energy sources, such as hydrogen or nuclear. Renewable Energy, on the other hand, is derived from inexhaustible (renewable) energy sources like sunlight or wind, which, if managed properly, can become sustainable *energi* (UU No. 30 Tentang Energi, 2007).

Renewable Energy is considered more environmentally friendly compared to New Energy because it can better reduce pollution and environmental damage. Consequently, the government's focus has been more on Renewable Energy, and thus, the subsequent discussion will concentrate on Renewable Energy.

### **Renewable Energy from an Islamic Perspective**

Everything created by Allah SWT is part of human needs, and humans are obligated to manage it well, avoiding harm to the environment or other people. The utilisation of natural resources, including energy, must be efficient and not excessive (Qur'an, Al-An'am (6): 141). Humanity's duty to prosper the earth includes the utilisation of energy for the welfare of people.

Mismanagement of natural resources resulting in environmental damage is considered evil (Qur'an, Al A'raf (7): 31, Al An'am (6): 141). The utilisation of Renewable Energy is crucial in preserving the current and future human life. Renewable Energy is not only environmentally friendly but also efficient, making it a highly needed energy source. Therefore, according to maqasid syariah, the utilisation of Renewable Energy aligns with the objective of preserving human life, making it an obligation to manage it properly.

### **Potential and Challenges of Renewable Energy Utilisation in Indonesia**

Indonesia possesses significant and diverse renewable energy potential, including solar, wind, water, biomass, and geothermal energy. According to the Ministry of Energy and Mineral Resources (ESDM), Indonesia's solar energy potential is 207.9 million megawatts, wind energy 60 thousand megawatts, hydropower 75 thousand megawatts, biomass 60 thousand megawatts, and geothermal energy 28.5 million megawatts. Bappenas estimates that Indonesia requires USD 167 billion to harness this energy potential and achieve its energy mix targets.

However, the utilisation of renewable energy in Indonesia remains relatively low and significantly lags behind its potential. Several factors hinder this utilisation,

primarily related to financing issues (Lestari, 2021). Common financial challenges in the development of renewable energy include:

1. The need for substantial and sustained funding, with limited availability of funds.
2. High investment costs coupled with significant risks, deterring investors.
3. Insufficient availability of financing sources.
4. Government incentives, although numerous, have not yet had a significant impact.

### **Islamic Finance for Social Welfare**

Islamic Finance, or *Kuangan Islam*, is based on the principles of *Maqasid Shariah*, which encompass five primary objectives to promote human welfare: the protection of religion (*din*), life (*nafs*), progeny (*nasl*), intellect (*aql*), and property (*mal*). *Maqasid Shariah* guides the practice of justice, honesty, and transparency in all financial transactions.

Every financial product must meet the criteria of fairness, permissibility (*halal*), benefit, and social tranquillity. Activities involving prohibited goods/services, interest (*riba*), gambling (*maysir*), and uncertainty (*gharar*) are strictly prohibited. It is on these fundamental principles that Islamic finance is founded (Ahmed, 2015). In many aspects, Islamic Finance is closely linked to social welfare (Alam et al., 2017).

In general, Islamic Finance can be divided into two parts: Islamic Commercial Finance and Islamic Social Finance. Islamic Commercial Finance refers to Sharia-compliant financial services that provide financial services to the public with the aim of generating commercial profits (Sakinah et al., 2022). Conversely, Islamic Social Finance is a type of Sharia-compliant finance that aims to create a prosperous society by aiding the poor and vulnerable, as well as empowering the social economy within communities (Widiastuti et al., 2022; (Kuanova et al., 2021). Although these two types of Islamic Finance differ in their implementation, they share the same goal of promoting justice and social welfare by adhering to Islamic Shariah principles.

### **Islamic Commercial Finance and Social Responsibility**

Islamic Commercial Finance refers to financial practices encompassing investments, financing, and business operations conducted within the bounds of Shariah law. The principles of Shariah in Islamic Commercial Finance include avoiding *riba* (interest), *gharar* (uncertainty), *maysir* (gambling), and activities or items prohibited by religion (Tahiri Jouti, 2019). Islamic Commercial Finance aims to mitigate financial risk by ensuring that investments and financing are in accordance with Islamic law and avoid harmful practices.

Islamic Commercial Finance is based on principles such as justice, social responsibility, and transparency. It promotes fairness in business and financing by considering the interests of all parties involved. It also emphasises social responsibility by ensuring that business operations do not harm society or the environment. Additionally, it promotes transparency in financial practices, including decision-making processes in investment and financing.

In practice, Islamic Commercial Finance can be applied across various economic sectors, including banking, insurance, investment, and project financing. In the context of international business, Islamic Commercial Finance can provide benefits by reducing financial risk and promoting fairness and social responsibility in global business.

There are several instruments within Islamic Commercial Finance, each with its own features. Generally, Islamic Commercial Finance can be divided into four categories of instruments:

1. Partnership – Mudharabah and Musyarakah
  - a. Mudharabah is a partnership where one party provides capital (rabb al mal) for investment, and the other party (mudharib) invests and manages the capital on behalf of the first party.
  - b. Musyarakah is a joint venture between two or more parties where each contributes funds to be used in a business endeavour.
2. Sales – Murabahah
  - a. Murabahah is a financing arrangement where the bank or financial institution purchases an asset or goods required by the client and sells it to the client with an added profit margin.
  - b. Leasing – Ijarah is a financing method where the bank or financial institution leases an asset or goods required by the client and receives rental payments.
3. Sukuk

Sukuk are commercial securities in the form of ownership certificates that prove an asset's ownership by a particular party. It is the most popular Shariah-compliant financial instrument and a common method of raising finance.

### **Islamic Social Finance Accelerating Community Welfare**

Islamic Social Finance is a type of Islamic Finance that focuses on providing social and humanitarian benefits. Funds for Islamic Social Finance come from the community and are used for societal and environmental purposes, in accordance with Shariah principles (Tahiri Jouti, 2019; Widiastuti et al., 2022). The term Islamic Social Finance was introduced in 2014 by the Islamic Research and Training Institute (IRTI) of the Islamic Development Bank (IsDB). Previously, this term was not widely known, but Islamic Social Finance gained momentum as building an inclusive financial system became a major theme in global economic development.

