

## Islamic Social Finance and SDG 7: A Comprehensive Framework for Sustainable Energy Access

Putri Reno Kemala Sari<sup>1\*</sup>, Galuh Ratna Mutia<sup>2</sup>, Ni Nyoman Yuliati<sup>3</sup>, I Made Suardana<sup>4</sup>  
<sup>1,2,3,4</sup>Sekolah Tinggi Ilmu Ekonomi AMM, Nusa Tenggara Barat, Indonesia

### **Absrtract**

*Purpose* – This study examines how Islamic social finance instruments can achieve Sustainable Development Goal 7 (SDG 7) by addressing energy poverty and climate change through sustainable energy access in developing countries. *Design/Methodology/Approach* – The research uses comprehensive framework analysis, integrating Islamic finance principles with sustainable development objectives. A conceptual framework examines input mechanisms (zakat, waqf, voluntary contributions), process mechanisms (resource mobilization, project development, implementation), and impact measures, supported by case studies from Indonesia, Jordan, Malaysia, and Bangladesh. *Findings* – Islamic social finance offers significant sustainable energy financing potential: zakat enables renewable energy infrastructure, clean energy equipment, subsidies, and training for underprivileged communities; waqf supports large-scale infrastructure through land utilization and long-term renewable projects. Case studies show successful implementations including Indonesian pesantren solar panels, Jordanian refugee camp energy solutions, Malaysian mosque solar systems, and Bangladeshi LPG programs. *Challenges* include limited institutional capacity, regulatory constraints, and stakeholder resistance. *Originality/Value* – This research provides the first comprehensive framework integrating Islamic social finance with SDG 7, offering practical guidance for leveraging zakat and waqf to address energy poverty while supporting climate mitigation, with actionable policy recommendations.

**Keywords:** islamic social finance; sdg 7; zakat; waqf; renewable energy

## INTRODUCTION

Energy poverty and climate change represent two interconnected global challenges that have become central priorities in the Sustainable Development Goals (SDGs), particularly SDG 7. This goal focuses on ensuring universal access to affordable, reliable, sustainable, and modern energy (Pymenna & Trypolska, 2024). The achievement of SDG 7 targets will not only reduce energy poverty but also contribute significantly to climate change mitigation. The transition to sustainable energy, moving away from fossil fuel dependence toward renewable energy sources, represents a key step in reducing greenhouse gas emissions the primary driver of climate change (Bajracharya et al., 2022).

Broader access to clean energy can also reduce the negative impacts of environmentally damaging fossil fuels that pose health risks to communities (Green, 2015). In many developing countries, populations still rely on firewood or coal for cooking and heating, producing harmful emissions and causing deforestation. By expanding access to renewable energy sources such as solar and wind power, communities can enjoy healthier environments, reduce pressure on ecosystems, and decrease carbon emissions that accelerate climate change.

To achieve SDG 7 while supporting climate change mitigation, investment in renewable energy becomes crucial. However, financing sustainable energy infrastructure remains a major

---

\*Penulis korespondensi. putrenoks@gmail.com

challenge (Azis & Jahan, 2023), especially in developing countries with limited resources. Significant investment is required to develop clean energy networks capable of reaching remote areas (Parthan, 2017). This infrastructure includes technologies such as solar panels, wind turbines, micro-hydro power plants, and efficient energy distribution networks.

The financing constraints on this infrastructure require collaborative approaches involving various parties. Cooperation between public, private, and philanthropic sectors is essential to meet large investment needs (Vaño, 2023) in renewable energy. Through fund mobilization for clean energy projects, marginalized communities can access sustainable energy that not only helps them escape energy poverty but also supports carbon emission reduction (Tirumala & Piyush, 2023).

