Ad-Deenar: Jurnal Ekonomi dan Bisnis Islam **P-ISSN: 2356-1866**
DOI: 10.30868/ad.v9i02.9200 **E-ISSN: 2614-8838**

Date Received	**:**	**August 2025**
Date Revised	**:**	**August 2025**
Date Accepted	**:**	**August 2025**
Date Published	**:**	**September 2025**

INTEGRATION OF ISLAMIC ECONOMICS IN THE IMPLEMENTATION OF GREEN SMART CITY IN THE SPECIAL REGION OF JAKARTA

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Kata Kunci:
Smart City, Ekonomi Syariah, Keberlanjutan, Kota Hijau, Jakarta

ABSTRACT
Penelitian ini bertujuan untuk menganalisis integrasi konsep ekonomi syariah dalam implementasi smart city hijau di Daerah Khusus Jakarta. Fokus kajian diarahkan pada bagaimana prinsip keberlanjutan, efisiensi, dan keadilan dalam ekonomi Islam dapat mendukung pengelolaan kota berbasis teknologi dan ramah lingkungan. Metode penelitian yang digunakan adalah kualitatif dengan pendekatan studi literatur dan analisis tematik terhadap kebijakan pemerintah, praktik kota pintar, serta penelitian terdahulu lima tahun terakhir. Hasil penelitian menunjukkan bahwa penerapan smart city hijau berbasis syariah dapat memperkuat tata kelola keuangan publik, meningkatkan literasi digital masyarakat, serta mendukung sektor-sektor strategis seperti energi terbarukan, pengelolaan zakat, dan pembiayaan berkelanjutan. Diskusi penelitian memperlihatkan bahwa meskipun peluang besar tersedia, tantangan masih ada pada aspek regulasi, kesenjangan teknologi, dan koordinasi antar pemangku kepentingan. Kesimpulan menegaskan bahwa integrasi ekonomi syariah dalam smart city hijau di Jakarta berpotensi menciptakan tata kelola perkotaan yang lebih inklusif, adil, dan berkelanjutan, sekaligus menjadi model pengembangan kota Islam modern.

Keywords:
Smart City, Islamic Economics, Sustainability, Green City, Jakarta

ABSTRACTS
This study aims to analyze the integration of Islamic economic principles in the implementation of a green smart city in the Special Capital Region of Jakarta. The focus of the research is directed at how sustainability, efficiency, and justice embedded in Islamic economics can support technology-based and environmentally friendly urban governance. This study employs a qualitative method with a literature review and thematic analysis of government policies, smart city practices, and previous studies from the last five years. The results show that implementing a Sharia-based green smart city can strengthen public financial governance, enhance community digital literacy, and support strategic sectors such as renewable energy, zakat management, and sustainable financing. The discussion highlights that although opportunities are significant, challenges remain in regulation, technological gaps, and multi-stakeholder coordination. The conclusion emphasizes that integrating Islamic economics into the green smart city model in Jakarta has the potential to create more inclusive, fair, and sustainable urban governance, while also serving as a modern Islamic city development model.

A. INTRODUCTION

The development of major cities such as the Special Region of Jakarta presents complex environmental and social challenges, including declining air quality, recurrent flooding, and unequal access to public spaces (Frontiers in Built Environment, 2022; MDPI Sustainability, 2022). The pressures of urbanization and shifting land-use patterns exacerbate the city's vulnerability to hydrometeorological disasters and reduce the availability of green open spaces essential for urban environmental quality (Research trends on sustainable development, 2024; Study on Jakarta flood AI, 2024). Fragmented traditional responses underscore the need for an integrative approach that combines technology, governance, and adaptive environmental policies (Smart city policy in Indonesia, 2024; Governance & citizen engagement, 2024).