Islamic Social Finance instruments can generally be divided into three categories based on their characteristics (Widiastuti et al., 2022; Tahiri Jouti, 2019):

1. Philanthropy-Based Instruments (Zakat, Infaq, Sadaqah, and Waqf)
  - a. Zakat is a financial obligation paid by Muslims to help eight categories of recipients (mustahiq), including the poor (Bayinah, 2017).
  - b. Infaq refers to donations of wealth for public benefit.
  - c. Sadaqah is a voluntary donation to help those in need.
  - d. Waqf is an endowment of assets or capital to be used for philanthropic purposes, with its benefits continuously distributed for public welfare (Fauzi et al., 2022).
2. Loan-Based Instruments (Qard and Kafalah)
  - a. Qard and Qard Hasan are loans provided without any additional profit.
  - b. Qard Hasan is specifically a benevolent loan, not requiring repayment.
3. Contemporary Instruments (Islamic Microfinance)
3. Islamic Microfinance is socially responsible for providing adequate funding for micro-enterprises (Tahiri Jouti, 2019).

Islamic Social Finance sources funds from zakat, infaq, sadaqah, and waqf (ZISWAF) contributed by the community for social welfare in accordance with Islamic teachings. ZISWAF funds can also be used productively, enabling the poor to build businesses and increase their income (Siswantoro, 2022). Islamic Social Finance is crucial for advancing community welfare. The various characteristics of Islamic Social Finance instruments are strengths that accelerate welfare transformation. Due to these characteristics, Zakat and Waqf are particularly potent instruments for supporting SDGs, especially in developing renewable energy utilisation. Islamic Social Finance encompasses two main aspects that must operate simultaneously and complementarily to have a significant impact:

1. Strengthening the social aspect of non-micro Islamic financial institutions, such as Islamic banks and insurance, reflected in:
  - a. Zakat payments (especially by Islamic banks).
  - b. Qardhul Hasan financing by Islamic banks, which averages 5% of their total financing portfolio.
  - c. Corporate social responsibility (CSR) funds.
2. Strengthening and developing the Islamic social economic sector, which includes zakat institutions, waqf, and Islamic microfinance institutions (LKMS).

Indonesia, as a country with high levels of philanthropy, has significant potential to develop Islamic Social Finance (Widiastuti et al., 2022). Nationally, the potential for Zakat is estimated at USD 26.1 billion, cash Waqf at USD 12.6 million, and land Waqf at USD 140 billion. However, the realisation is currently very low, with only about 3% for zakat and 0.21% for cash waqf. Globally, the potential for zakat is also vast. DinarStandard estimates global zakat at USD 76 billion (DinarStandard, 2019),

UNHCR estimates it could exceed USD 300 billion (UNHCR, 2019), while IsDB estimates more than USD 1 trillion annually (OECD, 2020). For waqf assets, DinarStandard estimated around USD 410 billion in 2016 (DinarStandard, 2019), while the Dubai government notes waqf could amount to USD 1 trillion (OECD, 2020).

### **Renewable Energy Financing and Blended Finance**

In general, public funding from the government is insufficient to finance all necessary investments. Therefore, alternative funding sources, such as private and community funds, are needed to help bridge the funding gap (IDFC, 2019). It is essential to create opportunities for private and community participation in development projects, which are inherently considered expensive when using commercial funds but have significant social and environmental impacts.

The United Nations introduced the concept of blended finance in 2015, which combines public and private funds, including community funds. This blended finance concept has generated strong interest in addressing the substantial funding gap that has long hindered the successful implementation of the Sustainable Development Goals (SDGs) (IDFC, 2019). Renewable Energy Utilisation Projects are part of the SDGs, specifically goals 7 and 13.



**Figure 2. SDGs No. 7 and No. 13 Related to Renewable Energy**

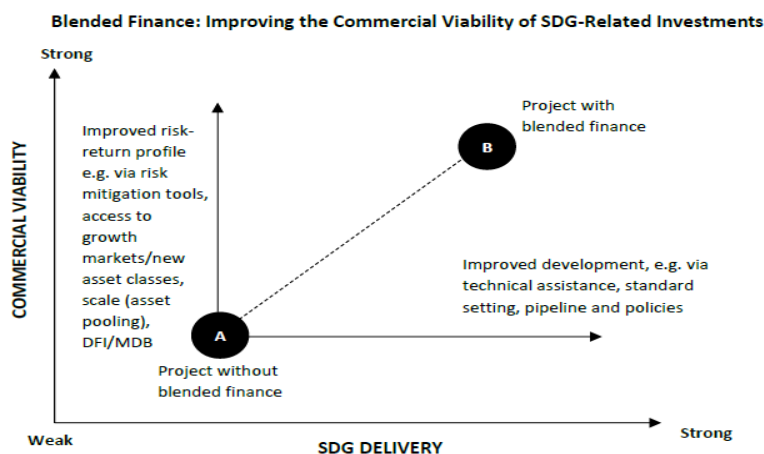
Blended Finance, as a concept, allows for the use of various types of funding sources from different entities, both profit and non-profit, to collaborate and achieve their respective goals, such as social impact, financial gain, or a combination of both (Baharuddin, 2022). This includes participation from government entities, non-governmental organisations, or the private sector to facilitate investment financing in development projects. The inclusion of social/non-profit funds in Blended Finance can enhance the economic viability of projects that otherwise have weak economic prospects. Social funds within Blended Finance can help overcome financing barriers faced by Renewable Energy projects.

By combining funding sources from various parties, Blended Finance can provide larger financial resources and help reduce the risk borne by each party. Blended



Finance not only provides capital to achieve investment goals but also creates synergy between diverse actors from the public and private sectors. This includes sharing knowledge and experience, as well as leveraging the strengths and capacities of each sector to address common challenges in achieving sustainable development goals (IDFC, 2019).

