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Green Caliph: Actualizing Ecotheology in Realizing a Sustainable Campus at UIN Sunan Gunung Djati Bandung

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Abstract:

This study aims to: (1) Analyze the gap between Islamic ecotheology values and the ecological behavior of students at UIN Sunan Gunung Djati Bandung, (2) Formulate the "Green Khalifah" concept as an integrative model, and (3) Develop a comprehensive implementation strategy towards a sustainable campus. Islamic Ecotheology, Green Khalifah (Green Steward), Fiqh al-Bi'ah (Environmental Jurisprudence), Sustainable Campus, Attitude-Behavior Gap. A qualitative study with a descriptive-analytical approach, integrating phenomenological and normative-theological perspectives. Data were collected through non-participant observation, document studies, and in-depth library research. Data analysis followed the interactive model by Miles, Huberman, and Saldaña. The ecological behavior of the academic community and environmental governance at UIN Sunan Gunung Djati Bandung, within the framework of responding to the Indonesian Ministry of Religious Affairs' 2025 Ecotheology Policy. (1) Identification of a paradoxical gap between theological knowledge and practice, manifested in the "hidden waste" phenomenon; (2) Construction of the "Green Khalifah" concept as an operational identity synergizing the spirituality of khalifah with principles of environmental fiqh (Hima, Mizan, Maslahah); (3) Formulation of a three-dimensional strategy (policy, curriculum, participation) reinforced by a circular economy model based on a Sharia Waste Bank, along with a measurable three-phase roadmap (2025-2027). A permissive culture, inconsistent waste management infrastructure, and the appeal of an instant lifestyle (Gen-Z) are external threats. Immediate implementation of the transformation roadmap, establishment of a Sustainable Campus Task Force, integration of ecotheology into the curriculum, and launch of a Sharia Waste Bank as the backbone of the campus circular economy.

Keywords: attitude-behavior gap; circular economy; ecotheology; environmental fiqh; waste management.

INTRODUCTION

The world is currently in a critical phase that UN Secretary-General António Guterres has called not "global warming" but rather "global boiling." The environmental crisis gripping the Earth has reached an alarming nadir, marked by extreme weather phenomena, rising sea levels, and uncontrolled deforestation. Scientists call this era the Anthropocene, a new geological epoch in which human activity is the primary cause of changes in the Earth's ecosystem (Crutzen, 2020). However, upon closer examination, this ecological crisis is actually only a superficial symptom of a more chronic disease: the spiritual crisis and moral drought of modern humans (Dermawan & Sain, 2025). In Indonesia, this situation is exacerbated by the country's status as one of the largest contributors of plastic waste to the ocean. A culture of massive consumerism without adequate waste management infrastructure has turned waste into an ecological time bomb (Ritchie, 2022). The piles of plastic waste that have not decomposed for hundreds of years are no longer merely an aesthetic or environmental health issue but have become a serious theological problem. From an Islamic perspective, this damage is a concrete manifestation of Allah's warning in the Qur'an, Surah Ar-Rum, verse 41, which explicitly links environmental degradation (fasad) with destructive human behavior (kasabat aydin-nas). The philosophical roots of this damage can be traced to the dominance of the anthropocentric paradigm, a worldview that places humans at the center of everything. Anthropocentric humans feel they have the absolute right to exploit nature for material satisfaction, viewing nature only as an object to satisfy needs without spiritual value (Ioris, 2022). As a result, the harmonious tripartite relationship between God, Man, and Nature becomes unbalanced. Nature, which should be seen as sacred verses of Allah (ayat kauniyah), is reduced in value to a mere economic commodity.

In response to this multidimensional crisis, a purely technical approach has proven inadequate (Hickman, 2021). This is where the urgency of a theological approach finds momentum. Dr. Sholehuddin, a lecturer at the Surabaya Religious Education and Training Center (BDK), reiterated the prophetic message in a 2025 call that ecotheology is a golden bridge connecting religious doctrine with conservation issues. This statement reaffirmed that in Islam, caring for the earth is a derivative of faith, and destroying it is a form of ecological sin. In line with this spirit, the Ministry of Religious Affairs of the Republic of Indonesia has taken a progressive step by issuing a 2025 strategic policy that encourages the implementation of ecotheological principles in all work units, including Islamic Religious Higher Education Institutions (PTKI). This policy emphasizes the integration of religious values into environmental conservation, including recommendations for tree planting, environmentally-based waste management, and efficient use of resources. The goal is clear: to make religious institutions the driving force behind behavioral change in the community (Moh Khoeron, 2025).

Sunan Gunung Djati State Islamic University (UIN) Bandung, as a leading Islamic higher education institution, bears a dual moral and institutional responsibility in responding to this policy. As an academic institution, UIN is responsible for producing environmental research and innovation. As an Islamic institution, UIN has a moral obligation to prove that Islam is a religion of rahmatan lil 'alamin (blessing for the universe). Ideally (Das Sollen), the UIN campus should be a miniature of Islamic civilization—clean, green, and sustainable. Every corner of the campus should radiate the values of environmental piety.

However, the empirical reality in the field (Das Sein) shows a sharp and ironic paradox. Based on participatory observation, the internalization of ecotheological values among students still faces a serious challenge in the form of a significant gap between cognition and action. UIN students who daily study the postulates of cleanliness (thaharah) in fiqh books, often stutter in practicing them in public spaces (Author, Initial Observation, 2024). One of the most obvious evidence of this behavioral anomaly is the phenomenon of "hidden trash" in lecture halls. Lecture desk drawers that should be a place to store sacred knowledge references, are instead converted into dumping places for used plastic food and drink waste. This behavior of hiding trash demonstrates an ecologically hypocritical mentality; as if the trash is not visible to the eyes of lecturers or cleaning staff, then the obligation to maintain cleanliness is over. This is a form of "visual piety" that is superficial and clean on the surface, but dirty in the hidden side. In fact, if we refer to the principles of ecotheology, this small act of littering reflects a profound spiritual crisis. It indicates the absence of Muraqabah (awareness of being watched over by God) in interacting with the environment (Nashr, 2021). The gap between the Ministry of Religious Affairs' progressive policies at the macro level and students' destructive behavior at the micro level indicates that existing environmental preaching strategies have not been effective in touching students' subconscious. The campus may appear green physically with trees, but it has not yet become a fully sustainable campus systemically, culturally, and spiritually (Alfan & Rizal, 2023).

Therefore, a paradigm deconstruction and reconstruction are needed. UIN Sunan Gunung Djati Bandung requires an integrative concept capable of changing the paradigm of campus residents from mere residents (occupants) to caretakers (stewards). This concept must be able to translate the language of heaven (revelation) into the language of earth (real action), transforming textual arguments into contextual behavior (Fauziah & Handoyo, 2025). Departing from academic anxiety about this gap, as well as the urge to respond to the national policy of the Ministry of Religious Affairs, research on the formulation of the concept of "Green Khalifah" is very urgent to be carried out. This paper is presented not merely to fulfill academic obligations, but as an intellectual endeavor to offer a roadmap for the transformation of UIN Sunan Gunung Djati Bandung towards a sustainable campus based on values. Through the actualization of ecotheology in the concept of Green Khalifah, it is hoped that environmental preservation will no longer be seen as a mere demand for administrative regulations, but rather as a manifestation of the spiritual piety of a Khalifah who is worshipping on His earth. Specifically, this research aims to:

First, analyzing the reality of the gap between the theological values taught and the ecological behavior of students in the UIN Sunan Gunung Djati Bandung environment, especially regarding the phenomenon of lack of awareness in waste management in lecture halls. This in-depth analysis is important to accurately map the root of the problem, whether it lies in the realm of cognition, affection, or inadequate support systems. Second, formulating the construction of the "Green Caliph" concept as an integrative approach that combines ecotheological insights with students' moral responsibility as agents of change. This concept will function as a philosophical-operational framework that positions every individual on campus as a caliph responsible for the maintenance (imarah) and improvement (islah) of their campus environment. Third, developing a comprehensive "Sustainable Campus" implementation strategy, covering aspects of institutional policy, improvements to environmentally friendly infrastructure, and transformation of academic culture at UIN Sunan Gunung Djati Bandung. This strategy is designed to close the identified gaps, with measurable

and sustainable indicators, so that the transformation towards a green campus is not a temporary project but becomes the DNA of the academic culture of UIN Sunan Gunung Djati Bandung. Thus, this research is expected to provide theoretical contributions in enriching the treasury of contemporary Islamic ecotheology and practical contributions in the form of an applicable blueprint for UIN Sunan Gunung Djati Bandung and other PTKI in realizing the vision of an authentic and value-based sustainable campus.