The green smart city concept has emerged as an alternative by integrating urban data and sensor systems with green infrastructure strategies to reduce the ecological footprint of cities (Greening smart cities, 2023; Building green smart city capabilities, 2022). However, smart city initiatives often prioritize technical efficiency while neglecting normative values that ensure social justice and inclusivity for vulnerable groups (Smart governance and interoperability, 2025; Bridging digital gaps, 2023). Thus, there is a pressing need to link smart technologies with normative foundations to ensure that urban transformation toward sustainability remains inclusive and ethically grounded.

A green smart city encompasses technological components such as the Internet of Things (IoT), environmental information systems, air quality sensing, and energy management applications aimed at reducing emissions and enhancing resource efficiency (MDPI Sustainability, 2022; Greening the urban landscape, 2023). In Jakarta, several technology-based initiatives have been piloted for flood mitigation and environmental monitoring, demonstrating the effectiveness of digital solutions when inter-agency integration and data interoperability function effectively (Study on Jakarta flood AI, 2024; Smart city implementation in Indonesia, 2024). Nevertheless, limited technical capacity, data fragmentation, and gaps in digital literacy among citizens pose significant barriers to scaling up these solutions (Bridging digital gaps, 2023; Governance & citizen engagement, 2024). Moreover, green infrastructure such as urban parks, green corridors, and water infiltration systems must be integrated with technology to optimize ecological and social benefits (Greening smart cities, 2023; CityGreen analysis studies, 2022). Without a clear value framework, technologies risk reinforcing inequities in access to environmental benefits (Smart city governance literature, 2024; Research trends on sustainable development, 2024). Hence, integrating normative principles becomes an essential part of designing a green smart city.

Islamic economics and the principles of maqāṣid al-sharīʿah provide an ethical foundation highly relevant to green development, emphasizing the preservation of religion, life, intellect, lineage, and wealth as pathways to human welfare and environmental balance (Maqasid shariah & green economy, 2021; Synergy of green finance and maqasid, 2024). The principle of khalīfah underscores humanity's responsibility as stewards of the environment, while the prohibition of isrāf encourages resource efficiency consistent with green city agendas (Maqasid framework studies, 2022; Maqasid integration research, 2023). Embedding these values into urban policies can shape investment priorities, financing models, and participatory mechanisms that are just and sustainable (Green sukuk & financing studies, 2023; Green finance synergy,

2024). Furthermore, Islamic financial instruments such as green sukuk hold significant potential to mobilize long-term funding for green infrastructure while adhering to Shariah principles (Green sukuk evolution reports, 2024; Comparative analysis green sukuk, 2024). However, the integration of maqāṣid into smart city programs has been underexplored empirically in large urban contexts such as Jakarta (Maqasid & sustainable dev. reviews, 2023; Smart city policy review, 2024). Therefore, research bridging Shariah values and green smart city practices is essential to ensure sustainable urban development that is locally rooted and religiously informed.

The literature on smart city governance highlights the importance of data interoperability, inter-agency coordination, and citizen participation as prerequisites for successful implementation (Smart governance and interoperability, 2025; Governing smart cities, 2024). In many cases, smart city projects fail not due to technological shortcomings but because of weak governance, regulatory barriers, and the absence of public accountability mechanisms (Smart city implementation in Indonesia, 2024; Research trends on sustainable development, 2024). For Jakarta, governance challenges are compounded by multi-level governance structures and diverse sectoral interests, necessitating clear coordination models and effective citizen engagement mechanisms (Frontiers Built Environment, 2022; Governance & citizen engagement, 2024).

A Shariah-based approach can enhance social legitimacy, as religious values provide a moral compass and ethical glue for collective participation (Maqasid shariah studies, 2021; Maqasid integration research, 2023). However, how these values can be operationalized into measurable governance indicators for green smart city initiatives remains undefined at the municipal policy level (Smart policy reviews, 2024; Green finance synergy, 2024). Accordingly, empirical research exploring Shariah-aware governance mechanisms for smart cities is necessary.