The United Nations (2015) defines Blended Finance as "the strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets." Meanwhile, the Development Finance Institutions (DFI) Working Group defines Blended Finance as "the combination of concessional finance from donors or third parties alongside development finance and/or commercial finance from other investors, to address SDGs challenges and mobilize private resources."



Based on the definitions provided *above*, Blended Finance has three main characteristics:

1. **Leverage** The systematic and strategic use of development and philanthropic funds to mobilise and involve private capital on a large scale.
2. **Impact** Investments that deliver measurable social, environmental, and economic impacts.
3. **Returns** Market-adjusted risk returns for private investors that meet business objectives and fiduciary responsibilities.

### **Blended Finance, Islamic Social Finance, and Islamic Blended Finance**

With the rapid growth of the Islamic Economy, there is an expectation for it to contribute to achieving sustainable development goals (SDGs). This has led to the need for implementing SDGs based on Islamic principles. Consequently, there is a need to develop the concept of Blended Finance, which initially focused on

conventional financial instruments, into a concept that incorporates Islamic Finance instruments.

By utilising social financial instruments within Islamic Finance, known as Islamic Social Finance, the Blended Finance concept must adapt to Shariah requirements and conditions. This adaptation transforms Blended Finance into Islamic Blended Finance. Hence, the use of Islamic Social Finance within Islamic Blended Finance is expected to play a more significant role in supporting the financing of renewable energy projects, thereby improving their economic feasibility. It is crucial to adhere to Shariah requirements and conditions for each Islamic Social Finance instrument used. This approach is expected to make Renewable Energy Projects economically viable and implementable.

### 3. Methodology

This research employs a mixed-method approach. For the quantitative aspect, a comparative study is conducted on the budget utilisation for renewable energy projects managed by two types of financial institutions: Islamic financial institutions (BAZNAS, BWI, Baitul Mal Muamalat) and social institutions (Yayasan Wakaf Energi Nusantara and PT. SMI). The results are used as considerations in analysing variables within the Islamic Blended Finance scheme.

For the qualitative aspect, a literature review method is used, with secondary data from scientific journals, books, reports, papers, articles, and relevant internet sources. Additionally, primary data is collected through research confirmation based on interviews with key informants who are experts in their fields, including Islamic Banking, Baitul Mal or Zakat Management Institutions (LAZ), and Renewable Energy, both practitioners and academics. Research Confirmation provides a strong foundation to demonstrate that the implementation of Islamic Social Finance, particularly zakat and waqf, can support sustainable development programmes or SDGs, especially in renewable energy projects through the Islamic Blended Finance scheme.

The analysis of the development of renewable energy projects will be conducted using a quantitative parametric approach. This approach employs a parametric regression model with R Studio. The t-test in the regression model can determine if there is a significant relationship between variables X and Y by testing whether the regression coefficient (population slope) is equal to 0. If this hypothesis is rejected, we can conclude that there is evidence of a linear relationship. The null and alternative hypotheses for this test are as follows:

*H0:  $b1 = 0$  (no linear relationship between X and Y)*

*H1:  $b1 \neq 0$  (there is a linear relationship between X and Y)*

This analysis aims to obtain data indicators on the development of renewable energy projects in Indonesia, focusing on the scale of usage types and total financing.

The second analysis uses a Systematic Literature Review with the NVivo application, a software specifically designed for qualitative data analysis. NVivo allows for the management, analysis, and understanding of complex data from various sources, including text, audio, video, and images. This software enables thematic analysis, data coding, visualization creation, and the identification of relevant patterns within the dataset, ensuring that the results of the analysis provide a strong foundation for the implementation of the role of Islamic Social Finance on Islamic Blended Finance scheme.

#### **4. Empirical Findings/Result and Discussion**

In the quantitative approach, the T-Test results are used to examine the effect of each independent variable on the dependent variable by looking at the significance value in the coefficients table. If the significance value of the t-test is greater than 0.05,  $H_0$  is accepted and  $H_a$  is rejected, meaning there is no effect of the independent variable on the dependent variable or they are the same (no difference). Conversely, if the significance value of the t-test is less than 0.05,  $H_0$  is rejected and  $H_a$  is accepted, indicating there is an effect of the independent variable on the dependent variable, or there is a difference in performance between variables. According to the equation  $t = \beta n / S\beta n$ , where t follows the t distribution with degrees of freedom (df).

Based on the variable testing results, it was found that Islamic Social Finance and Commercial Finance still operate independently. This is indicated by a significance value of 0.01266. Therefore,  $H_a$  is accepted, indicating a difference between the variables Islamic Social Finance and Commercial Finance.

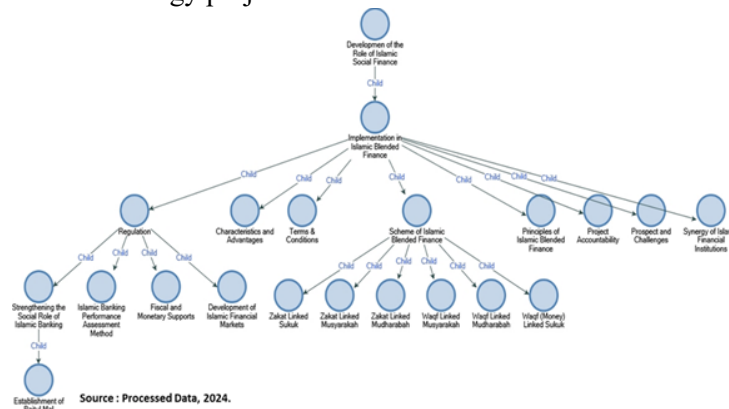
**Table 1. Paired T-Test and Regression**

	Standarized	Under standarized	t	Sig.	df
Constant	390090.6	-	2.5971	0.01266	45
Dependent variable : renewable energy					

Source : Processed Data, 2024.

In contrast, the qualitative approach reveals that the development of the role of Islamic Social Finance involves expanding the implementation of Shariah-based financial systems while maintaining a focus on fair, inclusive, and sustainable financial systems that prevent social and economic disparities. The role of Islamic Social Finance can be developed in various ways. This paper proposes the development of Islamic Social Finance through financial innovation in the form of an Islamic Blended Finance scheme. In this scheme, zakat and waqf, as Islamic Social Finance instruments, will play a crucial role. In practice, the instruments of

waqf and zakat within the Islamic Blended Finance scheme can significantly contribute to the development of projects with social and environmental impacts, including renewable energy projects.



