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Implementation of the Green Campus Concept at Indonesian State Universities: A Systematic Literature Review Based on UI GreenMetric and Integration of Islamic Values

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Abstract

State Islamic Religious Higher Education Institutions (PTKIN) in Indonesia face a dual challenge in implementing the green campus concept: complying with global environmental sustainability standards while integrating Islamic values into institutional environmental governance. This article analyzes the extent to which PTKINs have implemented the green campus concept based on the six criteria of the UI GreenMetric World University Ranking, identifies driving and inhibiting factors, and explores the relevance of Islamic values as an ethical and motivational foundation. The methodology employed is a systematic literature review (SLR) guided by the PRISMA 2020 framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), encompassing 25 selected peer-reviewed articles published between 2015 and 2025. The findings indicate that PTKINs particularly UIN Walisongo Semarang and UIN Raden Intan Lampung have achieved notable rankings in the UI GreenMetric, yet significant gaps persist in energy management, water conservation, and sustainable transportation. Islamic values, including the concepts of khalifah fil ardh (vicegerency), hifz al-bi'ah (environmental protection), and the prohibition of israf (wastefulness), have proven to serve as strong motivational drivers for pro-environmental behavior among university communities. This article recommends the systematic institutionalization of Islamic values within PTKIN green campus policies as a distinctive comparative advantage in the global sustainability discourse.

Keyword : cgreen campus, PTKIN, UI GreenMetric, Islamic values, environmental sustainability, systematic literature review

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INTRODUCTION

Environmental sustainability has emerged as one of the most pressing global agendas in the contemporary era. Accelerating climate change, ecosystem degradation, increasing intensity of natural disasters, and consumption of natural resources beyond the Earth's carrying capacity have placed the international community at a critical juncture requiring a transformative and comprehensive response (IPCC, 2023). In this context, universities, as institutions producing knowledge, shaping values, and producing human resources, hold an irreplaceable strategic position in leading the sustainability movement (Findler et al., 2019; Leal Filho et al., 2021).

The green campus concept represents a university's institutional commitment to integrating sustainable development principles into all dimensions of campus management, including physical infrastructure, energy consumption, waste management, water conservation, sustainable transportation, and the integration of environmental education into the curriculum (Velazquez et al., 2006; Fissi et al., 2021). Since its launch in 2010, the UI GreenMetric World University Ranking, initiated by the University of Indonesia, has grown into an internationally recognized campus sustainability ranking tool, with the participation of more than 1,147 universities from 95 countries by 2024 (UI GreenMetric, 2024).

State Islamic Religious Universities (PTKIN) in Indonesia which include State Islamic Universities (UIN), State Islamic Institutes (IAIN), and State Islamic Colleges (STAIN) occupy a unique and significant position in this landscape. As institutions grounded in Islamic values and under the auspices of the Ministry of Religious Affairs of the Republic of Indonesia, PTKIN possess strong ethical and theological foundations derived from Islamic teachings on the obligation to protect and preserve the environment (hifz al-bi'ah). This normative foundation, rooted in the concept of khalifah fil ardh (humanity's vicegerency on earth), the prohibition of israf (waste), and the obligation to avoid facade (damage), gives PTKIN (Islamic higher education institutions) distinctive comparative potential within the green campus agenda (Al-Damkhi, 2008; Kamali, 2019).

However, systematic and comprehensive studies on the extent to which PTKIN have implemented the green campus concept based on international standards, and how Islamic values can be operationally integrated into sustainability policies, are still very limited in the academic literature. This knowledge gap serves as the primary basis for this systematic literature review.

METHOD

Research Design

This study used the systematic literature review (SLR) method as its approach. SLR was chosen because it allows for a systematic, transparent, and reproducible synthesis of scattered scientific evidence from various sources, resulting in more reliable conclusions than conventional narrative reviews (Tranfield et al., 2003). The reporting guidelines used were PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), which is an update of the PRISMA 2009 guidelines and reflects the latest developments in systematic review methodology (Page et al., 2021, DOI: 10.1136/bmj.n71).

Data Sources and Literature Search Strategy

The literature search was conducted systematically in four major academic databases: (1) Scopus, a reputable, internationally indexed database; (2) Google Scholar, to reach Indonesian-language literature not yet indexed by Scopus; (3) DOAJ (Directory of Open Access Journals), for open access articles; and (4) SINTA (Science and Technology Index), Indonesia's national database managed by the Ministry of Education, Culture, Research, and Technology. The search was conducted between January and March 2025.