This research theme lies at the intersection of three main fields of study: sustainability studies in higher education (sustainable campus/green university), Islamic ecotheology, and environmental behavior studies. Literature mapping shows that although each field has developed rapidly, the integration of the three—especially in the operational context of Islamic Religious Higher Education (PTKI)—remains a relatively under-explored area, creating a significant research gap that this research attempts to fill.

The literature on sustainable campuses has grown globally, with a strong focus on infrastructure, policy, and management aspects. Studies such as those conducted by Alfan & Rizal (2023) and Ritchie (2022) often measure the success of green campuses based on quantitative indicators such as energy efficiency, water management, waste reduction, and green space (Alfan & Rizal, 2023). The Association for the Advancement of Sustainability in Higher Education (AASHE) with its STARS has become a widely adopted reference standard (Ritchie, 2022). However, criticism of this approach has arisen because it is often top-down, technocratic, and ignores the cultural dimension and intrinsic values of campus residents as agents of change. Research by Hickman (2021) confirms that purely technical solutions without transformation of values and behavior have serious limitations in achieving authentic sustainability (Hickman, 2021). In the Indonesian context, many studies (e.g., Campus, 2017) document physical green efforts on campus, but they rarely address the "soft infrastructure" aspects of values, spiritual motivation, and the formation of ecological identities among campus residents. This is the first gap: an overly fragmented approach to technical and administrative aspects, without connecting them to the living and deep value systems within religious communities such as PTKI.

On the other hand, Islamic ecotheological studies have produced a rich normative treasure. Scholars such as Nashr (2021) and Dermawan & Sain (2025) have explored key concepts such as khalifah (steward), amanah (trust), mizan (balance), and ayat kauniyah (cosmic signs) as theological foundations for environmental ethics (Nashr, 2021). Numerous thematic interpretations of ecological verses have also been conducted (Dermawan & Sain, 2025). However, as Fauziah & Handoyo (2025) point out, most of these discussions are still textual expositions (normative-theoretical) and stop at general recommendations (Fauziah & Handoyo, 2025). This literature has yet to provide concrete operational guidance on how to transform a lofty concept like "khalifah fil ardh" into a measurable set of behavioral indicators, governance protocols, or curricula in a modern institution like a university. This constitutes the second gap: the gap between sublime theological discourse and practical, measurable, and contextual implementation models in the everyday life of a campus.

The third field, the study of environmental psychology and sociology, has long identified the phenomenon of the attitude-behavior gap or value-action gap. This means that positive knowledge and attitudes toward the environment do not automatically guarantee consistent action. Research in religious circles demonstrates this complexity; religiosity does not always correlate linearly with pro-environmental behavior. Observations of "hidden trash" in desk drawers at UIN Sunan Gunung Djati Bandung are an empirical manifestation of this gap.

Previous research on students' environmental awareness, including at PTKI, often only measures levels of knowledge or attitudes through questionnaires, without delving into the paradoxes and psychological-spiritual mechanisms behind these contradictory behaviors (Ioris, 2022). The third gap is the lack of research linking this attitude-behavior gap analysis with Islamic theological frameworks (such as the concepts of muraqabah and ihsan) to design faith-based behavior change interventions.

Recently, literature has emerged that responds to national policies, such as the 2025 policy of the Indonesian Ministry of Religious Affairs on ecotheology (Indonesia, 2024). However, this literature often consists of policy reports or general conceptual articles. In-depth empirical research to test the effectiveness, translate, and critique these policies in the field—especially using an action research approach involving campus communities—remains very limited. The fourth gap is the lack of studies that use national policies as a starting point for in-depth integrative research at the institutional level, while also providing evidence-based feedback for the improvement of these policies.

Based on the mapping and identification of the gaps above, this research positions itself as an integrative synthesis effort that bridges these three areas. The formulated "Green Khalifah" concept aims to be an operational model that translates Islamic ecotheological doctrine into: (1) a measurable individual behavioral framework for students and academics, (2) institutional governance principles for UIN Sunan Gunung Djati Bandung, and (3) a holistic campus culture transformation strategy. By focusing on the specific context of PTKI and highlighting specific empirical phenomena ("hidden waste"), this research not only maps the gap between theology and behavior but also designs value-based solutions to close the gap. Thus, its main contribution is to fill the second and third gaps simultaneously, while responding to the first and fourth gaps by offering an alternative sustainable campus model based on local-religious values and oriented towards contextual policy implementation.

METHOD

This research was designed using a qualitative research method with a descriptive-analytical approach. The choice of this method is based on the characteristics of the problem being studied, namely the phenomenon of ecological awareness and human behavior that requires a deep understanding (verstehen) related to meaning, values, and subjective experiences, not just statistical calculations (Creswell & Poth, 2018). Through this method, the author attempts to dissect the reality of environmental damage on campus not only from the physical surface, but also to delve into the root of the problem of paradigms and theological awareness of the academic community. Specifically, this research integrates two main approaches. First, a phenomenological approach is used to capture and understand the essence of students' life experiences (lifeworld) in interacting with their campus environment, including the meaning behind actions such as throwing trash in desk drawers (Neubauer et al., 2019). Second, the normative-theological approach serves as an analytical tool for assessing and interpreting field facts based on authoritative Islamic texts, such as the Qur'an, Hadith, and the principles of Fiqh al-Bi'ah (Nashr, 2021). The integration of these two approaches is expected to produce a comprehensive analysis, from das sein (empirical phenomena) to das sollen (theological norms).

The data sources used are divided into primary and secondary data. Primary data were obtained directly from two sources: (1) field data in the form of the physical condition of the

cleanliness of the lecture hall and the observed consumption patterns of students, and (2) primary revelation text data which include ecological verses in the Qur'an and relevant Hadith of the Prophet. Secondary data were obtained from the official policy document of the Indonesian Ministry of Religious Affairs in 2025 regarding the application of ecotheology (Kemenag RI, 2025), environmental thematic interpretation books, and scientific journal articles related to Islamic ecotheology and sustainable campus management (Fauziah & Handoyo, 2025). To ensure the validity (trustworthiness) of the data, the researcher applied the source and method triangulation technique (Denzin & Lincoln, 2017). This technique combines non-participant observation of crucial points such as lecture desk drawers, the campus mosque area, and the canteen; documentation studies of policy documents and photographs of field conditions; and in-depth library research of theological and academic sources.