**Figure 3. Element Analysis**

To implement Islamic Social Finance within Islamic Blended Finance, coordination and integration of various elements are required. These elements interact and support each other to create an effective and sustainable Islamic Blended Finance scheme. The development of the role of Islamic Social Finance provides a strong foundation, while the optimisation of financing schemes, compliance with terms and conditions, and accountability ensure efficiency and transparency. Additionally, the role of Islamic banks and synergy with other Islamic financial institutions is necessary to ensure the successful execution of projects that deliver tangible social benefits. Strict regulation, innovative financial instruments, and fiscal and monetary support will ensure the Islamic Blended Finance scheme can evolve and adapt to contemporary needs. Performance evaluation methods and adherence to Islamic Blended Finance principles maintain integrity and Shariah compliance. With the integration of all these elements, Islamic Blended Finance can become a robust scheme supporting the SDGs, particularly in renewable energy utilisation, addressing social and economic challenges while fostering inclusive and equitable prosperity in society.

There are several characteristics and advantages of Islamic Blended Finance when applied to Renewable Energy Project financing (Pambudi et al., 2023), as follows:

1. Characteristics of Islamic Blended Finance in renewable energy project financing
  - a. Compliant with Shariah principles based on justice and impartiality.
  - b. Involves stakeholders with shared interests in Renewable Energy Projects, such as investors, financial institutions (commercial and social), and the community.
  - c. Integrates Islamic social finance instruments with other commercial financial instruments in a single financing scheme.

2. Advantages of the Islamic Blended Finance (IBF) concept in renewable energy project financing
  - a. Integration of commercial and social instruments has proven to reduce disparities more significantly (Widodo, 2019).
  - b. Can attract funding from various financial sources, both commercial and social.
  - c. Minimises risk for investors by integrating different types of financial instruments.
  - d. Increases investor confidence in project implementation.

### **Regulation of Renewable Energy Financing and Islamic Blended Finance Scheme**

The government, through Government Regulation No. 79/2014 on National Energy Policy, has promoted the increased use of renewable energy, with 75% from the power generation sector (equivalent to 45.2 GW) and 25% from the fuel sector as part of the Energy Transition Programme (Kemenkeu RI, 2021). This initiative reflects Indonesia's commitment to climate change mitigation, as outlined in Law No. 16/2016 on the Ratification of the Paris Agreement to the UN Framework Convention on Climate Change, with the goal of achieving net zero emissions by 2060 (Pribadi, 2022).

The government has also mandated that banks, including Islamic banks, address environmental and social issues. Furthermore, it has provided tax relief and allocated budgetary support for the utilisation of New Renewable Energy (NRE) and the Public-Private Partnership (PPP) scheme (Pusat Kebijakan, 2020). Additionally, the government issued Presidential Regulation No. 112/2022 concerning the Acceleration of Renewable Energy Development for Electricity Supply, aiming to reduce dependency on coal.

However, existing regulations are still insufficient (Lestari, 2021). Numerous challenges remain, such as the suboptimal use of the national budget (APBN) support. The setting of electricity tariffs tied to Power Purchase Agreements (PPA), alongside the poor economic feasibility of renewable energy projects, makes it difficult for renewable electricity to compete with fossil fuel-generated electricity. Additionally, the immature state of renewable energy technology results in high costs and other risks.

Regarding the implementation of Islamic Blended Finance, current regulations in Indonesia are limited, and no specific regulations govern Islamic Blended Finance. Some general regulations related to Islamic Finance include those from Bank Indonesia, the Financial Services Authority (OJK), and fatwas from the National Sharia Board (DSN MUI) related to Islamic blended finance and renewable energy project financing, such as:

1. Bank Indonesia Regulation No. 21/1/PBI/2019 on Shariah-Based Financing: This regulation governs shariah-based financing in general.
2. Financial Services Authority (OJK) Regulation No. 51/POJK.03/2017 on Shariah Financing Companies: This regulation governs the activities of shariah financing companies.
3. Fatwas from the National Sharia Board (DSN) No. 76/DSN-MUI/IV/2010 on Wakalah Fi Istithmar (Investment Mandate) and No. 80/DSN-MUI/X/2011 on Musyarakah Mutanaqishah (Diminishing Partnership Agreement): These fatwas provide guidelines on shariah-based financing.

However, to facilitate the use of Islamic Blended Finance for renewable energy projects in Indonesia, more concrete and specific policy support is required. Key policy aspects to consider include:

1. **Policy on Strengthening the Social Function of Islamic Banks:** While Law No. 21/2018 on Islamic Banking outlines the social function of Islamic Banks (Baitul Mal), no specific implementing regulations exist. Appropriate policies are needed to integrate commercial and social Islamic finance effectively in financing projects with significant and sustainable social and environmental impacts (Fauziah, 2021).
2. **Policy on Collaboration between Islamic Banks and Social Fund Management Institutions (ZISWAF):** Policies are required to facilitate cooperation between Islamic Banks and institutions like BAZNAS and other social fund managers to enhance public participation in ZISWAF and create innovative financing products that integrate commercial and social Islamic finance (Fauziah, 2021).
3. **Policy on Categorising Renewable Energy Projects:** Policies are needed to categorise renewable energy projects into social, private, or industrial, recognising that Islamic Social Finance (ISF) instruments must align with their social/environmental objectives.
4. **Policy on Adequate Fiscal and Monetary Support:** Sufficient support and incentives, such as tax breaks, electricity tariffs, and import tax exemptions, are required. Renewable energy projects currently have poor economic feasibility, and renewable energy technology remains immature, necessitating imported equipment and posing various risks due to technological developments (PKN STAN, 2022).
5. **Policy on Developing the Islamic Financial Market:** Developing the Islamic financial market is essential to offer more Islamic financing alternatives, such as expanding shariah financial instruments, issuing Islamic bonds (sukuk), and developing the shariah capital market to support renewable energy project financing (Musari, 2022; Siddiquee, 2022).