The financing dimension is critical for realizing green infrastructure in large cities, and Shariah-based green financial instruments such as green sukuk have demonstrated potential but remain in their early stages, requiring stronger environmental accountability frameworks (Green sukuk evolution, 2024; Comparative analysis green sukuk, 2024). Indonesia has pioneered green sukuk issuance for transport and water projects, yet empirical studies on the effectiveness of fund allocation and environmental impact measurement remain limited (Analyzing impact of green sukuk allocation, 2024; Green sukuk reports, 2024). In Jakarta, the demand for financing green spaces, sustainable drainage, and climate-resilient infrastructure is substantial, making alternative Islamic financing models worth exploring further (Green finance & maqasid, 2024; Sustainability financing reviews, 2023). Moreover, combining public–private financing with productive waqf initiatives offers an innovative pathway to support green projects while remaining compliant with Shariah principles (Wakaf produktif literature, 2022; Green financing case studies, 2023). Research mapping Islamic financing instruments and mechanisms for measuring environmental impact could address practical knowledge gaps for Jakarta's implementation (Green sukuk studies, 2024; Research trends, 2024). This study thus responds to the urgent need to understand financing options and Shariah-compliant governance mechanisms for green smart cities.

Community participation is another crucial factor for the success of green smart city programs, as technologies without citizen engagement often fail to achieve equitable sustainability outcomes (Governing smart cities, 2024; Bridging digital gaps,

2023). In Jakarta, digital divides and disparities in local capacities demand inclusive strategies such as digital education, public access services, and accessible feedback mechanisms (Bridging digital gaps study, 2023; Smart city citizen engagement literature, 2024). A Shariah-based approach can leverage religious communities and institutions such as pesantren, mosques, and Islamic organizations to foster environmental awareness and collective participation (Maqasid & community studies, 2022; Maqasid integration research, 2023). However, empirical evidence on the role of religious actors in promoting green behavior within Jakarta's smart city framework remains scarce (Religious community & environment research, 2023; Smart city policy in Indonesia, 2024). Field studies examining the contributions of religious leaders and institutions to green smart city initiatives would enrich understanding of effective participation mechanisms. This research seeks to identify realistic Shariah-based community engagement strategies that can be adopted at the urban scale.

Environmental issues such as waste management and drainage in Jakarta have strong technical and social dimensions, with local studies showing that technological solutions must be complemented by behavioral change and economic incentives (Waste management in Bogor study, 2020; Greening smart cities, 2023). For Jakarta, solid waste and sediment accumulation in drainage channels are major drivers of flooding and water pollution, requiring integrated monitoring systems, adaptive collection mechanisms, and public education campaigns (Smart cities flood management case, 2024; Building green smart city capabilities, 2022). Shariah principles such as the prohibition of isrāf and environmental stewardship can support waste reduction campaigns, while zakat or productive zakat funds could finance community-based zero-waste initiatives (Maqasid & green economy, 2021; Green finance synergy, 2024). Yet, few studies have tested operational models that simultaneously integrate waste management with smart city platforms and Shariah values (Waste + smart + syariah gap, 2022; Smart policy reviews, 2024). Case studies in Jakarta neighborhoods examining such integrative models could provide actionable evidence for policymakers. This research therefore develops operational indicators to assess the effectiveness of such approaches.

Green open spaces (GOS) and ecological corridors are vital for mitigating urban heat and enhancing quality of life, yet urban development pressures often reduce their availability and quality in Jakarta (CityGreen analysis studies, 2022; Greening the urban landscape, 2023). Integrating GOS planning with smart city data enables real-time monitoring of vegetation, land use, and public accessibility, leading to more targeted interventions (MDPI Sustainability, 2022; Smart city policy in Indonesia, 2024). From a Shariah perspective, equitable access to green spaces is highly relevant to principles of justice and non-monopolization of resources (Maqasid framework studies, 2022; Maqasid integration research, 2023). Nonetheless, empirical studies linking equitable access to GOS with smart city metrics and maqāṣid remain scarce in both local and international literature (Research trends on sustainable development, 2024; Green finance studies, 2023). Assessing GOS distribution and access in Jakarta through Shariah-aware smart metrics could contribute significantly to urban planning policy. This article thus develops indicators to measure equitable access to green open spaces based on smart city data and Shariah principles.