## METHODOLOGY

This study explores the comprehensive integration of Islamic Social Finance with SDG 7 (Clean and Affordable Energy), employing qualitative research methods to develop a comprehensive conceptual framework for Sustainable Energy Access that incorporates Islamic principles in social finance, including their elements and key features. The research methodology consists of an extensive literature review gathering relevant sources on Islamic social finance instruments (zakat, waqf, sadaqah, and infaq) and sustainable energy access, analyzing existing literature to identify critical intersections between Islamic financial principles and sustainable energy development through the lens of core Islamic concepts such as redistributive justice (Adl wa Ihsan), social responsibility (Takaful Ijtima'i), environmental stewardship (Khilafah fil Ard), and prohibition of waste (Israf) and harm (Darar). The study develops a comprehensive three-tier conceptual framework encompassing input mechanisms, process mechanisms, and output/impact measures, while incorporating global case studies from Indonesia, Jordan, Malaysia, and Bangladesh to examine real-world applications of Islamic social finance in renewable energy projects, providing empirical evidence of successful implementations and identifying challenges and opportunities in integrating SDG 7 with Islamic social finance to inform strategic policy recommendations for policymakers, Islamic financial institutions, renewable energy practitioners, and the wider Muslim community in developing sustainable and Sharia-compliant energy access programs that contribute to both social justice and environmental sustainability.

## DISCUSSION

The integration of Islamic social finance with SDG 7 is grounded in several theoretical foundations that bridge Islamic principles with sustainable development objectives. The core concepts underlying this framework include the redistributive justice principles of Islam (Adl wa Ihsan), social responsibility (Takaful Ijtima'i), environmental stewardship (Khilafah fil Ard), and the prohibition of waste (Israf) and harm (Darar).

These principles align with justice theory, which views equitable energy access as a fundamental right, stewardship theory emphasizing environmental responsibility in resource management, stakeholder theory promoting multi-stakeholder engagement in sustainable development, and resource-based view that leverages Islamic finance as a strategic resource for development.

**Tabel 1.** Comprehensive Conceptual Framework

Framework Component	Elements	Key Features	Expected Outcomes
Input Mechanisms			
Zakat (Obligatory Charity)	Individual contributions (2.5% of wealth); Institutional collections; Target: 8	Mandatory religious obligation; Stable annual collection;	Immediate energy access for poor; Equipment

Framework Component	Elements	Key Features	Expected Outcomes
	categories of recipients (Asnaf)	Direct poverty alleviation focus	subsidies; Capacity building programs
Waqf (Religious Endowment)	Cash waqf; Property waqf; Productive waqf investments	Perpetual nature; Asset-based financing; Long-term sustainability	Infrastructure development; Institutional energy systems; Sustainable financing cycles
Voluntary Contributions	Sadaqah (Voluntary charity); Infaq (Spending in Allah's way); Qard Hassan (Benevolent loans)	Flexible funding source; Crisis response capability; Community-driven initiatives	Emergency energy solutions; Community mobilization; Local ownership development
Process Mechanisms			
Resource Mobilization	Fund collection and aggregation; Asset identification and valuation; Donor engagement campaigns; Regulatory compliance	Systematic collection processes; Transparent governance; Strategic donor relations; Legal compliance framework	Adequate funding availability; Donor confidence building; Regulatory acceptance; Sustainable resource flow
Project Development	Community needs assessment; Technical feasibility studies; Technology selection; Partnership formation	Evidence-based planning; Technical rigor; Appropriate technology choice; Strategic alliances	Viable project pipeline; Technology optimization; Strong partnerships; Community buy-in
Implementation Models	Direct provision model; Capacity building model; Hybrid/partnership model	Multiple delivery channels; Skill development focus; Collaborative approaches	Diverse service delivery; Enhanced local capacity; Sustainable partnerships; Scalable solutions
Output and Impact			
Immediate Outputs	Households with energy access; Installed renewable capacity (MW/kW); Equipment distributed; People trained	Quantifiable deliverables; Technical infrastructure; Tangible benefits; Human capital development	Improved energy access rates; Enhanced energy security; Better quality of life; Increased technical skills

Framework Component	Elements	Key Features	Expected Outcomes
Intermediate Outcomes	Reduced energy costs; Improved energy reliability; Enhanced technical capabilities; Strengthened value chains	Economic benefits; Service quality improvements; Capacity enhancement; Market development	Economic relief for poor; Reliable energy services; Local expertise development; Sustainable markets
Long-term Impacts	SDG 7 achievement; GHG emission reductions; Health and education improvements; Enhanced economic opportunities	Global goal contribution; Environmental benefits; Social development; Economic empowerment	Universal energy access; Climate change mitigation; Human development; Poverty reduction

### The Role of Islamic Social Finance in Sustainable Energy

Islamic social finance provides a strategic and innovative approach to addressing energy poverty while contributing significantly to climate change mitigation through sustainable financing (Mohammad & Abdul, 2024). Instruments such as zakat, waqf, infaq, and sadaqah function not only as social donations but also as reliable funding sources to support sustainable development (Hunjra et al., 2024).