The data analysis technique was carried out inductively-conceptually by following the interactive model of Miles, Huberman, and Saldaña (2020), which includes three stages of flow that occur in a cycle: data reduction, data display, and conclusion drawing/verifying. In the data reduction stage, all field notes, documents, and literature were filtered, focused, and simplified (Miles et al., 2020). Observational data on student behavior were then juxtaposed with normative data from theological postulates to sharply map the gap pattern. In the data presentation stage, the organized data set was presented in the form of descriptive-analytical narratives and matrices to facilitate drawing relationships. The final stage was conclusion drawing, where researchers synthesized and abstracted to formulate the concept of "Green Caliphate" as an integrative solution. The final conclusion is drawn with deductive logic, starting from general theological principles to specific policy recommendations, which emphasize that the transformation towards a sustainable campus at UIN Sunan Gunung Djati Bandung must begin with the reconstruction of theological awareness as a foundation, not just superficial technical infrastructure improvements (Hickman, 2021).

RESULTS AND DISCUSSION

Integration of Spirituality and Ecological Responsibility

The global environmental crisis, which has reached a "boiling" intensity, demands a deeper and more transformative response than mere technical solutions or regulatory policies. Experts are increasingly recognizing that the roots of this crisis are philosophical and spiritual, namely the human perspective on nature, which has been reduced to an exploitative relationship (Ioris, 2022). This is where the ecotheological or Green Theology approach finds its urgency. Ecotheology argues that environmental degradation is a symptom of a crisis of meaning and value, so its recovery must involve deep spiritual and ethical dimensions (Dermawan & Sain, 2025). This approach emphasizes that the relationship between humans and nature is not a mechanistic subject-object relationship, but rather a manifestation of faith and divine responsibility. The universe, in this perspective, has intrinsic value and sacredness as ayat kauniyah (signs of God's power) that must be respected and protected, not exploited arbitrarily (Nashr, 2021). For religious communities, especially Islam, the ecological crisis is a call to spiritual introspection and re-evaluate religious practices that are often confined to individual rituals, without any real impact on the preservation of the universe.

In the Indonesian context, Islamic educational institutions such as UIN Sunan Gunung Djati Bandung assume a strategic dual role in responding to this challenge. As a bastion of

Islamic values and a center for national intelligence, PTKI has a unique opportunity to integrate ecotheological insights into all aspects of the tri dharma of higher education. Research by Merciano et al. (2024) shows that the eco-theological approach in Islamic educational institutions has proven capable of forming the character of students holistically, by internalizing the value that protecting the environment is an integral part of worship and the actualization of faith (Merciano et al., 2024). This integration is centered on the reactualization of the central concept of al-Insan al-Khalifah (humans as God's representatives on earth). The concept of caliph is not a title of authority to dominate, but rather a divine trust (amanah) that bears the moral responsibility to maintain, manage, and prosper the earth (imarah al-ardh) based on justice and compassion (Cardoso, 2023). As a caliph, every individual, including the academic community, is responsible for maintaining the balance of the ecosystem (mizan) and preventing all forms of damage (fasad) on the face of the earth, as warned in QS. Ar-Rum: 41.

Furthermore, within the framework of state bureaucracy and institutions, ecotheology can be interpreted as the spiritual dimension of national defense and public service. Within the Indonesian Ministry of Religious Affairs, protecting the environment is a concrete manifestation of love for the homeland and the practice of religious teachings. Therefore, State Civil Apparatus (ASN) and students under the auspices of the Ministry of Religious Affairs are required to develop an "environmental spirituality," an ingrained awareness that any act of negligence or damage to the environment is not merely an administrative violation, but more fundamentally, a form of betrayal of the divine mandate they have been entrusted with (Stier et al., 2024). This spirituality will become an intrinsic driving force, transcending mere compliance due to regulatory pressure or incentives.

However, realizing the ideal of a Green Caliph requires more than just general theological discourse. It requires a concrete and implementable operational foundation, sourced from the Islamic legal tradition itself, namely Fiqh al-Bi'ah (Environmental Jurisprudence). To date, many students' understanding of cleanliness and sustainability is often limited to the chapter on Thaharah (purification) in ritual jurisprudence, which focuses on the purity of the body, clothing, and places for mahdhah worship. However, Islam offers a much more comprehensive concept, namely Imarah al-Ardh (prospering the earth), which encompasses all human interactions with its ecosystem (Rahmawati et al., 2024). To build a complete ecological reasoning among students at UIN Sunan Gunung Djati Bandung, there are at least three main principles of Fiqh al-Bi'ah that need to be reconstructed and internalized.

First, the principle of Hima (Protected Conservation Zones). Historically, the Prophet Muhammad (peace be upon him) established the Hima policy, which designated prohibited zones around springs and grasslands in Medina to be protected from overexploitation, in order to maintain biodiversity and resource sustainability (Al-Damkhi, 2021). In the contemporary campus context, this principle can be realized through the "Campus Hima Zone" policy. This zone is not simply a passive Green Open Space (RTH), but rather a strictly regulated area that applies active conservation principles (Johnstone et al., 2023). For example, establishing a zero-emission zone in the center of the campus to reduce air and noise pollution, or designating the cafeteria and certain academic areas as a total "Single-Use Plastic Free Zone." The establishment of a campus Hima is a strong statement that a religious institution is committed to protecting part of its creation, as well as a living education about the limits of exploitation.

Second, the principle of Mizan (Ecological Balance). The Qur'an explicitly states that God created everything with the right proportion and balance (QS. Al-Qamar: 49). This principle

of Mizan is a cosmic law that must not be violated. The phenomenon of "hidden trash" in college desk drawers is a clear violation of this principle. This action reflects a mentality of ignoring the responsibility to maintain balance; by hiding trash, students try to eliminate traces of the "imbalance" they create from view, even though the imbalance remains material and continues to have an impact (Fauziah & Handoyo, 2025). The concept of the Green Khalifah requires every individual to actively return and maintain the Mizan (Maulana Bagus Rahmat et al., 2025). In campus practice, this is translated through a commitment to a zero-waste lifestyle and a circular economy. Any consumption residue, such as food packaging or water bottles, must be managed consciously—recycled, composted, or minimized from the start—so that it does not become a burden that disrupts the campus's natural balance.

Third, the principle of Maslahah Mursalah (Public Benefit). Often, pro-environmental campus policies, such as plastic bans or the requirement to bring tumblers, are considered burdensome and restrict personal freedom. This is where the principle of maslahah mursalah from ushul fiqh plays an important role. Maslahah mursalah refers to benefits that are not explicitly mentioned in the text of revelation, but are in line with the universal goals of sharia (maqasid al-shari'ah), including the goal of hifdz al-bi'ah (preserving the environment) (Jamaruddin, 2023). The action of protecting the campus from plastic waste and pollution, therefore, is not merely following a trend, but an urgent effort to realize a greater public benefit: the healthy survival of current and future generations. Students as future leaders must be trained to prioritize this long-term benefit over short-term interests and comfort. The application of this principle opens up space for ijtihad for the rectorate to create innovative policies based on ecological benefits, even though there is no strict precedent in the yellow book (Ulum et al., 2025).

The integration of these three principles of Islamic jurisprudence—Hima, Mizan, and Maslahah—with the theological concept of the Caliph creates a robust operational framework for the Green Caliph. This framework transforms environmental preservation from a mere additional activity into the core business of religious and scientific activities on campus. Students no longer see themselves as passive "residents" of the campus, but as "local caliphs" who are actively responsible for the maintenance and prosperity of the small ecosystem where they study. This paradigm shift is a fundamental prerequisite for achieving a truly sustainable campus, where green policies are not implemented under duress, but are implemented consciously as part of their devotion to God, science, and the future of the earth.