With clearer and more concrete regulations on Islamic blended finance for renewable energy projects, it is hoped that opportunities for investors and financial

institutions to participate in renewable energy financing will increase, thereby accelerating the energy transition programme in Indonesia (Tristl, 2022).

### **Development of Islamic Blended Finance and Enhancing the Role of Islamic Social Finance**

To date, the author has not found a formal definition for Islamic Blended Finance. However, Islamic Blended Finance can essentially be developed from the general concept of Blended Finance by incorporating Islamic financial instruments (Islamic Finance) and ensuring that its implementation complies with Shariah requirements and conditions (Khan & Badjie, 2022; Musari, 2022).

Conceptually, Islamic Blended Finance is a financing scheme that integrates different financial instruments, both commercial and social funds, in accordance with Shariah principles to finance projects with social and environmental impacts. Commercial funds can come from the government, banks, or investors, while social funds can come from general social funds such as CSR or Islamic Social Finance instruments like zakat and waqf. The use of zakat and waqf requires adherence to specific conditions and the project's objectives must include social and environmental impacts (Auliyah & Basuki, 2021).

The use of Islamic Social Finance, specifically zakat and waqf, within the Islamic Blended Finance scheme for financing projects with positive social and environmental impacts will significantly enhance the role of Islamic Social Finance. This approach allows Islamic Social Finance to contribute more broadly to sustainable development programmes (Cinar, 2022; Lenssen et al., 2014; Sukmana et al., 2023).

### **Conditions and Requirements for Using Islamic Social Finance in Islamic Blended Finance**

The use of Islamic Social Finance within Islamic Blended Finance depends significantly on the type of instruments employed. There are specific conditions that must be met according to the inherent requirements of each Islamic Social Finance instrument, such as zakat and waqf. Generally, these conditions are related to supporting social and humanitarian causes (Widiastuti et al., 2022).

Zakat and waqf can play crucial roles in enhancing the socio-economic welfare of communities (Bayinah, 2017; N.S Shirazi, 2014; Sukmana et al., 2023). Productive zakat can positively impact the well-being of the mustahiq (recipients) (Beik & Arsiyanti, 2016) (Widiastuti et al., 2021). Zakat can also assist in a country's economic recovery from crises (Ascarya, 2021) and has the potential to support development and help Muslim-majority countries achieve the SDGs by aligning with maqashid shariah (J. Abdullah, 2018). Historically, waqf has played a significant

role in societal development, as it combines and displays all the elements needed in an ideal philanthropic institution (M. Abdullah, 2016).

However, the vast potential of zakat and waqf has not yet been fully realised due to gaps in effective resource utilisation, a lack of development frameworks based on zakat and waqf, and insufficient strategic planning and roadmaps (M. Abdullah, 2016; N.S Shirazi, 2014). It is hoped that by incorporating Islamic Social Finance into Islamic Blended Finance, the potential of zakat and waqf can be better harnessed for sustainable development.

Fundamentally, zakat aims to promote economic justice and equality through redistribution mechanisms, extending beyond religious rituals to target social goals like poverty alleviation and community development (BAZNAS-BI-IRTI, 2016). For zakat distribution, certain conditions must be met according to Shariah, such as the eight asnaf (eligible recipients) outlined in QS At Taubah (9):60:

1. The poor (fakir)
2. The needy (miskin)
3. Zakat administrators (amil zakat)
4. Those whose hearts are to be reconciled (muallaf), including new converts to Islam or those who defend and benefit Muslims
5. To free slaves (riqab), such as those in oppressive conditions or under enemy control
6. Those in debt (gharimin) for essential needs
7. For the cause of Allah (fi sabilillah), including religious education and disaster relief
8. Travellers (ibn sabil) in legitimate need.

Zakat must be distributed within the same area where it is collected, unless there are no eligible recipients, in which case it can be transferred to other jurisdictions based on urgency and priority (BAZNAS-BI-IRTI, 2016). Waqf is a form of perpetual charity involving the donation of assets or property for charitable or religious purposes. The conditions for waqf include:

1. The asset or property must be halal and lawfully acquired
2. The asset or property must be fully owned by the donor
3. The asset or property must be capable of growth
4. The asset or property must meet the nisab threshold
5. The asset or property must surpass the haul period
6. The owner must not have short-term debts to settle.

Additionally, for waqf to be valid, the following elements must be present to avoid future disputes:

1. The donor (wakif)
2. The manager (nazir)
3. The waqf property
4. A declaration of waqf intention



5. A statement of the waqf's purpose
6. The waqf's duration.

When integrating Islamic Social Finance instruments with other financial instruments in Islamic Blended Finance, several key conditions must be considered:

1. **Shariah Compliance:** Ensuring that all financial instruments used in Islamic Blended Finance adhere to Shariah principles.
2. **Alignment of Objectives:** The project's goals must align with the purposes of the Islamic Social Finance instruments used (Widiastuti et al., 2022). Commercial instruments focus on profit, while Islamic Social Finance instruments target significant social and environmental impacts.
3. **Transparency and Accountability:** All transactions and fund usage must be conducted transparently and accountably to maintain the trust of investors and the community.

With clear and specific regulations related to Islamic blended finance for renewable energy projects, it is anticipated that more opportunities will open up for investors and financial institutions to engage in renewable energy financing, thus accelerating the energy transition programme in Indonesia (Tristl, 2022).

### **Islamic Blended Finance Scheme for Renewable Energy Projects**

There are several fundamental principles for implementing Islamic Blended Finance in financing renewable energy projects:

1. **Legal Compliance:** Adherence to Shariah principles and applicable regulations.
2. **Sustainability Principle:** Utilising clean, environmentally friendly energy that reduces greenhouse gas emissions, resulting in long-term positive impacts for society and the environment.
3. **Partnership Principle:** Financing projects through partnerships involving various parties such as financial institutions, investors, government, and communities. This partnership can facilitate financial access, enhance project development efficiency, and improve oversight through active community participation from planning to implementation stages.
4. **Transparency Principle:** Openness regarding budgets and their use, ensuring equal access for all parties involved to guarantee transparency and accountability.
5. **Balance Principle:** As an investment, Islamic Blended Finance (IBF) carries risks that need to be managed properly. It is crucial to balance risks and returns while considering the impact on community and environmental interests.