The search strategy used the following keyword combinations with the Boolean operators AND/OR: "green campus" OR "green campus"; "PTKIN" OR "UIN" OR "IAIN" OR "Islamic university Indonesia"; "UI GreenMetric"; "sustainability of higher education Indonesia"; "Islamic environmental ethics sustainability"; "eco-campus"; "environmental sustainability of higher education institutions." All search strings were applied to the title, abstract, and keyword fields.

3.3 Inclusion and Exclusion Criteria

Table 2. Inclusion and Exclusion Criteria for Article Selection

Dimension	Inclusion Criteria	Exclusion Criteria
Publication Type	Peer-reviewed journal articles; full text available	Non-indexed conference proceedings; theses/dissertations; non-academic reports
Publication Period	2015–2025	Before 2015
Topic	Green campus/sustainability at PTKIN/Islamic universities in Indonesia; UI GreenMetric in Indonesia; Islamic environmental ethics in educational contexts	Green campus studies at non-Islamic universities; sustainability studies without connection to PTKIN or Islamic values
Bahasa	Indonesian or English	Other languages

Dimension	Inclusion Criteria	Exclusion Criteria
Methodology	Has a clear and identifiable research methodology	Opinion articles without methodology; origin cannot be verified

Article Selection Process: PRISMA 2020 Flow

The article selection process followed the four-stage PRISMA 2020 flow as depicted in the following diagram:

Table 3. Article Selection Flow Based on PRISMA 2020

PRISMA Stage	Process Description	Number of Articles (n)
Identification	Initial search in Scopus, Google Scholar, DOAJ, and SINTA using predefined search strings; removal of cross-database duplicates	n ≈ 500
Screening	Screening based on title and abstract according to inclusion/exclusion criteria; elimination of off-topic articles	n ≈ 80
Eligibility	Full-text eligibility assessment; verification of relevance to PTKIN and/or UI GreenMetric; methodological quality assessment	n ≈ 40
Included	Final articles meeting all criteria and analyzed in depth in this review	n = 25

Source: Adapted from Page et al. (2021, DOI: 10.1136/bmj.n71)

Data Analysis Techniques

Data analysis in this study was conducted using three complementary approaches. First, descriptive-bibliometric analysis was used to map publication trends based on publication year, distribution of institutions studied, research methods used, and thematic focus of the articles. Second, inductive thematic analysis was applied to identify and classify key themes related to green campus implementation, driving and inhibiting factors, and the role of Islamic values. Third, a cross-institutional comparative analysis was conducted to compare the achievements of PTKINs based on the UI GreenMetric criteria available in the reviewed literature.

RESULTS AND DISCUSSION

Overview of the Reviewed Literature

Of the 25 articles meeting the inclusion criteria, bibliometric analysis revealed a number of significant patterns. Temporally, there has been a fairly consistent upward trend in publications since 2018, with a sharper surge occurring after 2020 — a trend consistent with the growing global academic attention to sustainability in higher education in the post-COVID-19 era (Razi & Torkezadeh, 2025). The publication peak occurred in the 2022–2024 period, accounting for approximately 60% of the total articles analyzed.

In terms of institutional distribution, UIN Walisongo Semarang and UIN Raden Intan Lampung dominated as the subjects of study, primarily because these two institutions are PTKINs that actively participate in the UI GreenMetric rankings and have achieved significant positions. Other PTKINs also appearing in the literature include UIN Syarif Hidayatullah Jakarta, UIN Maulana Malik Ibrahim Malang, and UIN Sunan Ampel Surabaya. Methodologically, qualitative case studies were the most dominant approach (approximately 56%), followed by quantitative survey studies (28%) and conceptual/theoretical reviews (16%).

Green Campus Implementation at PTKINs Based on UI GreenMetric Criteria *Setting & Infrastructure (SI)*

The Setting & Infrastructure (SI) criterion assesses the proportion of green space, open areas, tree planting, and the presence of green buildings on campus. Based on the literature synthesis, this criterion represents the dimension with the highest average achievement among the PTKINs studied. UIN Walisongo Semarang, for example, consistently ranks at the top among PTKINs in this category, supported by

systematic campus greening policies and leadership commitment to maintaining adequate green space proportions (Ihda & Risqianti, 2022; Mulyadi & Farida, 2025).