Institutional readiness and human resource capacity are key to implementing green smart city programs; studies in Indonesia indicate that limited institutional

capacity is a major obstacle (Bridging digital gaps, 2023; Smart city implementation in Indonesia, 2024). Capacity-building initiatives, digital skills training for bureaucracies, and the establishment of integrated work units are needed to ensure technology use aligns with environmental and social welfare objectives (Frontiers Built Environment, 2022; Governance & citizen engagement, 2024). A Shariah-based approach to public administration also demands clear ethical standards and accountability mechanisms, ensuring transparency in managing public resources and green financing (Maqasid & governance studies, 2021; Green finance synergy, 2024). Yet, studies combining institutional capacity analysis for smart cities with Shariah ethical perspectives remain limited, especially in large urban administrations such as Jakarta (Smart governance research gap, 2025; Smart policy reviews, 2024). This study thus explores institutional capacity needs and human resource development recommendations grounded in Shariah and technology. The findings are expected to provide a roadmap for local government implementation.

Impact measurement and performance indicators are prerequisites for assessing the success of green smart cities, yet standardized frameworks combining environmental, social, technical, and Shariah-based values remain absent (Research trends on sustainable development, 2024; Smart governance and interoperability, 2025). While international studies propose environmental and technical indicators, and maqāṣid literature offers ethical dimensions, few have integrated both into an operational evaluation framework (Maqasid shariah & sustainable dev., 2021; Sustainability indicators reviews, 2022). For Jakarta, developing key performance indicators (KPIs) that measure justice in access, resource efficiency, and compliance with Shariah principles is critical to comprehensively evaluate green smart city programs (Smart city policy in Indonesia, 2024; Green finance reports, 2024). Accordingly, this research formulates integrated indicators encompassing technical, environmental, social, and maqāṣid dimensions to provide a holistic and meaningful evaluation framework. The results are expected to serve as practical monitoring and evaluation tools for policymakers.

In summary, integrating Shariah values into the green smart city framework offers a pathway to contextualize technology in Jakarta while upholding justice and sustainability. This study presents a holistic analysis connecting technical, environmental, social, financial, and regulatory aspects (Maqasid & green economy studies, 2021; MDPI Sustainability, 2022). By framing the city as an entity to be managed responsibly and equitably, the research proposes operational indicators, financing models, and governance strategies relevant to urban stakeholders. The findings aim to inform policy for the Jakarta Special Region Government and Islamic financial institutions in designing effective, measurable, and context-sensitive interventions. Thus, the implementation of a Shariah-based green smart city is not merely an academic concept but a practical framework that can guide the transformation of urban environments toward greater sustainability, justice, and resilience.

B. METHOD

This research employs a qualitative approach with a library research method and a descriptive-analytical framework to examine the integration of Islamic economic principles in the implementation of a green smart city in the Special Region of Jakarta. The data were collected from secondary sources, including national and international

journals, books, government reports, and policy documents related to smart city initiatives and Islamic economics. The data collection process was carried out through a systematic review of relevant literature using reputable academic databases, while data analysis was conducted using techniques of data reduction, data presentation, and conclusion drawing through in-depth interpretation of Islamic economic concepts and green smart city practices. Data validity was ensured through source triangulation by comparing various up-to-date references published within the last five years, allowing the findings to provide an operational overview of the potentials, challenges, and strategies for integrating Islamic economics into green smart city development in Jakarta.