Islamic Blended Finance can integrate social instruments with commercial instruments within Islamic Finance. For Islamic Commercial Finance (ICF),

instruments such as musyarakah, mudharabah, and sukuk are suitable for renewable energy projects due to their partnership principles. For Islamic Social Finance (ISF), instruments like waqf and zakat align with the sustainability principle. The integration can be carried out as follows:

1. **Waqf Linked Musyarakah:** Funds from social sources (cash waqf from individuals/institutions for specific purposes) and commercial funds (from banks/companies/individuals) are placed in a musyarakah contract for renewable energy projects in line with waqf objectives. This concept has been simulated by Ari & Koc for a solar farm project, showing improved project economics and enhanced economic and social welfare through more equitable wealth distribution (Ari & Koc, 2021).
2. **Zakat Linked Musyarakah:** Funds from social sources (zakat from Islamic banks or other Islamic Financial Institutions) and commercial or charitable funds like CSR (from banks/companies/individuals) are placed in a musyarakah contract for renewable energy projects in specific social areas aligned with zakat objectives. This concept has been implemented in an inclusive partnership project involving UNDP, the Ministry of Energy and Mineral Resources, BAZNAS, and Bank Jambi for micro-hydro power plants (PLTMH) in Jambi, benefiting several villages with access to electricity and poverty alleviation (EBTKE, 2018).
3. **Waqf Linked Mudharabah:** Funds from social sources (cash waqf from individuals/institutions for specific purposes) are placed in a mudharabah contract for renewable energy projects in specific areas aligned with waqf objectives, with the mudharib (such as local institutions/cooperatives) managing the funds. This concept has been implemented on a micro scale by Koperasi Syariah Bersama (KSBB) in Surabaya for MSMEs using cash waqf funds (Majid, 2021).
4. **Zakat Linked Mudharabah:** Funds from social sources (zakat from individuals or institutions for specific purposes) are placed in a mudharabah contract for renewable energy projects in specific social areas aligned with zakat objectives, with the mudharib managing the funds.
5. **Waqf (Cash) Linked Sukuk:** Funds from social sources (cash waqf from individuals/institutions for specific purposes) are placed in sukuk for renewable energy projects in line with waqf objectives. This model has been integrated with Green Sukuk and Cash Waqf Linked Sukuk, demonstrating its potential as an innovative sustainable financing model for combating climate change (Musari, 2022).
6. **Zakat Linked Sukuk:** Funds from social sources (zakat from individuals/institutions for specific purposes) are placed in sukuk for renewable energy projects in line with zakat objectives.

These principles and integration strategies highlight the potential for Islamic Blended Finance to support renewable energy projects, addressing both social and economic challenges while promoting sustainable development.

### **Future Prospects and Challenges of Islamic Blended Finance**

The future prospects for implementing Islamic Blended Finance in Indonesia are promising, given that Indonesia has the world's largest Muslim population and a rapidly growing Islamic financial market. This growth will lead to the expansion of Islamic banks and other Islamic financial institutions, resulting in the development of more Islamic financial products. The Islamic Blended Finance scheme, leveraging the strengths of Islamic Social Finance instruments, will be an attractive alternative for market participants and investors. It will particularly help expand financing access to economic sectors that have traditionally struggled to secure Shariah-based financing, such as renewable energy. This aligns with the concept that new market mechanisms, such as blended finance, will emerge (IFC, 2018).

However, implementing Islamic Blended Finance will face several challenges. It is crucial to have a shared understanding among all stakeholders on utilising Islamic Blended Finance. Investors, in particular, need a clear understanding of the available instruments and how to integrate them into financial structures and implement them in projects (IFC, 2018; Khan & Badjie, 2022; Kublbock & Grohs, 2019; Purwanto & Alfian, 2023).

## **5. Conclusions**

Islamic Blended Finance (IBF) is a financing scheme that can be applied to enhance the role of Islamic Social Finance in supporting the funding of socially and environmentally beneficial projects, such as renewable energy initiatives in Indonesia. The implementation of Islamic Blended Finance, supported by Islamic Social Finance instruments, offers several advantages:

1. It can address funding limitations by leveraging additional potential from Islamic financial institutions and philanthropy to finance renewable energy projects.
2. It provides a flexible financing scheme that can be tailored to project needs.
3. It can encourage community participation in renewable energy development and support sustainable development.
4. It can enhance the role of Islamic Social Finance in supporting national funding programs.

In this study, several Islamic Blended Finance schemes have been developed in a basic form, but modelling has not yet been completed. Future research should focus on creating models for these Islamic Blended Finance schemes and conducting risk mitigation studies.

Additionally, there are several factors to consider when using Islamic Social Finance within the Islamic Blended Finance scheme for renewable energy projects in Indonesia:

1. Limited knowledge and understanding of Shariah-compliant products and financing schemes among the public.
2. Limited use of Islamic Social Finance in productive activities, with zakat often used for consumptive needs rather than supporting productive initiatives, and many waqf assets being underutilised.
3. Limited public understanding of the importance of utilising renewable energy to prevent further damage from fossil fuel use.

To further enhance the role of Islamic Social Finance and the implementation of the Islamic Blended Finance scheme in supporting socially and environmentally beneficial projects such as renewable energy initiatives, several policies need to be developed:

1. **More Adequate Fiscal Policies:** Current fiscal policies are adequate, but their utilisation is often hindered by existing requirements and procedural complexities. Simplifying these processes is necessary.
2. **Enhancing the Social Role of Islamic Banks:** Islamic banks should not only manage commercial funds but also actively manage social funds such as zakat and waqf to support national social and environmental projects.
3. **Increasing Cooperation Between Islamic Banks and Non-Bank Islamic Financial Institutions:** Strengthening collaboration between Islamic banks and institutions like BAZNAS or the Indonesian Waqf Board (BWI) to support national social and environmental projects.
4. **Capacity Building for Managers of Islamic Financial Institutions:** Both bank and non-bank Islamic financial institutions need to enhance the capacity of their managers to ensure a common understanding of managing and utilising Islamic Social Finance effectively.