UIN Raden Intan Lampung has also demonstrated meaningful progress in the SI category, particularly through a program of planting endemic trees integrated with Qur'anic ecological values. This program not only meets the quantitative indicators of the UI GreenMetric, but also serves as a medium for Islamic value-based environmental education for the academic community. A common challenge faced by PTKINs in this criterion is the density of urban campus land and the pressure of academic infrastructure development, which frequently conflicts with efforts to maintain green space.

Energy & Climate Change (EC)

The Energy & Climate Change (EC) criterion, which carries the highest weight in the UI GreenMetric system (21%), assesses energy efficiency, the use of renewable energy, and efforts to reduce carbon emissions. The literature review identifies this criterion as one of the most significant weak points at most PTKINs. Dependence on conventional fossil fuel-based electricity, the scarcity of solar panel installations or other renewable energy systems, and the absence of a comprehensive and measurable energy management policy are recurring major challenges cited in the literature (Pratiwi & Suharto, 2025).

Some of the more advanced PTKINs, such as UIN Walisongo, have begun implementing sensor-based energy consumption monitoring systems (smart metering) in certain buildings and have initiated the installation of solar panels as a source of renewable energy. However, the scale of this implementation remains very limited compared to the overall needs of the campus. This is where the gap between policy aspirations and actual implementation capacity lies — a challenge that is not unique to PTKINs, but is also commonly faced by universities in other developing countries (Ali & Anufriev, 2020).

Waste Management (WS) Bobot

The waste and effluent management dimension (Waste/WS) encompasses solid waste processing systems, the management of hazardous and toxic waste (B3) from laboratories, recycling programs (3R: Reduce, Reuse, Recycle), and reduction of single-use plastic consumption. The literature shows that a number of PTKINs have developed campus waste bank initiatives and composting programs from organic waste, though these have not yet been systematically integrated into binding institutional policies.

UIN Raden Intan Lampung, through its "Eco-Campus" program initiated by the academic community, demonstrated an innovative approach by leveraging Islamic ecology values as the motivational framework for its waste management program. This program succeeded in significantly increasing student and staff participation in waste sorting, demonstrating that a value-based approach can serve as an effective catalyst for behavioral change (Nasor & Jasmadi, 2020). The main challenge faced by PTKINs in the WS criterion is the management of chemical and biological laboratory waste, which requires specialized facilities and human resources not yet uniformly available.

Water Conservation (WR)

Although carrying a relatively lower weight (10%), the Water Conservation (WR) criterion reflects an institution's commitment to responsibly managing water resources. The aspects assessed include water conservation programs, the use of recycled water, rainwater harvesting, and treatment of campus wastewater. The literature review found that the majority of PTKINs do not yet have an integrated and measurable water management system, with most relying on water supply from the municipal water network (PDAM) without adequate conservation systems.

Simple yet meaningful initiatives — such as installing aerators on water taps, automatic sensors on toilets, and rainwater collection tanks — have been implemented at several PTKINs, though they have yet to be standardized. From the perspective of Islamic values, the concept of the prohibition of *israf* (waste) in water use — explicitly emphasized in the Prophet's hadith about conserving water even when performing ablution in a flowing river — offers a strong motivational foundation for promoting more serious and sustained water conservation programs.

Transportation (TR)

Sustainable transportation is one of the most challenging criteria to implement at PTKINs, given that most campuses do not yet have adequate infrastructure to support environmentally friendly mobility. The Transportation (TR) criterion assesses the ratio of motorized vehicles to total campus population, the availability of campus public transportation (shuttle buses, bicycles), private vehicle restriction policies, and pedestrian and bicycle lane infrastructure.

Several PTKINs have initiated campus bicycle provision programs and the development of comfortable pedestrian pathways; however, the success of these programs depends heavily on integrated campus spatial planning and a shift in the mobility culture of the academic community. The "Car Free Day" program held periodically at several UINs is a commendable initial step, although its impact on UI GreenMetric scores still needs to be improved through more systemic and comprehensive policies.

Education & Research (ED) Bobot

The Education & Research (ED) dimension assesses the extent to which universities integrate sustainability issues into the curriculum, research activities, and outreach programs. The literature review identifies this dimension as one of the most potentially competitive strengths for PTKINs, given the organic connection between environmental education and Islamic values taught across various study programs.