Integrating Sustainable Campuses, SDGs, and Waste Management Transformation: The Path to a Green Caliphate

The evolution of the concept from Green Campus to Sustainable Campus marks a crucial paradigm shift in the environmental movement in higher education. While earlier approaches often focused on physical and aesthetic aspects such as landscape greening, Sustainable Campus embraces a far more holistic and integrative vision. This concept emphasizes the harmonization of the three pillars of sustainability—environmental, economic, and social—in all campus governance, policies, culture, and operations, actively contributing to the achievement of the United Nations Sustainable Development Goals (SDGs) (Leal Filho & et al., 2019). Universities, as microcosms of society and pioneers of innovation, have a moral responsibility and the strategic capacity to serve as living labs for implementing the SDGs. In this context, contributions to SDG 4 (Quality Education) through education for sustainable development, SDG 11 (Sustainable Cities and Human Settlements) through environmentally

friendly campus governance, and specifically SDG 13 (Addressing Climate Change) through carbon emission mitigation and climate resilience building, are key sustainability performance parameters (Sammalisto et al., 2022). However, achieving these requires more than just installing solar panels or expanding green spaces; it requires a comprehensive systemic transformation.

Recent research consistently demonstrates the close link between SDG indicators and the operational framework of a sustainable campus. Ranking tools such as the UI GreenMetric World University Rankings have popularized and standardized these key indicators, including spatial planning and infrastructure (campus conditions and infrastructure), energy efficiency and climate change, waste management, water use, transportation systems, and education and research (Suwartha & Sari, 2020). The real challenge lies in transforming these quantitative indicators into a living culture and values within the campus community. This is where the uniqueness and opportunities of Islamic Religious Higher Education (PTKI) lie. A study on the implementation of a green campus at UIN Raden Intan Lampung revealed that success requires an integrative management approach, encompassing seven main aspects: institutions, policies, curriculum, active student participation, reward systems, human resource capacity, and cross-unit collaboration (Ardhy & Fauziah, 2025). This holistic model serves as a valuable reference for the development of the Green Khalifah concept at UIN Sunan Gunung Djati Bandung. This concept aims to transcend the techno-managerial approach by injecting spiritual and ethical dimensions into each of these aspects. Thus, sustainability is no longer merely administrative jargon or a list of physical achievements, but is deeply internalized and becomes part of the institutional identity and individual ethos of every campus member. A "Green Caliph" within the SDGs framework is an agent who not only understands global targets but also internalizes and implements them as part of the divine mandate to prosper the earth in a just and sustainable manner (Guerra et al., 2022).

Among all sustainability indicators, waste management is often both a tangible benchmark and a glaring weakness on many campuses. Based on the UI GreenMetric standard, comprehensive waste management includes 3R (Reduce, Reuse, Recycle) policies and programs, reducing the use of paper and single-use plastics, and separate handling of organic, inorganic, and hazardous waste (Beringin & Situmorang, 2021). However, the reality on the ground shows a wide gap between theoretical knowledge and daily practice, a phenomenon known as the attitude-behavior gap in environmental psychology literature (Kollmuss & Agyeman, 2020). A case study conducted at HKBP Nommensen University, for example, revealed a startling paradox: although 100% of students were aware of the negative impact of plastic waste on the environment, the adoption rate of waste reduction behaviors in their daily activities remained low (Zebua & Fitri, 2021). Similar findings were reported from Jakarta State University (UNJ), where the effectiveness of waste management was hampered by two main factors: first, incomplete and unclear waste sorting facilities at source; and second, more fundamentally, the low awareness and intrinsic commitment of the academic community to disciplined waste sorting and reducing waste generation (Yulianti et al., 2022).

This phenomenon confirms the central thesis of this paper: providing physical infrastructure—such as colorful trash bins or composting machines—is a necessary but insufficient step. Without social engineering that builds new norms and, most importantly, a spiritual approach that touches the heart and faith, sustainable behavioral change will be difficult to achieve. This is the gap that the Green Khalifah concept is struggling to fill. This concept offers a motivational framework that goes far beyond mere eco-guilt or regulatory

compliance. He built the foundation of action on: (1) Muraqabah Awareness, namely the belief that every action, including littering, is witnessed and accounted for before God, (2) Amanah Ethics, that managing waste properly is part of fulfilling the mandate as a caliph to prevent damage (fasad) on earth, and (3) Mizan Principle, that a zero-waste life is a concrete effort to maintain the ecological balance that has been established by Allah (Nashr, 2021).

Therefore, the implementation of the 3R program at UIN Sunan Gunung Djati Bandung, within the Green Khalifah framework, must be designed as a multidimensional intervention. Reduce is not only a frugal campaign, but is also based on Islamic teachings about simplicity (zuhd) and avoiding israf (excess). Reuse is inspired by the wisdom of appreciating blessings and avoiding waste. Recycle is understood as a concrete form of imarah al-ardh (prospering the earth) by returning resources to a beneficial cycle. By combining a systemic SDGs framework, integrative green campus management principles, and transformative spiritual motivation, UIN Sunan Gunung Djati Bandung can transform the challenge of waste management from an operational burden into an opportunity to shape the character of a Green Khalifah—a generation of future leaders who are not only intellectually intelligent but also ecologically pious, contributing significantly to a sustainable earth.

Ecological Reality Analysis

The theological foundation of Islam offers a very solid framework of environmental ethics, starting from the concept of humans as caliphs, the principle of mizan (balance), and the strict prohibition against destruction (fasad). However, empirical observations in the field often display a profound paradox. At UIN Sunan Gunung Djati Bandung, an institution that explicitly upholds Islamic values in its vision and mission, a significant gap was found between the theological values taught in the classroom and the daily practice of ecological behavior in the campus public spaces. This gap is not an isolated phenomenon, but rather a reflection of a pattern also found in various other universities, both general and religious, which indicates a systematic "ecological behavioral anomaly" (Kollmuss & Agyeman, 2020). Students who cognitively understand the obligation to maintain cleanliness (as a derivative of thaharah) and the dangers of plastic waste, in practice, actually carry out contradictory actions. Research by Sirait et al. (2023) confirmed that although students' perceptions and knowledge of environmental issues tend to be good, this is not converted into real action, often due to a lack of participatory program socialization and failure to build emotional involvement (Sirait et al., 2023).

At UIN Sunan Gunung Djati Bandung, the most concrete and ironic manifestation of this anomaly is the phenomenon of "hidden trash" in lecture desk drawers. Drawers, which philosophically should be a place to store sacred "knowledge," are instead reduced to "temporary graves" for plastic beverage packaging, food wrappers, and used paper. This behavior is more than just a simple hygiene issue; it is a sharp diagnostic indicator. This act of "hiding" trash reveals several layers of problems: first, an extrinsic and artificial environmental awareness. Students maintain the cleanliness of public areas only when there is direct supervision (lecturers, staff) or when facilities (trash cans) are within easy reach (Yahya & Hidayat, 2022). Second, this indicates a weak internalization of the value of muraqabah, namely the awareness that every action, including those hidden behind the wood of the drawer, is constantly monitored by Allah (Nashr, 2021). Third, this behavior reflects a mentality of "eliminating symptoms" rather than "solving the root of the problem"; Garbage is

considered to be out of personal view, although it remains a problem for cleaning staff and the campus environment.

This behavioral condition is exacerbated by a suboptimal enabling system. Inorganic waste management, particularly sorting, is often ineffective. As reported in many universities, the availability of segregated waste bins (3 colors) is often not accompanied by a consistent transportation and subsequent processing system, resulting in waste being re-mixed at the Temporary Disposal Site (TPS) (Yulianti et al., 2022). This situation creates a vicious cycle: low campus community participation in sorting makes an integrated management system uneconomical to implement, and the absence of an integrated system then justifies campus residents for not sorting. Without multidimensional interventions—combining rule enforcement, the provision of truly functional infrastructure, and most importantly, spiritual-normative interventions to change mindsets—campuses risk becoming mere "educated waste producers," a major irony for institutions that aim to produce responsible leaders.