Through these Islamic social finance instruments, the Islamic financial sector offers potential as a stable and inclusive financing solution (Widiastuti et al., 2024), particularly in funding renewable energy projects in areas still affected by energy poverty (Kismawadi et al., 2024). These mechanisms create unique opportunities for financing clean energy infrastructure while adhering to Islamic principles of social responsibility and environmental stewardship.

#### Zakat: Empowering Affordable Energy Access

Zakat, as an annual obligation for financially capable Muslims, plays a crucial role in expanding affordable energy access for low-income communities. As a collective management of zakat funds creates opportunities to finance various empowerment programs, including providing affordable clean energy for underprivileged communities (Lessy et al., 2023). With these resources, zakat can become an important instrument in supporting sustainable energy access through several strategic approaches (Raimi et al., 2021).

**Renewable Energy Infrastructure Financing.** Zakat funds can be utilized for building renewable energy infrastructure, such as solar power plants or micro-hydro systems in areas not yet reached by conventional electricity networks. This enables communities isolated from modern infrastructure to gain electricity access, reducing their dependence on environmentally unfriendly fossil fuels (Haji et al., 2021).

**Clean Energy Equipment Provision.** Zakat funds can be allocated to provide clean energy equipment, such as solar-powered stoves or gas appliances, to low-income families. With such equipment, poor communities can reduce their use of firewood or other traditional fuels that negatively impact health and the environment (Lin & Lin, 2022).

**Energy Subsidies for Poor Families.** Portion of zakat funds can be allocated as energy subsidies for poor families, helping them access clean energy at more affordable costs. This step not only lightens the economic burden on poor communities but also supports carbon emission reduction efforts through clean energy utilization (Sarif et al., 2024).

**Sustainable Energy Training.** Zakat can also be directed toward sustainable energy training programs for low-income communities. Through this training, communities learn how to

effectively utilize and manage clean energy (Sohag et al., 2015), enhancing their ability to maintain energy sustainability in their regions.

**Energy Support for Micro Enterprises.** Additionally, zakat can be used to support micro enterprises in remote areas by providing more affordable energy access. Adequate energy access can help develop small businesses, increase productivity, and ultimately improve the economic welfare of local communities (Raimi et al., 2021; Sohag et al., 2015).

### **Impact of Zakat on Sustainable Development**

The utilization of zakat to expand affordable energy access brings positive impacts for sustainable development in various aspects. First, stable energy access enables low-income families to enjoy safer lighting, heating, and cooking equipment, significantly improving their daily quality of life (Sohag et al., 2015). Second, more affordable energy helps lighten the expenditure of poor families, allowing available budgets to be allocated for other urgent needs such as education and health (Sharofiddin et al., 2019). Additionally, by switching to renewable energy sources, dependence on fossil fuels decreases, supporting global efforts to reduce carbon emissions and climate change mitigation, aligned with sustainable development targets (Raimi et al., 2021). Zakat programs that also include training and business support open opportunities for communities to be more independent in managing energy, creating new jobs, and strengthening local economies (Mohd Thas Thaker & Abdullah, 2021).

### **Waqf: Supporting Sustainable Energy Infrastructure**

Waqf, as one of the Islamic social finance instruments, has great potential to support the development of sustainable energy infrastructure that provides long-term benefits for broader society. The waqf tradition, often manifested in assets such as land, buildings, or other resources, is managed productively for public interest (Zain et al., 2019). In the context of sustainable energy, waqf can serve as a stable financing source supporting renewable energy projects such as solar, wind, or micro-hydro power plants. These projects not only provide environmental benefits through carbon emission reduction but also directly impact community economic improvement (Md Zhabri, 2024).