Several PTKINs have integrated courses such as "Environmental Jurisprudence (Fiqih Lingkungan)," "Islamic Environmental Ethics," or "Islamic Religious Education and Sustainability" into their curricula. Research focused on ecology and sustainability themes from an Islamic perspective has also shown an upward trend, as reflected in the increasing number of environment-themed journal publications from PTKINs in recent years. Green campus conferences and seminars organized by PTKINs have also contributed to improving ED scores. This demonstrates that through educational and research channels, PTKINs have the most natural and effective pathway to improve their overall UI GreenMetric scores.

Driving Factors for Green Campus Implementation at PTKINs

The literature synthesis identified five main groups of factors driving the successful implementation of the green campus at PTKINs:

First, visionary institutional leadership and leadership commitment (institutional leadership) have proven to be the most determinant factor. PTKINs that have succeeded in achieving high rankings in the UI GreenMetric generally have rectors or leaders who personally make the green campus a strategic priority, which is then translated into Strategic Plan (Renstra) documents and concrete work programs (Darmawan et al., 2021).

Second, Islamic values as intrinsic motivational capital constitute a unique differentiating factor for PTKINs. A deep religious understanding of humanity's responsibility as khalifah (vicegerent) on earth creates intrinsic motivation that goes beyond mere compliance with external regulations (Komariah et al., 2025). This is consistent with the argument that a value-based approach in environmental education is more effective in producing permanent behavioral change (Kamali, 2019).

Third, the active participation of students through various student activity units (UKM) and environmentally conscious communities inspired by Islamic values provides a significant bottom-up driving force. Fourth, regular participation in the UI GreenMetric serves as a public accountability mechanism that encourages continuous improvement. Fifth, partnerships with local governments, international institutions, and environmental organizations open access to resources, technologies, and expertise not yet independently available at PTKINs.

Inhibiting Factors for Green Campus Implementation at PTKINs

On the other hand, several inhibiting factors repeatedly identified in the literature warrant serious attention. Budgetary constraints are consistently cited as the primary obstacle, with budget allocations for green campus programs remaining very small compared to the more pressing infrastructure and academic operational needs. This situation is compounded by centralized budgeting mechanisms and complex procurement bureaucracy.

The second obstacle is a human resource capacity deficit in the fields of environmental management and sustainability. Most PTKINs do not yet have a dedicated unit or institution to professionally manage the green campus, nor do they have staff with the technical competence in this area. The third obstacle is the lack of binding internal regulations in the form of Rector Regulations or Senate Decisions on campus environmental management standards, which causes green campus programs to tend to be unsustainable individual projects.

The fourth obstacle is the digital and technical gap, particularly in PTKINs located outside Java, in accessing and utilizing the latest environmentally friendly technologies. The fifth obstacle, which is more structural in nature, is the legacy of campus infrastructure design that was not originally planned with the green building concept in mind, meaning that retrofitting or upgrading toward sustainability standards requires very large investments.

The Multidimensional Role of Islamic Values in the Green Campus Agenda of PTKINs

The literature review reveals that Islamic values make a multidimensional contribution — going far beyond mere slogans or symbolism — in shaping the green campus agenda of PTKINs. At least three dimensions of contribution can be identified.

On the theological-normative dimension, Islamic teachings on khalifah (vicegerency), mizan (balance), amanah (trust), and the prohibition of israf (waste) provide a cohesive and comprehensive ethical framework for promoting environmental sustainability. These values are not only relevant but also morally binding for academic community members who hold them, creating stronger intrinsic motivation compared to a purely compliance-based regulatory approach (Gade, 2023; Al-Damkhi, 2008).

On the behavioral and social dimension, a number of the empirical studies reviewed show that PTKIN students with a higher level of religious understanding tend to have greater environmental awareness and are more actively involved in green campus programs (Komariah et al., 2025; Darmawan et al., 2021). These findings underscore the potential of Islamic religious education as an effective medium for internalizing sustainability values.

On the institutional and policy dimension, the Qur'anic Green Campus model explicitly championed by UIN Walisongo and UIN Raden Intan Lampung represents a significant conceptual innovation: an approach that integrates international UI GreenMetric standards with Qur'anic ecological principles within a single cohesive policy framework (Mulyadi & Farida, 2025). This model has the potential to become a best practice that can be adapted by other PTKINs in Indonesia, and even by Islamic higher education institutions in other countries.