To design a precise and contextual transformation strategy, a comprehensive mapping of the internal and external conditions of UIN Sunan Gunung Djati Bandung is required. SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis provides a systematic framework for mapping the institution's strategic position and how the Green Khalifah concept can be implemented realistically to transform threats and weaknesses into opportunities that are utilized by existing strengths (Gürel & Tat, 2017).

The Internal Strengths of UIN Sunan Gunung Djati Bandung stem from its identity and value capital. As an Islamic campus, it has direct access to the rich theological and ethical treasures of Islam regarding the environment. Courses such as Akhlak Sufism, Fiqh, and Ulumul Qur'an in the curriculum are already installed cognitive infrastructure that can be integrated with ecotheological insights (Fauziah & Handoyo, 2025). The Rectorate's policy towards a Smart Campus is also a progressive force that aligns with the principle of reduce, as it enables the digitalization of administration and learning to reduce dependence on paper (paperless). In addition, social capital in the form of the existence of Student Activity Units (UKM) for nature lovers, campus da'wah institutions, and other student organizations constitute a network of potential agents of change to be mobilized as pioneers and ambassadors of the Green Caliphate.

The most crucial internal weaknesses lie in the culture and behavioral systems. The permissive culture of littering, reflected in the desk drawer phenomenon, demonstrates weak self-regulation and collective efficacy at the student community level (Zebua & Fitri, 2021). Another systemic weakness is the inconsistency in waste management infrastructure. Often, segregated trash bins serve only as symbols without substance, as the logistics chain after the point of disposal—transportation, collection, and processing—is not designed to maintain segregation (Beringin & Situmorang, 2021). Furthermore, the absence of meaningful consequences or the absence of firm and educational sanctions for violations of cleanliness rules makes existing regulations lose their teeth and are seen as mere voluntary appeals (Brussee, 2023).

External Opportunities are currently very conducive. The 2025 policy of the Indonesian Ministry of Religious Affairs on mainstreaming ecotheology is a breath of fresh air that provides a mandate and political legitimacy while opening access to resources such as competitive grants and technical support (Kemenag RI, 2025). The global trend of Sustainable Development Goals (SDGs) also opens up opportunities for broad collaboration, both with international universities, donor agencies, and environmental NGOs, for mentoring programs,

joint research, and capacity building towards a Sustainable Campus (Leal Filho & et al., 2019). The increasingly critical society towards environmental issues also creates a social demand for campuses to not only teach but also practice sustainability.

The main external threats come from the economic and cultural ecosystems around campus. The rise of the single-use food and beverage packaging industry in canteens and stalls around campus creates an enabling environment for unsustainable consumption patterns (Pretorius & de Waal, 2022). In addition, the characteristics of Generation Z who prioritize convenience and practicality (instant gratification) are a challenge in promoting a zero-waste lifestyle that often requires extra effort, such as bringing your own food containers, sorting waste, or washing tumblers (Khan & Belk, 2024). If not addressed, this instant lifestyle will continue to compete with the ethics of sustainability that are trying to be built.

Based on this SWOT mapping, the position of UIN Sunan Gunung Djati Bandung can be categorized as being in the "Diversification" quadrant. This institution has a very strong core strength in the form of a foundation of Islamic values and identity, and is supported by very prospective external opportunities. However, this institution also faces acute internal weaknesses in the form of a permissive culture and an incomplete management system, which is exacerbated by external threats from a consumptive lifestyle. Therefore, the Green Khalifah implementation strategy must not be patchwork or merely a ceremonial campaign. It must be a transformative strategy that is "re-education and systemic coercion" (Alam et al., 2024). Re-education here means the reconstruction of religious understanding that explicitly and applicatively connects the doctrines of thaharah, caliph, and mizan with concrete actions of disposing of and managing waste. Meanwhile, "systemic coercion" refers to the design of policies and infrastructure that make green behavior choices the easiest, most affordable, and normal (default option) for every campus member, while providing clear consequences for those who violate them. Only with a combination of soft power (values, education, persuasion) and hard power (regulation, infrastructure, sanctions) can the paradox of the theology-behavior gap be overcome, and UIN Sunan Gunung Djati Bandung can truly transform from a physically green campus into a spiritually and culturally sustainable community.

Construction and Implementation of the Green Khalifah Concept

To bridge the acute gap between theological awareness and ecological practice, this study formulates an operational concept that serves as a transformative framework: "Green Khalifah". This concept is not merely an empty terminology but a newly constructed identity that organically integrates individual ritual piety with social ecological piety. Green Khalifah is built on the philosophical foundation that every individual, especially in the context of the Islamic academic community, is a trustee (khalifah) who is fully responsible for his ecological footprint and is obliged to actively prosper the earth (imarah al-ardh). Methodologically, this concept adopts and adapts the Eco-Pedagogy approach based on Eco-Theology which has been proven effective in forming students' characters holistically in various nature-based schools. A study by Andriana et al. (2025) showed that a pedagogical approach integrated with environmental theology succeeded in simultaneously developing spiritual, social, and cognitive dimensions, because values were taught not through abstract lectures but through habituation and meaning in real contexts (Andriana et al., 2025).

At Insan Rabbani Nature School, for example, the internalization of ecological values is carried out through strict practices such as a total ban on single-use plastics in the cafeteria area and regular activities of processing organic waste into compost by students. This model

of "habituation through positive coercion" creates an environment where environmentally friendly behavior is the only prevailing norm. At UIN Sunan Gunung Djati Bandung, this concept can be translated into a cultural movement that reconstructs the meaning of everyday objects and actions. A plastic bottle of mineral water, for example, is no longer seen as simply inorganic waste, but as a "potential ecological sin" if discarded carelessly, because it violates the principle of mizan (balance) and is a form of israf (wastefulness) which is prohibited. Conversely, planting and caring for trees on campus is not seen as a side activity, but as an "ecological charity" whose rewards continue to flow as the tree grows and provides the benefits of oxygen, shade, and carbon absorption (Nashr, 2021). Thus, Green Khalifah operationalizes theological doctrine into practical ethics that are directly connected to concrete choices in campus life.

However, to transform the individual identity of Green Khalifah into a collective reality called a Sustainable Campus, a comprehensive and multi-dimensional implementation strategy is required. Based on the analysis of the success model at UIN Raden Intan Lampung and the theoretical framework of change management, this strategy must simultaneously address three main areas: policy and governance, education and curriculum, and participation and culture (Sirait et al., 2023). First, in the Policy and Governance Dimension (Institutional & Policy Management), transformation must begin with the highest political commitment (political will) from university leaders. UIN SGD Bandung needs to immediately establish a Sustainable Campus Development Task Force or Team that is directly responsible to the Rector and has the authority to coordinate, monitor, and evaluate all sustainability initiatives across all faculties and units. This team will formulate the "Green Campus Statute" or binding rector's regulations, which require all work units to implement the Green Office principles. Concrete policies that must be encouraged include: (1) Total Administrative Digitalization (Paperless Office), by adopting e-office, e-signature, and digital archive systems to drastically reduce paper usage. This is not just cost efficiency, but a form of "administrative jihad" against the waste of natural resources (Suwartha & Sari, 2020). (2) Strict Single-Use Plastic Ban Regulations, which apply to all canteens, cafeterias, and official campus events, supported by the provision of adequate water refill stations in each building to encourage the use of tumblers.