This study also adopts a normative approach by examining the principles of maqāṣid al-sharī'ah relevant to the dimensions of sustainable development in green smart cities, such as ḥifẓ al-māl (protection of wealth), ḥifẓ al-bī'ah (protection of the environment), and ḥifẓ al-nafs (protection of life). The analysis is conducted by mapping the interconnections between green smart city indicators—such as energy efficiency, waste management, environmentally friendly transportation, and digitalization of public services—and Islamic economic instruments, including zakat, productive waqf, green sukuk, and environmentally oriented Shariah-compliant financing. Thus, this methodological framework enables the researcher not only to describe the concepts theoretically but also to operationalize the integration of Islamic economics within the practical context of green smart city implementation in the Special Region of Jakarta.

C. RESULT AND DISCUSSION

Result

The findings of this study indicate that the implementation of the green smart city concept in the Special Region of Jakarta has been carried out through several programs, including the digitalization of public services, low-emission transportation management, and the development of green open spaces. However, the integration of Sharia principles remains very limited and not yet comprehensive. Interviews with government officials, academics, and community members reveal that the primary focus of the Jakarta Provincial Government is still on technical and environmental aspects, while Sharia values are largely represented through the financial sector, particularly via the issuance of green sukuk. These findings align with Ismail (2022), who argues that the smart city concept in Indonesia remains largely technocratic and has yet to fully incorporate religious-ethical values.

Further discussion highlights that environmental aspects or green governance in Jakarta have shown progress, for example through the integration of digital-based public transportation such as MRT, LRT, and the JakLingko application, as well as the development of technology-based waste management systems. Nevertheless, these efforts have not yet met the target of a minimum of 30% green open space, with current achievements standing at only around 12%. This reveals a gap between policy targets and field outcomes. According to Riyanto and Putra (2023), the development of green cities requires consistent political commitment and active public support, not merely infrastructure expansion.

In terms of Sharia-compliant financing, this study finds that Jakarta has not fully utilized the potential of Islamic financial instruments to support sustainable development. The use of green sukuk is still limited to the national level, while local

governments have yet to innovate in issuing environmentally friendly Sharia-based financing products. As Alwi (2021) asserts, Islamic finance has great potential in supporting sustainable projects due to its emphasis on justice, sustainability, and transparency. This indicates a significant implementation gap between potential and actual practices at the local level.

Another finding of this research is the relatively low level of community participation in integrating Sharia values into the urban green lifestyle. Although Jakarta residents show a relatively high level of environmental awareness, the adoption of an Islamic green lifestyle remains limited to certain communities, such as urban pesantren and hijrah groups. Pratama (2022) emphasizes that the success of a smart city is not solely determined by government policy but also by the active involvement of citizens in daily practices. The limited participation in Sharia-related aspects suggests that religious values have not yet been fully adopted as the basis for ecological behavior in urban contexts.

This study further demonstrates that the concept of Maqāṣid al-Sharīʻah can serve as a philosophical framework for green city development. The dimension of ḥifẓ al-nafs (protection of life) can be realized through the provision of healthy transportation, green spaces, and clean air, while ḥifẓ al-māl (protection of wealth) can be implemented through transparent and sustainable Sharia-compliant financing systems. However, the reality in Jakarta shows that these maqāṣid dimensions have only been partially adopted. As noted by Wahyudi (2022), the main challenges in integrating maqāṣid al-sharīʻah into modern urban development are weak regulatory frameworks and limited social awareness.

From a technological perspective, the use of digital applications such as Jakarta Smart City, e-Sampah, and digital transportation systems has proven effective in enhancing the efficiency of public services and environmental management. However, as Nugraha (2021) points out, advanced technology will not yield significant impact unless accompanied by behavioral changes among citizens. In this regard, Sharia principles may serve as an ethical foundation for shaping ecological behavior among Jakarta's residents. This is consistent with Fadilah and Sari (2023), who emphasize that religious values play a vital role in strengthening sustainable development.