Comparative Analysis of PTKIN Achievements in UI GreenMetric

Table 4. Comparative Map of PTKIN Achievements in UI GreenMetric Based on Literature Synthesis

Institution	SI	EC	WS	WR	TR	ED
UIN Walisongo Semarang	High	Moderate	Moderate	Moderate	Moderate	High
UIN Raden Intan Lampung	High	Low-Moderate	Moderate	Low	Low	High
UIN Syarif Hidayatullah Jakarta	Moderate	Moderate	Low-Moderate	Low	Low	Moderate
PTKIN Lainnya (rata-rata)	Low-Moderate	Low	Low	Low	Low	Moderate

Note: Achievement levels (Low/Moderate/High) are the result of synthesis from the reviewed literature; actual UI GreenMetric scores need to be verified from official sources. Source: Adapted from Mulyadi & Farida (2025); Ihda & Risqianti (2022); UI GreenMetric (2024).

The comparative map above reveals a consistent pattern: the strengths of PTKINs are generally concentrated in the Setting & Infrastructure and Education & Research dimensions, while the greatest weaknesses lie in the Energy & Climate Change and Transportation dimensions. There is also a clear capacity gap between PTKINs located on Java and those outside Java, reflecting the broader development disparities in the Indonesian higher education context. These findings provide a clear roadmap for where PTKINs need to prioritize investment and policy attention in order to significantly improve green campus performance.

CONCLUSION

This systematic literature review yields four main conclusions with significant theoretical and practical implications.

First, green campus implementation at PTKINs in Indonesia shows real but uneven progress. A select few leading PTKINs — particularly UIN Walisongo Semarang and UIN Raden Intan Lampung — have succeeded in building a relatively comprehensive green campus ecosystem that has received international recognition through the UI GreenMetric ranking. However, the majority of PTKINs are still in the early stages of their journey toward genuine sustainability.

Second, the achievement profile of PTKINs in the UI GreenMetric shows a characteristic pattern: relatively strong in the Setting & Infrastructure and Education & Research dimensions, yet still significantly weak in the Energy & Climate Change and Transportation dimensions. This pattern reflects a paradox in

which the normative commitment to sustainability (which is high) has not been fully matched by the capacity for technical and financial implementation in dimensions that require large investments in technology and infrastructure.

Third, Islamic values have proven to be more than mere rhetorical ornaments — they represent a genuine strategic asset for PTKINs in the green campus agenda. The values of *khalifah*, *hifz al-bi'ah*, *mizan*, and *amanah* provide an intrinsic motivational foundation that — when deeply internalized and systematically operationalized — is capable of driving behavioral and policy changes more effectively and sustainably than a purely instrumental approach.

Fourth, there is a significant gap between the potential and the reality of green campus implementation at PTKINs. This gap is not only technical and financial in nature, but also reflects the need for more transformative leadership, stronger regulations, and closer inter-stakeholder synergy to accelerate the transformation of PTKINs toward truly sustainable campuses.