Second, in the Education & Curriculum Management Dimension, environmental education must move beyond the periphery (extracurricular) and into the core (curriculum). UIN SGD Bandung can pioneer the integration of Islamic ecotheology modules into Compulsory General Courses (MKU) such as Islamic Religious Education, Citizenship, or a new course specifically on the Philosophy of Environmental Science and Ethics. Lecturers from various disciplines are encouraged to link lecture materials to sustainability issues and relevant kauniyah verses, so that there is an integration of naqli and aqli knowledge (Fauziah & Handoyo, 2025). Furthermore, the Eco-Pedagogy method must be realized through project-based and experiential learning. For example, chemistry courses can discuss air pollution, sociology can highlight environmental movements, and Community Service (KKN) activities are designed with specific environmental themes, such as community waste management or mangrove rehabilitation. Ecobrick-making training—packaging used plastic packaging into solid bricks for furniture—is a concrete example that trains creativity, precision, and at the same time provides a real solution to plastic waste on campus (Yulianti et al., 2022).

Third, in the Student Participation & Culture Dimension, true sustainability is only possible if students are not passive objects but active subjects of change. A key strategy is to build an engaging and meaningful participation ecosystem. One way is through the Green Ambassadors program, recruited from various faculties. These ambassadors receive intensive training in ecotheology and campaign techniques, then serve as role models and agents of change in their respective fields (Askar & Ghofur, 2025). To encourage participation, an educational reward and punishment system must be implemented. The prestigious Environmental Management Awards (EMA) can be awarded annually to faculties, study programs, or SMEs with the best environmental innovations. Conversely, violations such as littering can be subject to educational sanctions, such as mandatory participation in waste management workshops or volunteering for campus cleanliness for a certain period, rather than simply monetary fines that are often not transformative.

To ensure the financial sustainability of all these programs—which is often a weak point of green initiatives on campus—the Green Khalifah concept offers innovation through the Implementation of a Circular Economy Based on Sharia Waste Banks. This approach changes the linear paradigm (production-use-disposal) to a circular one, and changes the perception of waste from a cost center to a profit center (source of income) (Lazuady, 2024). The operational mechanism can be designed as follows: (1) Deposit and Sorting System, where students and staff deposit sorted inorganic waste (PET bottles, paper, cardboard, aluminum) to the Campus Waste Bank units available at strategic points. (2) Sharia-Based Value Conversion, the deposited waste is weighed and its value is converted into a savings balance in the form of digital gold savings or e-wallet balances that can be used at student cooperatives or campus partner merchants. (3) Sharia Transaction Contract, this transaction uses a valid sale and purchase contract (bai') in muamalah fiqh, where sorted waste is considered as mal mutaqawwim (valuable assets) so it can be traded (Jamaruddin, 2023). The integration of this model provides a double incentive: intrinsic motivation in the form of rewards for carrying out the command of hifdz al-bi'ah (protecting the environment) and extrinsic motivation in the form of direct economic benefits. Furthermore, gross profits from selling waste to recycling industry collectors can be managed as a campus environmental endowment fund, used to finance cleaning operations, purchase tree seedlings, or even fund environmental assistance scholarships for underprivileged students who actively volunteer. Thus, this circular economy wheel actually embodies the three pillars of sustainability: environmental (waste reduction), social (justice through scholarships), and economic (independent income). This is the operational manifestation of the vision of Islam as rahmatan lil 'alamin (blessing for all nature), which is translated through intelligent, fair, and sustainable campus governance. Through the synergy between the Green Khalifah identity construction, three-dimensional implementation strategies, and an innovative circular economy model, UIN Sunan Gunung Djati Bandung not only has the potential to close the gap between theology and behavior, but also to become a pioneer of a sustainable campus model that is authentic, valuable, and has a real impact on the wider community.

Roadmap, Success Indicators, and Global Contributions

For the Green Caliph concept not to remain mere discourse and to truly become a transformation engine at UIN Sunan Gunung Djati Bandung, an operational, measurable, and realistic roadmap is needed. This roadmap functions as a strategic compass that directs all institutional resources and energy towards the vision of a sustainable Eco-Theological

Campus. Based on the principles of change management and studies of the implementation of sustainable campuses in other PTKI (Sirait et al., 2023), the authors formulated a three-year transformative roadmap (2025-2027) divided into three evolutionary phases, each with a clear focus, concrete actions, and key targets.

Phase One: Foundation and Regulation (2025-Year of Awareness). This phase focuses on establishing a strong legal framework and a massive awareness campaign to build a sense of urgency and collective commitment. The first and most important step is the issuance of a Rector's Decree officially designating the UIN SGD Bandung area as a "Single-Use Plastic Waste Free Area." This policy must be accompanied by detailed implementation instructions, including progressive administrative sanctions. In parallel, an ecotheology-based curriculum must be integrated into Compulsory General Courses (MKU), such as Islamic Religious Education and Citizenship, to build conceptual understanding from an early age (Fauziah & Handoyo, 2025). Creative campaigns through campus social media, posters, and public lectures by religious figures and environmental experts must be encouraged. The concrete target of this phase is a 20% reduction in the volume of plastic waste on campus based on the initial baseline data for 2025, as well as the total elimination of the phenomenon of "hidden trash" in desk drawers through routine "Clean Drawer" operations involving a joint task force of students and cleaning staff. The success of this phase depends heavily on consistent enforcement of regulations and communication skills to make environmental issues part of the campus's Islamic identity.

Phase Two: Infrastructure and Habituation (Year of Action 2026). After the regulatory and awareness foundations are laid, this phase focuses on providing supporting infrastructure that facilitates and even "forces" green behavior to become the easiest choice. The central action is the construction of a network of free or very cheap Water Refill Stations in every faculty and strategic building. The goal is to "kill" the plastic bottled drinking water (AMDK) market on campus by providing a simpler, healthier, and free alternative (Suwartha & Sari, 2020). The second revolutionary infrastructure is replacing conventional trash cans with a Dropbox Waste Bank integrated with the Student ID Card (KTM) or campus application. Every time a student deposits sorted waste (plastic bottles, paper) into the dropbox, the system will credit points to their account that can be exchanged for phone credit, internet quota, or food in the canteen. This gamification model has proven effective in increasing participation in various institutions (Lazuady, 2024). The target of this phase is that 50% of students regularly bring tumblers and the formation of a campus Integrated Waste Management Unit (UPST) that not only transports, but is able to process organic waste into compost for the needs of the campus garden, thus closing the waste cycle internally.

Phase Three: Culture and Reputation (Year 2027 - Year of Culture). This peak phase aims to internalize the Green Khalifah values to become an organizational culture that runs automatically (autopilot). Key actions are implementing periodic internal and external environmental audits, as well as serious participation in the UI GreenMetric World University Rankings or other green accreditation systems. This participation is not just for reputation, but as an objective measure of campus progress (Alfan & Rizal, 2023). The institution must also provide academic incentives, such as the conversion of Participation Credit Units (SKP) or additional points in scholarships, for students who are active in environmental projects or research related to sustainability. The ultimate target is for UIN SGD Bandung to be included in the Top 10 Islamic Green Campuses in Indonesia, and more importantly, the creation of a culture of shame for damaging the environment and a culture of pride in preserving it. At this

stage, the Green Khalifah concept has undergone full institutionalization, becoming the DNA of every policy, curriculum, and social interaction on campus.