**Waqf Land Utilization for Renewable Energy Centers.** Unproductive waqf land can be optimized as renewable energy centers. For example, waqf land can be developed into solar panel fields or wind turbines that generate electricity for surrounding communities. The energy produced benefits not only local needs but can also be sold to the main electrical grid. Revenue from electricity sales can be used to maintain infrastructure or channeled to other social programs, creating sustainable financing cycles (Nafar, 2019).

**Productive Waqf Development for Clean Energy Projects.** The productive waqf concept allows waqf assets to be invested in clean energy projects that provide long-term results (Zain et al., 2019). For example, waqf funds can be used to build micro-hydro installations in remote villages or purchase other renewable energy equipment. Revenue from these projects can be used for energy system maintenance or allocated to other social programs, making waqf a revolving fund source for clean energy needs and broader community needs.

**Waqf Support for Energy in Public Institutions.** Many public institutions such as schools, hospitals, and mosques face high energy cost constraints. Waqf funds can be used to install renewable energy systems like solar panels in these facilities. Thus, these institutions can achieve significant operational cost savings, and these savings can be redirected to support social, educational, and health programs. Additionally, implementing renewable energy in public institutions provides positive examples to communities about the importance of sustainable energy (Zain et al., 2024).

**Energy Infrastructure Development for Remote Communities.** Waqf can be allocated to build energy infrastructure in remote areas difficult to reach by conventional electricity networks. For example, waqf funds can be used to establish solar power plants in areas far from urban centers.

With electricity available, communities in these regions gain affordable energy access, improving quality of life and creating new sustainable economic opportunities (Wijaya, 2023). This reduces dependence on fossil fuels and opens energy access for previously isolated communities.

**Long-term Investment in Renewable Energy.** Waqf has perpetual nature; waqf assets cannot be sold, but their results or benefits can be utilized for community interests. This makes waqf an ideal instrument for supporting sustainable energy projects (Ari & Koc, 2021) requiring long-term investment. Using waqf funds for renewable energy projects like solar or wind power plants can provide sustainable benefits without being affected by short-term economic fluctuations, making waqf a reliable financing solution.

### **Positive Impact of Waqf on Sustainable Development**

Waqf has great potential in expanding sustainable energy access for communities, especially in regions previously difficult to reach by modern energy services. Positive impacts from waqf utilization for energy include several aspects. First, communities become more independent in meeting their energy needs without having to depend on fossil fuels or electricity networks prone to disruptions (Wijaya, 2023). Second, institutions utilizing renewable energy through waqf funds can reduce energy operational costs, allowing available funds to be allocated for other beneficial social programs (Raimi et al., 2021). Third, switching energy use to cleaner sources also supports carbon emission reduction, important for climate change mitigation (Sukmana & Rusydiana, 2023). Finally, energy infrastructure development financed through waqf creates new economic opportunities for local communities, such as technician jobs, operators, and renewable energy service providers (Qadri et al., 2024).

### **Global Case Studies: Islamic Finance in Action**

The use of zakat and waqf as financing sources for clean energy projects is increasingly developing in various countries. These Islamic social finance instruments no longer merely serve as assistance tools for those in need but also play important roles in supporting sustainable initiatives, particularly in the energy sector. By utilizing zakat and waqf, many countries have successfully implemented projects that provide affordable and environmentally friendly energy access for underprivileged communities and areas with minimal electricity access.

#### **Indonesia: Solar Panel Waqf in Islamic Boarding Schools (Pesantren)**

In Indonesia, the productive waqf concept began to be utilized in the renewable energy sector. The Quran Waqf Foundation initiated solar panel installation projects in Islamic boarding schools (pesantren). These waqf funds were used to install solar panels that help pesantren overcome high electricity costs. With solar energy, pesantren can reduce dependence on conventional electricity and suppress operational costs. The savings generated are reallocated to fund educational and social activities in the pesantren environment, as well as providing clean energy for surrounding communities (Badan Wakaf Alquran, 2022).

#### **Jordan: Zakat for Solar Water Heaters for Refugees**

In Jordan, zakat funds were utilized to install solar water heating systems in the Zaatari refugee camp through cooperation between UNHCR and several international zakat institutions. This project provided hot water access for thousands of Syrian refugees, improving their quality of life while reducing dependence on expensive and environmentally unfriendly fossil fuels. The use of solar energy also reduces camp operational costs and supports energy sustainability in the region (UNHCR, 2022).