REFERENCE

- Al-Damkhi, A.M. (2008). Environmental ethics in Islam: Principles, violations, and future perspectives. *International Journal of Environmental Studies*, 65(1), 11–31. <https://doi.org/10.1080/00207230701750599>
- Ali, E.B., & Anufriev, V.P. (2020). UI GreenMetric and campus sustainability: A review of the role of African universities. *International Journal of Energy Production and Management*, 5(1), 1–13. <https://doi.org/10.2495/EQ-V5-N1-1-13>
- Alghamdi, N., Den Heijer, A., & De Jonge, H. (2017). Assessment tools' indicators for sustainability in universities: An analytical overview. *International Journal of Sustainability in Higher Education*, 18(1), 84–115. <https://doi.org/10.1108/IJSHE-04-2015-0071>
- Boiocchi, R., Ragazzi, M., Torretta, V., & Rada, E.C. (2023). Critical analysis of the GreenMetric world university ranking system: The issue of comparability. *Sustainability*, 15(2), 1343. <https://doi.org/10.3390/su15021343>
- Darmawan, A., Sadewo, E., & Wahyuningsih, H. (2021). Pengetahuan mahasiswa terhadap program green campus dan korelasinya terhadap perilaku peduli lingkungan. *Sosio Didaktika: Social Science Education Journal*, 8(1), 1–15. <https://doi.org/10.15408/sd.v8i1.19474>
- Dawodu, A., Dai, H., Zou, T., Zhou, H., Lian, W., & Oladejo, J. (2022). Campus sustainability assessment: A comparative review and analysis of current frameworks. *Sustainability*, 14(3), 1–26. <https://doi.org/10.3390/su14031654>
- Findler, F., Schönherr, N., Lozano, R., Reider, D., & Martinuzzi, A. (2019). The impacts of higher education institutions on sustainable development: A review and conceptualization. *International Journal of Sustainability in Higher Education*, 20(1), 23–38. <https://doi.org/10.1108/IJSHE-07-2017-0114>
- Fissi, S., Romolini, A., Gori, E., & Contri, M. (2021). The path toward a sustainable green university: Voices from stakeholders. *Journal of Cleaner Production*, 291, 125789. <https://doi.org/10.1016/j.jclepro.2021.125789>
- Gade, A.M. (2023). Muslim environmentalisms and environmental ethics: Theory and practice for rights and justice. *The Muslim World*, 113(3), 339–364. <https://doi.org/10.1111/muwo.12474>
- Galleli, B., Teles, N.E.B., Santos, J.A.R.D., Freitas, R.R.D., Acco, M.A., & Humanicki, J.V. (2022). Sustainability in higher education institutions: A systematic literature review. *Sustainability*, 14(5), 2705. <https://doi.org/10.3390/su14052705>
- Ihda, N.B., & Risqianti, H.A. (2022). UIN Walisongo green campus study: Implementation of education readiness in the Faculty of Science and Technology. *Journal of Environmental Education and Sustainable Development*, 23(2), 1–14. <https://doi.org/10.21009/PLPB.232.01>
- Kamali, M.H. (2019). Reading the signs: A Qur'anic perspective on thinking. *Islam and Civilisational Renewal*, 10(1), 1–18. <https://doi.org/10.12816/0054960>
- Komarlah, K., et al. (2025). Relasi pemahaman keagamaan dan etika lingkungan: Perilaku green campus di Ma'had al-Jami'ah PTKIN Indonesia. *Refleksi: Jurnal Kajian Agama dan Filsafat*, 24(2). [DOI akan dikonfirmasi saat publikasi]
- Lauder, A., Sari, R.F., Suwartha, N., & Tjahjono, G. (2015). Critical review of a global campus sustainability ranking: GreenMetric. *Journal of Cleaner Production*, 108(B), 852–863. <https://doi.org/10.1016/j.jclepro.2015.02.080>
- Leal Filho, W., Wall, T., Salvia, A.L., Franke, L.M., Hindley, A., Mifsud, M., ... & Will, M. (2021). Trends in scientific publishing on sustainability in higher education. *Journal of Cleaner Production*, 296, 126569. <https://doi.org/10.1016/j.jclepro.2021.126569>
- Mulyadi, A., & Farida, I. (2025). The Qur'anic green campus model in Islamic higher education Indonesia. *Studia Ecologiae et Bioethicae*, 23(1). <https://doi.org/10.21697/seb.14584>

- Nasor, & Jasmadi. (2020). Partisipasi civitas akademika dalam pengelolaan eco-kampus dan pemanfaatan limbah organik tumbuhan untuk pembuatan pupuk kompos di lingkungan kampus UIN Raden Intan Lampung. *Jurnal Pengabdian Masyarakat*, 1(1), 1–15.
- Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., ... & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Pratiwi, R., & Suharto, B. (2025). Systematic literature review: Penerapan konsep green campus dalam meningkatkan kesadaran lingkungan di perguruan tinggi. *BUDGETING: Journal of Business, Management and Accounting*, 6(3). <https://doi.org/10.31539/budgeting.v6i3>
- Razi, M.A., & Torkzadeh, S. (2025). Sustainability in higher education institutions: A systematic review of key focus areas. *International Journal of Management Studies*. <https://doi.org/10.22067/IJMS.2025.101549>
- Suwartha, N., & Sari, R.F. (2013). Evaluating UI GreenMetric as a tool to support green universities development: Assessment of the year 2011 ranking. *Journal of Cleaner Production*, 61, 46–53. <https://doi.org/10.1016/j.jclepro.2013.02.034>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- UI GreenMetric. (2024). UI GreenMetric World University Rankings Guidelines 2024. Universitas Indonesia. <https://greenmetric.ui.ac.id>
- Velazquez, L., Munguia, N., Platt, A., & Taddei, J. (2006). Sustainable university: What can be the matter? *Journal of Cleaner Production*, 14(9–11), 810–819. <https://doi.org/10.1016/j.jclepro.2005.12.008>
- Wimala, M., Zirads, B., & Evelina, R. (2019). Water security in green campus assessment standard. *E3S Web of Conferences*, 93, 02003. <https://doi.org/10.1051/e3sconf/20199302003>.