## References:

- Abdullah, J. (2018). Institusi Pengelola Zakat dalam Hukum Positif di Indonesia. *Jurnal Zakat Dan Wakaf*, 5(1), 171–185.
- Abdullah, M. (2016). Waqf , Sustainable Development Goals ( SDGs ) and Maqasid al-Shariah. *International Journal of Social Economics*.
- Ahmed, M. (2015). Islamic Project Finance: A Case Study of the East Cameron Project. *The Journal of Structured Finance*, 20(4), 120–135. <https://doi.org/10.3905/jsf.2015.20.4.120>
- Alam, N., Gupta, L., & Shanmugam, B. (2017). *Islamic Finance | A Practical Perspective*. Palgrave Macmillan.
- Ari, I., & Koc, M. (2021). Towards sustainable financing models: A proof-of-concept for a waqf-based alternative financing model for renewable energy investments. *Borsa Istanbul Review*, 21, S46–S56. <https://doi.org/10.1016/j.bir.2021.03.007>

- Ascarya. (2021). Baitul Mall wat Tamwil as Integrated Islamic Microfinance Institution fo Support SDGs. In *Islamic Ewalth and SDGs Global Strategies for Socio-economic Impact* (pp. 175–195). Springer.
- Ashwin Kumar, N. C., Smith, C., Badis, L., Wang, N., Ambrosy, P., & Tavares, R. (2016). ESG factors and risk-adjusted performance: a new quantitative model. *Journal of Sustainable Finance and Investment*, 6(4), 292–300. <https://doi.org/10.1080/20430795.2016.1234909>
- Auliyah, R., & Basuki, B. (2021). Ethical Values Reflected on Zakat and CSR: Indonesian Sharia Banking Financial Performance. *Journal of Asian Finance, Economics and Business*, 8(1), 225–235. <https://doi.org/10.13106/jafeb.2021.vol8.no1.225>
- Baharuddin, G. T. P. B. (2022). Blended Finance and the Role of Waqf Bank : Shaping the SDGs in Indonesia. In *Wealth Management and Investment in Islamic Settings* (pp. 357–364). Springer Nature Singapore Pte Ltd. .
- Bayinah, A. N. (2017). Role of Zakat as Social Finance Catalyst to Islamic Banking and Economic Growth. *International Journal of Zakat*, 2(2), 55–70.
- BAZNAS-BI-IRTI. (2016). *Prinsip-Prinsip Pokok untuk Penyelenggaraan dan Pengawasan Zakat yang Efektif*.
- Beik, I. S., & Arsiyanti, L. D. (2016). Measuring Zakat Impact on Poverty and Welfare Using CIBEST Model. *Journal of Islamic Monetary Economics and Finance*, 1(2), 141–160.
- Cinar, F. (2022, May). *Blending Islamic Finance and Impact Investing for Sustainable Development Goals*. Islamic Finance News. <https://www.islamicfinancenews.com/blending-islamic-finance-and-impact-investing-for-the-sustainable-development-goals.html?access-key=b5146481a245e50255f5b24319c2711a>
- DinarStandard. (2019). *State of the Global Islamic Economy Report : Driving The Islamic Economy Revolution 4.0*. [www.SalaamGateway.com/SGIE19-20](http://www.SalaamGateway.com/SGIE19-20)
- EBTKE. (2018). *Inovasi Model Pembiayaan, Wujudkan Energi Berkeadilan di Jambi*. [Www.Esdm.Go.Id](http://Www.Esdm.Go.Id). <https://www.esdm.go.id/id/berita-unit/direktorat-jenderal-ebtke/inovasi-model-pembiayaan-wujudkan-energi-berkeadilan-di-jambi>
- Fader, M., Cranmer, C., Lawford, R., & Engel-Cox, J. (2018). Toward an understanding of synergies and trade-offs between water, energy, and food SDG targets. *Frontiers in Environmental Science*, 6(NOV). <https://doi.org/10.3389/fenvs.2018.00112>
- Fauziah, S. (2021). Optimalisasi Fungsi dan Kedudukan Bank Syariah dalam Mewujudkan Integrasi Keuangan Komersial dan Sosial Islam. *Jurnal Magister Hukum Ekonomi Syariah*, 5(No. 2), 153–162.
- ICCTF. (2021). *Apa itu COP26 dan Mengapa Penting ?* [Www.Icctf.or.Id](http://Www.Icctf.or.Id). <https://www.icctf.or.id/apa-itu-cop26-dan-mengapa-penting/>
- IDFC. (2019). *Blended Finance: A Brief Overview* (Issue October).