#### **Malaysia: Solar Energy Waqf in Mosques**

Solar energy waqf innovation in mosques has become a transformative model in energy management, with Masjid Permatang Tok Mahat in Nibong Tebal, Penang, as a concrete example. Through solar panel investment, the mosque achieved monthly savings of RM500, revealing the substantial potential of renewable energy in religious institutions. This trend shows positive

development, with nearly 20 mosques having adopted solar panel technology and ambitious plans to expand coverage to 200-350 mosques in Penang through waqf schemes. Economically, a 12kW solar panel system with initial capital of RM50,000 has operational life reaching 25 years, underlining the financial and environmental sustainability of this initiative (Institute Kefamahan Islam Malaysia, 2022).

Beyond economic aspects, this solar energy waqf practice carries strategic mission in conveying ecological responsibility. This proves that religious institutions can actively participate in driving transition toward sustainable energy systems while integrating environmental conservation principles into religious practices.

### **Bangladesh: Zakat for LPG and Electricity for Refugees**

Access to safe and sustainable energy is a critical need for refugees, especially women and children experiencing forced displacement. Zakat can play an important role in helping them by providing sustainable energy solutions. In Bangladesh, for example, zakat funds have been utilized to distribute LPG to Rohingya refugees, producing significant positive impacts. UNHCR research (2021) showed that LPG provision could reduce firewood use by up to 80% in refugee camps. This not only helps refugees meet cooking needs but also contributes to environmental preservation through deforestation reduction. Besides supporting fuel provision, zakat can also be utilized to provide electricity in health centers and implement solar energy technology for lighting, which overall improves quality of life and empowerment of refugees.

These implementations show that zakat and waqf have great potential as innovative financing sources for renewable energy projects. By utilizing zakat funds and waqf assets, these countries successfully provide sustainable clean energy, help those in need, and support climate change mitigation. These initiatives prove that Islamic social finance instruments not only play roles in social assistance but also in supporting achievement of sustainable development goals, particularly SDG 7 focusing on clean and affordable energy access.

### **Challenges and Opportunities**

The integration of SDG 7 (Clean and Affordable Energy) in waqf energy programs still faces several challenges. First, lack of understanding among communities and waqf institutions about waqf potential in supporting renewable energy projects becomes the main obstacle, requiring more intensive education and socialization efforts (Sukmana, 2020). Second, limited technical and managerial capacity of waqf institutions in running renewable energy projects makes them need to partner with parties having expertise in clean energy and enhance internal capacity (Napitulu et al., 2024). Third, existing regulations do not fully support waqf integration in renewable energy projects, making policies and incentives encouraging waqf energy development much needed (Zain et al., 2024). Finally, there is still resistance from some stakeholders who view waqf only for traditional religious or social purposes, requiring paradigm change about waqf's role in supporting sustainable development (Raimi et al., 2014).

However, SDG 7 integration in waqf energy also opens various opportunities. First, large waqf potential, both in form of land assets, buildings, and cash, can be utilized for sustainable renewable energy project financing. Second, increasing community awareness about the importance of clean and affordable energy provides momentum for directing waqf funds to renewable energy sector. Third, renewable energy technology developments becoming more efficient and affordable make waqf energy projects easier to implement and more cost-effective. Fourth, collaboration with other Islamic financial instruments, such as green sukuk and Islamic microfinance, can expand funding sources and increase waqf energy program impacts. Finally, support from international organizations such as Islamic Development Bank (IsDB) and United Nations Development Programme (UNDP) encouraging waqf integration in achieving SDGs, including SDG 7, becomes significant opportunity supporting waqf energy development (Raimi et al., 2014; Zain et al., 2020).

### **Policy Recommendations**

Optimizing the role of Islamic social finance in supporting clean energy requires a comprehensive and integrated approach. The important initial step is developing innovation-supporting regulations, where government needs to establish specific policies to facilitate waqf and zakat use in renewable energy projects. This can be realized through licensing simplification, tax incentive provision, and clear technical guideline formulation. Establishing integrated services (one-stop service) for waqf-based energy projects and special desks at Ministry of Energy and Mineral Resources could be concrete steps to support implementation.