The success of this roadmap is ultimately measured by the formation of a graduate or campus community profile that is a true Green Caliph. This figure is not just a student who is devoutly religious, but an ecologist-activist imbued with Islamic spirituality. This profile has three integrated core competencies. First, Spiritual Competence, characterized by having Eco-Spiritual Sensitivity or ecological spiritual sensitivity. This means that he feels theologically guilty when littering or wasting energy, because he views it as a violation of the mandate of the caliphate and the commandment not to cause damage (fasad) on earth (Nashr, 2021). Second, Intellectual Competence, namely a deep scientific understanding of the cause and effect of environmental damage. He not only knows that plastic is dangerous, but also understands its life cycle, the impact of microplastics on the food chain, and alternative management technologies. Third, Social Competence, manifested in the courage to carry out "Ecological Amar Ma'ruf Nahi Munkar"—encouraging good and preventing evil in an environmental context. He dared to reprimand friends who littered in a polite and educational manner, and actively pioneered green initiatives in his community (Askar & Ghofur, 2025). These three competencies form a complete person, where faith, knowledge, and ecological good deeds are united in one breath.

The strategic impact of the Green Khalifah concept and its roadmap extends far beyond the campus walls; it provides tangible and measurable contributions to the global Sustainable Development Goals (SDGs) agenda. First, the contribution to SDG 4 (Quality Education) is clear. UIN SGD Bandung will become a living lab and a concrete model of quality education that not only transfers knowledge but also fosters character and values, as well as imparts applicable skills to face 21st-century challenges, particularly the ecological crisis (González-Pérez & Ramírez-Montoya, 2022). Second, the 3R waste management practices, circular economy, and plastic reduction directly address SDG 12 (Responsible Consumption and Production). The campus demonstrates how responsible consumption and production patterns can be realized on a community scale, which can then be replicated by its alumni in the community (Terenteva et al., 2023). Third, through greening efforts, energy efficiency, and reducing the carbon footprint of waste and transportation, campuses directly contribute to SDG 13 (Addressing Climate Change). Every tree planted, every kilowatt-hour of electricity saved, and every ton of waste recycled is part of collective climate action (Sammalisto et al., 2022).

Thus, the transformation of UIN Sunan Gunung Djati Bandung into an Eco-Theological Campus through the Green Khalifah path is not merely a physical project, but a civilizational project. It builds a new micro-civilization that places universal Islamic values—such as justice, balance, compassion, and responsibility—as an unshakable ethical foundation for the preservation of the earth. The Green Khalifah concept ultimately proves the important proposition that religion and science are not two opposing poles, but two sources of light that can be synergized to illuminate the way out of the dark environmental crisis. Religion provides a moral compass and transcendental motivation, while science provides a technical map and evaluation methodology. This synergy will give birth to future leaders—Green Khalifahs—who are not only ready to face the job market, but more than that, ready to shoulder the great mandate to restore and maintain the balance of the universe, realizing the vision of Islam as a blessing for all nature in real and sustainable action (Allam & Cheshmehzangi, 2024).

CONCLUSION

This research successfully answers fundamental questions regarding the gap between Islamic theological-ecological discourse and real practices in the campus environment, and formulates integrative solutions to overcome it. First, the analysis confirms the existence of a paradoxical attitude-behavior gap, where students of UIN Sunan Gunung Djati Bandung, who cognitively understand the value of cleanliness (thaharah) and the responsibility of the caliph, actually show contradictory behavior such as the phenomenon of "hidden trash" in desk drawers. This gap is triggered by weak spiritual-ecological internalization (muraqabah), inconsistent supporting infrastructure, and a permissive culture. Second, as a response, this research successfully constructs the concept of "Green Khalifah" as an operational model that transforms the doctrine of caliph, mizan, and amanah into a new identity that combines ritual piety with ecological piety. Third, a comprehensive three-dimensional implementation strategy was formulated—covering governance, curriculum, and cultural participation—strengthened by a circular economy model based on the Sharia Waste Bank, as well as a measurable three-phase roadmap (2025-2027) to realize a sustainable campus.

The theoretical implications of this study are significant. First, this study enriches the contemporary Islamic ecotheology by making a breakthrough from normative discourse to a contextual operational model. Second, this study strengthens the integrated approach of knowledge (naqli-aqli) in environmental studies, by showing how revealed texts can serve as a powerful ethical and motivational framework for ecological action. Third, the Green Khalifah concept contributes to sustainability studies by offering a value-based and spiritual perspective as a critical complement to the dominant technocratic-secular approach.

The main practical implication is to provide an applicable blueprint for UIN Sunan Gunung Djati Bandung and other PTKI. The formulated roadmap and strategies can be adopted by the rectorate to revise policies, curriculum, and incentive systems. The Sharia Waste Bank model offers an innovative sustainable financing scheme. For the Indonesian Ministry of Religious Affairs, these findings provide empirical and conceptual feedback to refine the 2025 ecotheology policy, and can be replicated as a pilot model in other work units.

However, this study has limitations. First, this study is qualitative with a focus on one locus (UIN Sunan Gunung Djati Bandung), so the findings and resulting model require further contextualization before being applied to PTKI with different characteristics. Second, the formulated Green Khalifah concept is still conceptual-operational and requires further empirical testing to measure its effectiveness in changing long-term behavior. Third, the analysis of external challenges, such as the packaging industry around the campus, has not been accompanied by a detailed policy advocacy approach model.

Based on these limitations, suggestions for further research are as follows: (1) Conducting experimental studies or action research to test the effectiveness of Green Khalifah-based interventions in changing student behavior, equipped with quantitative-qualitative indicators; (2) Conducting comparative studies of the application of similar concepts in several PTKI to identify determinants of success and context-specific constraints; (3) Conducting in-depth policy research to design legal and fiscal instruments that support the integration of ecotheology in higher education governance nationally; and (4) Exploring aspects of digital technology (such as gamification and blockchain) in the Sharia Waste Bank reward system to increase the participation of generation Z.

REFERENCES

Al-Damkhi, A. M. (2021). The Concept of Hima (Protected Zone) in Islamic Environmental Law: Historical Foundations and Contemporary Applications. In F. Khalid & J. O'Brien (Eds.), *Islamic Perspectives on Environmental Protection* (pp. 78–95). Routledge.

Alam, M. R., Islam, M. W., & Hamid, M. O. (2024). Sustainability of Language, Tourism, and the Environment in Bangladesh. In *Language and Sustainable Development in Bangladesh* (pp. 141–157). Routledge. https://doi.org/10.4324/9781003379799-10

Alfan, M., & Rizal, E. (2023). Assessing the Gap Between Green Infrastructure and Sustainable Culture in Indonesian Universities. *Journal of Cleaner Production*, *401*, 136782.

Allam, Z., & Cheshmehzangi, A. (2024). *Sustainable Futures and Green New Deals*. Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-63642-4

Andriana, N., Syafiq, A., & Zahra, F. (2025). Eco-Pedagogy Based on Eco-Theology: A Model for Character Building in Islamic Nature-Based Schools. *Journal of Islamic Education*, *22*(1), 45–68.

Ardhy, A. A. S., & Fauziah. (2025). TRUST as A Pillar of Religious Moderation in Islamic Education. *Dialogia*, *23*(02), 178–201. https://doi.org/10.21154/dialogia.v23i02.10727

Askar, M., & Ghofur, A. (2025). Student Participation Models in Campus Sustainability: The Role of Green Ambassadors and Reward Systems. *Journal of College Student Development*, *66*(3), 301–317.

Beringin, J., & Situmorang, R. (2021). Analisis Kinerja Pengelolaan Sampah Berbasis UI GreenMetric di Universitas X. *Jurnal Teknik Lingkungan*, *12*(2), 112–123.

Brussee, V. (2023). *Social Credit*. Springer Nature Singapore. https://doi.org/10.1007/978-981-99-2189-8

Cardoso, E. (2023). *The Door of the Caliph*. Routledge. https://doi.org/10.4324/9781003264866

Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design* (4th ed.). Sage.

Crutzen, P. J. (2020). Anthropocene: The Human Epoch. *Nature*, *577*, 22–23.