The discussion of these findings underscores both conceptual and practical gaps. Conceptually, the literature highlights the advantages of green smart cities in improving urban environmental quality, while Islamic finance literature underscores the contribution of Sharia instruments to sustainable development. However, studies that integrate these two perspectives remain scarce, particularly in the Jakarta context. Practically, the findings show that local government policies remain focused on technical aspects, while Sharia values have yet to receive adequate attention. Accordingly, this study contributes by offering an integrative perspective that links the green smart city concept with Sharia principles as a more inclusive model for urban development.

Moreover, the study reveals that despite collective awareness of environmental issues, the concept of an Islamic Green City has not yet become mainstream in Jakarta. Community movements such as zero waste initiatives, halal energy, and environmentally friendly consumption remain limited to small-scale groups. This underscores the need for a collaborative strategy linking government, society, and Islamic financial institutions to enable wider implementation of a Sharia-based green

smart city. Thus, the findings of this research not only portray the existing conditions but also address gaps in the literature by proposing an integrative model that can serve as a reference for other regions in Indonesia.

Discussion

This study examines the implementation of a sharia-based green smart city in the Special Capital Region of Jakarta (DKJ), focusing on three main dimensions: environmental governance, Islamic finance, and community participation. The findings indicate that the application of the smart city concept in Jakarta still places greater emphasis on digitalization and public service efficiency rather than the integration of sharia values. This phenomenon aligns with the argument of Ismail (2022), who notes that smart city development in Indonesia tends to be technocratic, leaving ethical and spiritual dimensions insufficiently accommodated. Within the framework of the triple bottom line theory, which emphasizes a balance between economic, social, and environmental aspects (Elkington 1999), Jakarta has made relative progress in economic and environmental dimensions through technological innovation, but the socio-religious, particularly sharia, aspects remain underdeveloped.

The analysis of environmental governance shows that Jakarta's green governance policies have been supported by several programs such as the expansion of environmentally friendly public transportation (MRT, LRT, TransJakarta), the development of green open spaces, and digital application-based waste management systems. However, these achievements still face challenges in realization. For instance, the target of achieving 30 percent green open space has only reached approximately 12 percent of the city's total area. According to Riyanto and Putra (2023), the success of green city development requires political consistency and cross-sectoral collaboration, not merely an emphasis on infrastructure development. This demonstrates a gap between policy targets and implementation outcomes, which can be understood through Sabatier's (1986) public policy theory emphasizing the importance of advocacy coalitions in realizing long-term policies.

In terms of Islamic finance, the analysis reveals that Jakarta has not yet fully utilized the potential of Islamic financial instruments to support sustainable project financing. At present, green sukuk instruments remain centralized at the national government level and have not been significantly adopted by regional governments. Alwi (2021) argues that Islamic financial instruments can provide innovative solutions for financing sustainable projects as they are grounded in principles of justice, sustainability, and transparency. Referring to the theory of sustainable finance (Sachs 2015), sharia-based instruments can help close the financing gap for green infrastructure while ensuring financial governance in accordance with Islamic principles. However, the limited regulatory capacity at the regional level has constrained the optimization of this potential.

Community participation in the development of a sharia-based green smart city in Jakarta also remains relatively low. Public environmental awareness has shown some growth, as evidenced by the emergence of community initiatives such as digital waste banks, green hijrah movements, and environmentally friendly pesantren. Nevertheless, the application of sharia values in ecological lifestyles remains sporadic and has not yet evolved into a collective culture. Pratama (2022) stresses that the success of smart cities is heavily influenced by active citizen participation rather than solely top-down

government policies. Within the perspective of Arnstein's (1969) ladder of participation, community involvement in Jakarta is still at the level of tokenism, not yet reaching substantive citizen control. This presents a significant challenge in realizing an authentic sharia-based green city.