On the other hand, innovation in financing models and institutional capacity strengthening also become main focuses. Zakat and waqf institutions need to develop hybrid financing schemes combining various financial instruments, for example combination of cash waqf with green sukuk for communal electricity projects. Special digital platforms also need to be developed to facilitate public participation in supporting these projects. From institutional side, establishing special units for renewable energy supported by expert teams and continuous training programs become keys to program success.

For programs to run sustainably, solid partnership ecosystems are needed, for example through waqf-based "Energy Independent Village" programs involving various parties. Community empowerment through technical training and creative campaigns is also important for increasing public involvement. Additionally, technology use for monitoring systems and synergy with government programs will strengthen impacts from these initiatives. With comprehensive approach, Islamic social finance can become driver of inclusive clean energy transition while creating sustainable development models aligned with Sharia principles and social justice.

### **CONCLUSION**

Islamic social finance, through zakat and waqf instruments, now plays an important role in supporting access to clean and affordable energy, aligned with SDG 7 targets. These instruments, which have long been part of Islamic tradition, are increasingly relevant in answering energy challenges in modern era. Zakat, for example, has developed from consumptive assistance to strategic financing source for renewable energy projects empowering underprivileged communities, such as providing solar stoves, energy subsidies, and clean energy-based business training programs.

Meanwhile, waqf shows its flexibility in supporting large-scale sustainable energy projects. Waqf land is now optimized as renewable energy centers, and productive waqf serves as main supporter of clean energy installations in public facilities such as schools and mosques. Besides improving energy access for poor communities, waqf and zakat integration with clean energy projects drives transition toward environmentally friendly energy, opens new job opportunities, and supports climate change mitigation efforts, bringing hope for more sustainable and inclusive future.

The comprehensive conceptual framework presented demonstrates the systematic approach needed to leverage Islamic financial instruments effectively for sustainable energy access. The integration mechanisms, success factors, and risk mitigation strategies provide practical guidance for implementation while ensuring alignment with both Islamic principles and international development goals. Through evidence from successful case studies across different countries, this framework proves that Islamic social finance can serve as a transformative force in achieving universal energy access while supporting global climate objectives.

### **REFERENCES**

Alshaleel, M. M. (2019). Zakat and sustainable development goals: An empirical study. *Journal of Islamic Economics*, 12(2), 45-62.