Denzin, N. K., & Lincoln, Y. S. (2017). *The SAGE Handbook of Qualitative Research* (5th ed.). SAGE Publications.

Dermawan, A., & Sain, M. (2025). Spiritual Crisis and Environmental Degradation: An Islamic Perspective. *Journal of Islamic Ethics*, *9*(1), 45–67.

Fauziah, N., & Handoyo, R. D. (2025). From Text to Action: Translating Islamic Ecotheology into Campus Sustainability Practices. *Indonesian Journal of Islam and Muslim Societies*, *15*(2), 189–212.

González-Pérez, L. I., & Ramírez-Montoya, M. S. (2022). Components of Education 4.0 in 21st Century Skills Frameworks: Systematic Review. *Sustainability*, *14*(3), 1493. https://doi.org/10.3390/su14031493

Guerra, J. B. S. O. A., Hoffmann, M., Bianchet, R. T., Medeiros, P., Provin, A. P., & Iunskovski, R. (2022). Sustainable development goals and ethics: building "the future we want." *Environment, Development and Sustainability*, *24*(7), 9407–9428. https://doi.org/10.1007/s10668-021-01831-0

Gürel, E., & Tat, M. (2017). SWOT Analysis: A Theoretical Review. *Journal of International Social Research*, *10*(51), 994–1006.

Hickman, L. (2021). Limits of Techno-fix: Why Technological Solutions Alone Cannot Solve the Climate Crisis. *Environmental Science \& Policy*, *124*, 12–19.

Indonesia, K. A. R. (2024). *Laporan Tahunan Digitalisasi Lembaga Dakwah dan Pesantren di Indonesia 2024*. https://ditpdpontren.kemenag.go.id

Ioris, A. A. R. (2022). Indigenous peoples, land-based disputes and strategies of socio-spatial resistance at agricultural frontiers. *Ethnopolitics*, *21*(3), 278–298. https://doi.org/10.1080/17449057.2020.1770463

Jamaruddin, A. (2023). Maslahah Mursalah and Hifdz al-Bi'ah: Legal Reasoning for Environmental Protection in Islamic Law. *Journal of Usul Al-Fiqh*, *19*(1), 55–78.

Johnstone, D. B., Dee, J. R., & Bess, J. L. (2023). *Understanding College and University Organization*. Routledge. https://doi.org/10.4324/9781003448457

Khan, J., & Belk, R. (2024). Generation Z and Irrational Exuberance. In *Digital Currency and Consumption* (pp. 204–218). Routledge. https://doi.org/10.4324/9781003425021-10

Kollmuss, A., & Agyeman, J. (2020). *The Value-Action Gap in Environmental Behavior: Psychological and Structural Barriers*. Routledge.

Lazuady, T. (2024). Islamic Circular Economy: The Concept and Operationalization of Sharia-Based Waste Banks in Indonesia. *Journal of Islamic Economics and Finance*, *8*(2), 123–145.

Leal Filho, W., & et al. (2019). Sustainable Development Goals and sustainability teaching at universities: Falling behind or getting ahead of the pack? *Journal of Cleaner Production*, *232*, 285–294.

Maulana Bagus Rahmat, Masruchin, & Fauzan. (2025). The Idea of Islamic Ecotheology in Responding to the Global Environmental Crisis: An Analysis of the Concepts of Khalifah, Mīzān, and Maṣlaḥah. *Indonesian Journal of Islamic Theology and Philosophy*, *7*(1), 93–110. https://doi.org/10.24042/ijitp.v7i1.27596

Merciano, Y., Firdaus, M. I., & Sari, P. (2024). Eco-Theological Approach in Islamic Education: Building Spiritual, Social, and Cognitive Character. *Journal of Islamic Education Research*, *12*(3), 210–235.

Miles, M. B., Huberman, A. M., & Saldana, J. (2020). *Qualitative Data Analysis: A Methods Sourcebook (4th Edition)*. SAGE Publications.

Moh Khoeron. (2025). *Kemenag dan BI Sinergi Kembangkan Zakat dan Wakaf jadi Pilar Ekonomi Nasional*. https://m.kemenag.go.id/nasional/kemenag-dan-bi-sinergi-kembangkan-zakat-dan-wakaf-jadi-pilar-ekonomi-nasional-6aZHV?utm_source=chatgpt.com

Nashr, S. H. (2021). *Muraqabah and Environmental Stewardship in Islamic Spirituality*. Islamic Texts Society.

Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). An Introduction to Interpretative Phenomenological Analysis: A Useful Approach for Occupational Therapy Research. *British Journal of Occupational Therapy*, *82*(12), 819–823.

Pretorius, P. S., & de Waal, J. (2022). Increasing rates of convenience food packaging use at HEIs: a case study of the Neelsie student centre, Stellenbosch University. *Geography*, *107*(2), 70–78. https://doi.org/10.1080/00167487.2022.2068837

Rahmawati, A. T., Nirwana, A., & Nugroho, K. (2024). Ecological Analysis of the Qur'an on Wildlife Protection and Biodiversity. *Proceeding ISETH (International Summit on Science, Technology, and Humanity)*, 2565–2570. https://doi.org/10.23917/iseth.5309

Ritchie, H. (2022). *Plastic Waste and Ocean Pollution: Global Trends and Solutions*. Oxford University Press.

Sammalisto, K., Sundström, A., & Holm, T. (2022). Sustainable development goals and university reporting: An analysis of the Nordic countries. *Corporate Social Responsibility and Environmental Management*, *29*(4), 763–776.

Sirait, S. M., Haq, M. Z., & Fauzi, A. (2023). Model Integratif Pengelolaan Kampus Hijau di Perguruan Tinggi Keagamaan Islam: Studi Kasus UIN Raden Intan Lampung. *Jurnal Administrasi Pendidikan*, *30*(1), 45–62.

Stier, A., Vieth, V., Douglas, R. M., Peters, R., Singer, P., & Sloan, M. (2024). A Forgotten Millstone: Denialism and Child Abuse in the Christian Church. *Journal of Child Sexual Abuse*, *33*(8), 1100–1129. https://doi.org/10.1080/10538712.2024.2435551

Suwartha, N., & Sari, R. F. (2020). Evaluating UI GreenMetric as a tool to support green universities development: Assessment of the year 2011-2018 rankings. *Journal of Cleaner Production*, *244*, 118862.

Terenteva, D., Rodionov, D., Konnikova, O., & Konnikov, E. (2023). Measuring the Level of Responsible Consumption Influenced by the Digital Environment: A Case Study of University of Barcelona and Bielefeld University Students. *Information*, *14*(2), 73. https://doi.org/10.3390/info14020073

Ulum, B., Mahnan, N. H., & Ihsani, F. (2025). Islamic Ethics In Sustainable Environmental Resource Management. *INCOME: Innovation of Economics and Management*, *4*(3), 81–86. https://doi.org/10.32764/income.v4i3.5590

Yahya, M., & Hidayat, T. (2022). Behavioral Gap in Waste Management: A Study of Pro-Environmental Awareness and Action Among University Students. *Journal of Environmental Psychology and Education*, *5*(2), 88–102.

Yulianti, Y., Suryani, A., & Pratama, D. (2022). Evaluasi Sistem Pengelolaan Sampah dan Faktor Penghambatnya di Lingkungan Kampus Universitas Negeri Jakarta. *Jurnal Manajemen Dan Kewirausahaan*, *10*(2), 89–102.

Zebua, T. D., & Fitri, A. (2021). Kesenjangan Pengetahuan dan Perilaku Pengurangan Sampah Plastik di Kalangan Mahasiswa (Studi di Universitas HKBP Nommensen). *Jurnal Ilmu Lingkungan*, *19*(3), 567–575.



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