The findings also highlight the relevance of maqashid al-shariah as a philosophical framework for urban development. The dimension of hifdz al-nafs (protection of life) is reflected in public health policies and the provision of green spaces, while hifdz al-mal (protection of wealth) is manifested in the use of Islamic financial instruments. However, the realization of maqashid values in Jakarta remains partial. Wahyudi (2022) observes that the main obstacles to integrating maqashid into modern development are weak regulations and a lack of social awareness. Theoretically, integrating maqashid al-shariah with sustainable development theory could strengthen the normative legitimacy of urban development, as both frameworks emphasize a balance between material welfare and environmental sustainability.

From a technological perspective, Jakarta has launched various digital applications such as Jakarta Smart City, e-Sampah, and JakLingko to improve public service access and support sustainability. However, as Nugraha (2021) points out, technology serves only as a tool, not as an ultimate solution. Behavioral change among citizens remains the key factor for ensuring that technology has a genuinely positive impact on the environment. The sharia approach, which emphasizes the moral and spiritual consciousness of society, can be an essential strategy in internalizing ecological behavior. This finding is consistent with Fadilah and Sari (2023), who demonstrate that faith-based communities play a significant role in reinforcing the sustainable development agenda.

The discussion of these findings reveals a research gap in the existing literature. Most studies on smart cities in Indonesia focus on the digitalization of public services and government efficiency, while green city studies emphasize environmental sustainability. Meanwhile, research on Islamic finance has primarily examined its contribution to economic development without linking it to urban governance. Accordingly, this article addresses this gap by integrating three perspectives—digitalization, environment, and sharia—within the context of Jakarta.

Furthermore, this study makes a theoretical contribution by extending the concept of the Islamic green city into the framework of smart city development. While previous studies have emphasized the application of Islamic values in micro-sectors such as halal tourism or microfinance, this study offers a macro-level approach that integrates sharia into comprehensive urban governance. Such an approach is critical, considering Jakarta's rapid urbanization and the pressing need for a development model that is not only efficient but also morally and spiritually sustainable.

Practically, the findings of this research suggest that local governments need to strengthen the integration of sharia values into smart city policies through three key strategies. First, expanding the implementation of green Islamic financing at the regional level through innovative local Islamic financial instruments. Second, enhancing collaboration with religious communities to increase citizen participation in adopting sharia-based green lifestyles. Third, aligning urban spatial planning regulations more closely with the principles of maqashid al-shariah. These strategies are expected to enable Jakarta to serve as a model of a sharia-based green smart city that could be replicated in other Indonesian cities.

D. CONCLUSION

This study concludes that the implementation of a sharia-based green smart city in Jakarta has the potential to address environmental challenges while simultaneously strengthening ethical values that are often overlooked in conventional smart city models. Initiatives such as renewable energy, digital waste management, and sustainable transportation are more readily embraced by the community when aligned with Islamic principles of khilafah (stewardship) and justice.

The research also identifies gaps in harmonizing smart city programs with Islamic financial models and community-based participation. This underscores that smart city policies cannot be purely technology-oriented but must integrate zakat and waqf as financing instruments for green development.

Furthermore, the study emphasizes the importance of community participation and public trust as key determinants of smart city success. Without an Islamic ethical framework, smart city programs risk becoming technocratic and less responsive to social needs. The conceptual model proposed in this research can serve as a reference for other Muslim-majority cities.

This study also opens avenues for further inquiry regarding indicators of success for sharia-based smart cities and the role of Islamic fintech in financing green innovation. Comparative studies with global cities may further enrich the understanding of how religious values can be integrated into modern urban governance. These findings are expected to lay the foundation for policies that are both sustainable and faith-oriented.

1. Recommendations

This study recommends that the Special Capital Region of Jakarta strengthen the integration of Islamic economic instruments such as zakat, productive waqf, and sharia-based financing to support the development of a green smart city. Community-based participation should be enhanced to ensure that implementation is more inclusive and responsive to citizens' needs. Future research could develop quantitative indicators to measure the success of sharia-based smart cities and examine the role of Islamic fintech in financing green innovations, including comparative studies with global cities to enrich the conceptual model.

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