- Ari, I., & Koc, M. (2021). Sustainable energy potential of waqf lands in Turkey. *Renewable Energy*, 175, 1023-1034.
- Azis, A., & Jahan, S. (2023). Financing challenges for renewable energy in developing countries. *Energy Policy*, 180, 113-125.
- Badan Wakaf Alquran. (2022). *Annual Report: Solar Energy Waqf Initiative*. Jakarta: BWA Publishing.
- Bajracharya, S., et al. (2022). Climate change mitigation through renewable energy transition. *Nature Climate Change*, 12(8), 756-762.
- Fujimoro, T., et al. (2020). Green economy and sustainable development nexus. *Sustainable Development*, 28(4), 823-835.
- Green, F. (2015). *Fossil fuels, health risks and environmental impacts*. Cambridge University Press.
- Haji, A., et al. (2021). Islamic finance for renewable energy infrastructure. *Journal of Cleaner Production*, 298, 126-138.
- Haron, H. (2024). Zakat allocation for environmental sustainability. *Islamic Economic Studies*, 31(1), 78-92.
- Hunjra, A. I., et al. (2024). Islamic social finance and sustainable development. *Research in International Business and Finance*, 69, 102-115.
- Idlallène, S. (2021). Waqf and sustainable development in Muslim countries. *International Journal of Islamic and Middle Eastern Finance*, 14(2), 234-250.
- Institute Kefamahan Islam Malaysia. (2022). *Solar Waqf Implementation Report*. Kuala Lumpur: IKIM.
- Kismawadi, E., et al. (2024). Islamic microfinance for energy poverty alleviation. *Energy for Sustainable Development*, 78, 101-112.
- Lessy, Z., et al. (2023). Zakat management for community empowerment. *International Journal of Zakat*, 8(1), 15-28.
- Lin, B., & Lin, J. (2022). Clean cooking solutions for developing countries. *Energy Economics*, 108, 105-118.
- Md Zhabri, N. (2024). Productive waqf in renewable energy sector. *Waqf Studies*, 15(2), 89-105.
- Mohammad, S., & Abdul, R. (2024). Islamic social finance mechanisms for climate action. *Climate Policy*, 24(3), 312-328.
- Mohd Thas Thaker, M. A., & Abdullah, M. (2021). Zakat-based microfinance for poverty alleviation. *Journal of Islamic Monetary Economics and Finance*, 7(2), 245-268.
- Nafar, N. (2019). Renewable energy development through waqf institutions. *International Journal of Energy Economics and Policy*, 9(4), 125-135.
- Napitulu, F., et al. (2024). Capacity building challenges in Islamic institutions. *Organization Development Journal*, 42(1), 67-83.
- Nwakolo, N., et al. (2023). Islamic philanthropy for sustainable energy access. *Philanthropy Journal*, 18(3), 156-172.
- O.N-C, A., & Kim, S. (2019). Inclusive growth through sustainable energy. *World Development*, 123, 104-118.
- Pardhe, N., et al. (2024). Economic benefits of renewable energy transition. *Renewable and Sustainable Energy Reviews*, 189, 113-125.
- Parthan, B. (2017). *Rural electrification through renewable energy*. Academic Press.
- Patrianti, W., et al. (2021). SDG 7 and climate change mitigation strategies. *Environmental Research Letters*, 16(8), 084-095.
- Pysmenna, U., & Trypolska, G. (2024). SDG 7 progress assessment methodology. *Sustainable Development Goals Review*, 12(1), 23-38.
- Qadri, U., et al. (2024). Economic opportunities from waqf-based renewable energy. *Islamic Economics Review*, 29(2), 178-195.

- Raimi, L., et al. (2014). Islamic social finance for development. *Development in Practice*, 24(8), 1105-1120.
- Raimi, L., et al. (2021). Zakat and sustainable development nexus. *International Journal of Ethics and Systems*, 37(3), 398-415.
- Sarif, S., et al. (2024). Energy subsidies through Islamic social finance. *Energy Policy*, 185, 113-128.
- Schmidt, T., et al. (2024). Carbon emission reduction through renewable energy. *Nature Energy*, 9(4), 234-245.
- Sharofiddin, A., et al. (2019). Poverty alleviation through energy access. *Energy and Development*, 45(2), 156-170.
- Sohag, K., et al. (2015). Energy training and community development. *Community Development Journal*, 50(3), 445-462.
- Sukmana, R. (2020). Waqf innovation challenges in Indonesia. *Journal of Islamic Finance*, 9(1), 45-58.
- Sukmana, R., & Rusydiana, A. (2023). Environmental sustainability through Islamic finance. *Environmental Economics and Policy Studies*, 25(2), 234-250.
- Tirumala, R., & Piyush, G. (2023). Community-based renewable energy financing. *Renewable Energy Focus*, 44, 189-202.
- UNHCR. (2021). *Energy access for refugees: Bangladesh case study*. Geneva: UNHCR.
- UNHCR. (2022). *Solar solutions for refugee camps: Jordan experience*. Geneva: UNHCR.
- Vañó, M. (2023). Public-private partnerships in renewable energy. *Energy Policy Research*, 78, 234-248.
- Widiastuti, T., et al. (2024). Islamic finance inclusion for sustainable development. *Journal of Banking and Finance*, 158, 106-120.
- Wijaya, A. (2023). Rural electrification through waqf mechanism. *Rural Development Review*, 34(4), 445-462.
- Zain, N., et al. (2019). Waqf asset management for social development. *International Journal of Nonprofit and Voluntary Sector Marketing*, 24(3), e1650.
- Zain, N., et al. (2020). International cooperation in Islamic social finance. *International Development Review*, 42(5), 723-740.
- Zain, N., et al. (2024). Regulatory framework for Islamic social finance. *Regulation and Governance*, 18(2), 445-462.