- IFC. (2018, April). *Blended Finance - A Stepping Stone to Creating Markets - IFC - 2018*. [www.ifc.org/thoughtleadership](http://www.ifc.org/thoughtleadership)
- Kemenkeu RI. (2021). *Transisi Energi Bagian dari Upaya Pengendalian Perubahan Iklim*. [Www.Kemenkeu.Go.Id.   
http://www.kemenkeu.go.id/publikasi/berita/transisi-energi-bagian-dari-upaya-pengendalian-perubahan-iklim/](http://www.kemenkeu.go.id/publikasi/berita/transisi-energi-bagian-dari-upaya-pengendalian-perubahan-iklim/)
- KESDM. (2023). *Kinerja KESDM RI 2022*. [www.esdm.go.id](http://www.esdm.go.id)
- Khan, T., & Badjie, F. (2022). Islamic blended finance for circular economy impactful smes to achieve sdgs. *Singapore Economic Review*, 67(1), 219–244. <https://doi.org/10.1142/S0217590820420060>
- KPPN/Bappenas. (2018). Masterplan Ekonomi Syariah Indonesia 2019-2024. *Kementerian Perencanaan Pembangunan Nasional/ Badan Perencanaan Pembangunan Nasional*, 1–443. [https://knks.go.id/storage/upload/1573459280-MasterplanEksyar\\_Preview.pdf](https://knks.go.id/storage/upload/1573459280-MasterplanEksyar_Preview.pdf)
- Kublbock, & Grohs. (2019). *Blended Finance and its potential for development cooperation*. <https://www.oefse.at/fileadmin/content/Downloads/Publikationen/Briefingpaper/BP21->
- Lenssen, J.-J., A. Dentchev, N., & Roger, L. (2014). Sustainability, risk management and governance: towards an integrative approach. *Corporate Governance*, 14(5), 670–684. <https://doi.org/10.1108/CG-07-2014-0077>
- Lestari, V. P. (2021). Permasalahan dan Tantangan Program Peningkatan Kontribusi Energi Baru dan Terbarukan dalam Bauran Energi Nasional. In *Pusat Kajian AKN, Badan Keahlian Dewan DPR RI*.
- Majid, R.-. (2021). Mudharabah Linked Waqf: Inovasi Model Pembiayaan Berkelanjutan untuk UMKM. *Al-Kharaj : Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 3(1), 102–118. <https://doi.org/10.47467/alkharaj.v3i1.267>
- Musari, K. (2022). Integrating Green Sukuk and Cash Waqf Linked Sukuk, the Blended Islamic Finance of Fiscal Instrument in Indonesia: A Proposed Model for Fighting Climate Change. *International Journal of Islamic Khazanah*, 12(2), 133–144. <https://doi.org/10.15575/ijik.v12i2.17750>
- N.S Shirazi. (2014). Integrating Zakat and Qaqf into the Poverty Reduction Strategy of IDB Member Countries. *Islamic Economic Studies* .
- OECD. (2020). *How Islamic Finance Contributes to Achieving The SDGs* (Issue 30).
- Pambudi, N. A., Firdaus, R. A., Rizkiana, R., Ulfa, D. K., Salsabila, M. S., Suharno, & Sukatiman. (2023). Renewable Energy in Indonesia: Current Status, Potential, and Future Development. In *Sustainability (Switzerland)* (Vol. 15, Issue 3). MDPI. <https://doi.org/10.3390/su15032342>
- PKN STAN. (2022). *Bunga Rampai Akuntansi Pemerintah Indonesia Kontemporer*.
- Pribadi, A. (2022). *Urgensi Transisi Energi dalam Presidensi G20 Indonesia*. [Esdm.Go.Id.   
https://www.esdm.go.id/id/media-center/arsip-berita/urgensi-transisi-energi-dalam-presidensi-g20-indonesia](http://Esdm.Go.Id)

- Purwanto, E. A., & Alfian, M. B. (2023). *Blended Finance: Antara Manfaat dan Tantangan dalam Penerapannya*. KBBU Kementerian Keuangan. <https://kpbu.kemenkeu.go.id/read/1130-1294/umum/kajian-opini-publik/blended-finance-antara-manfaat-dan-tantangan-dalam-penerapannya>
- Pusat Kebijakan, A. (2020). *Kajian Skema Dana Energi Terbarukan sbg Insentif Percepatan Pemanfaatan Energi Terbarukan*. Kemenkeu.Go.Id. <http://portal.fiskal.kemenkeu.id/pustaka/index.php?p=research&id=20200803192254735038>
- Sakinah, G., Kasri, R. A., & Nurkholis, N. (2022). Islamic Finance and Indonesia's Economy: An Empirical Analysis. *Jurnal Ekonomi & Keuangan Islam*, 47–59. <https://doi.org/10.20885/jeki.vol8.iss1.art4>
- Siddiquee, E. A. (2022). Green Sukuk: An Islamic SRI Tool to Reclaim Environmental Sustainability Through the Circular Economy Notion. *SRRN*.
- Siswantoro, S. (2022). Can the integration between Islamic social finance and Islamic commercial finance tackle poverty in Indonesia? *Jurnal Ekonomi & Keuangan Islam*, 8(2), 236–249. <https://doi.org/10.20885/jeki.vol8.iss2.art7>
- Sukardi, B., Fachrurazi, F., & Supriyanto, S. (2019). Sharia Maqashid's Inclusive Performance and Contribution to The Sharia Non-Bank Financial Industry in Indonesia. *Economica: Jurnal Ekonomi Islam*, 10(2), 283–310. <https://doi.org/10.21580/economica.2019.10.2.4325>
- Sukmana, R., Slamet Rusydiana, A., & Laila, N. (2023). *Waqf and Sustainability: A Text Mining*. <http://journals.smartinsight.id/index.php/MS>
- Tahiri Jouti, A. (2019). An integrated approach for building sustainable Islamic social finance ecosystems. *ISRA International Journal of Islamic Finance*, 11(2), 246–266. <https://doi.org/10.1108/IJIF-10-2018-0118>
- Tristl, C. (2022). *Blended Finance, Transparent Data, and The Complications of Waters' Multiple Ontologies*. *Geographica Helvetica*. <https://doi.org/10.5194/gh-77-357-2022>
- UNHCR. (2019). *UNHCR Zakat Program: 2019 Launch Report*. <https://zakat.unhcr.org/hk/wp-content/uploads/2019/04/UNHCR-Annual-Zakat-Report-2019-En.pdf>
- UU No. 30 Tentang Energi (2007).
- Widiastuti, T., Auwalin, I., Rani, L. N., & Ubaidillah Al Mustofa, M. (2021). A mediating effect of business growth on zakat empowerment program and mustahiq's welfare. *Cogent Business and Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1882039>
- Widiastuti, T., Ningsih, S., Prasetyo, A., Mawardi, I., Herianingrum, S., Robani, A., Al Mustofa, M. U., & Hady, A. F. (2022). Developing an integrated model of Islamic social finance: toward an effective governance framework. In *Heliyon* (Vol. 8, Issue 9, p. e10383). <https://doi.org/10.1016/j.heliyon.2022.e10383>
- Widodo, A. (2019). The Role Of Integrated Islamic Commercial and Social. *Journal of Islamic Monetary Economics and Finance*, 5(2), 263–286.