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The Concept of Green Islamic Education as a Model for Integrating Eco-theological Values into the Islamic Education Curriculum

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ABSTRACT

The convergence of climate change, biodiversity loss, and weakening moral responsibility toward nature demands educational responses that engage the spiritual and ethical dimensions of human-environment relations. Islamic education in Indonesia is strategically positioned for this task, yet its environmental education practices remain fragmented, descriptive, and institution-specific. This article formulates the concept of Green Islamic Education (GIE) as a model for integrating eco-theological values into the Islamic education curriculum. Using a qualitative conceptual design based on library research, the study screened academic databases for 2021-2026 publications against explicit inclusion criteria, yielding 35 peer-reviewed studies analysed through reflexive thematic analysis. Three global sustainability reports served as normative benchmarks for aligning the themes with education for sustainable development and translating them into curriculum components. The synthesis shows that (1) the scholarship converges on tawhid-centred values: khalifah, amanah, mizan, and the prohibition of fasad and israf; (2) environmental content in the curriculum is present but dispersed and weighted toward the affective domain; and (3) outcomes depend less on values than on pedagogy, institutional leadership, and partnerships. The proposed GIE model has five interdependent components: eco-theological foundation, curriculum integration, eco-pedagogy, whole-institution eco-culture, and partnership and assessment. Its novelty lies in linking tawhid-based values directly to curriculum, pedagogy, institutional culture, and assessment within one framework, which existing studies treat separately. The model bridges Islamic theology and education for sustainable development and offers a practical framework for curriculum developers, teachers, and policymakers. Empirical testing is a priority for future research.

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Introduction

Environmental degradation has become one of the defining conditions of the twenty-first century. The Synthesis Report of the IPCC's Sixth Assessment cycle states that global surface temperature in 2011-2020 was approximately 1.1°C above the 1850-1900 level and attributes this warming unequivocally to human activities (IPCC, 2023). A parallel assessment of planetary boundaries concludes that six of the nine boundaries that regulate the stability of the Earth system have already been transgressed (Richardson et al., 2023). Indonesia experiences these pressures acutely through deforestation, flooding, waste, and the vulnerability of coastal and agrarian communities, and scholars increasingly read such problems as expressions of a moral and spiritual crisis rather than merely technical failures (Hidayat, 2023; Kim, 2021).

Education is widely regarded as a primary lever of response, yet a global review by UNESCO (2021) indicates that environmental and climate topics remain unevenly integrated into curricula, teacher preparation, and assessment. Attention has consequently turned to values-based approaches to education for sustainable development (ESD) that engage learners' commitments and not only their knowledge (Huang et al., 2024). Islam offers abundant resources for such an approach. The Qur'an and the Sunnah frame nature as a sign of God, a trust (amanah) to be safeguarded, and a balanced order (mizan) that humans must not disturb, so that human freedom in relation to the natural world is bounded rather than absolute (Muhammad et al., 2024; Nasir et al., 2022). Eco-theology, understood as systematic reflection on the relationships among God, humanity, and the cosmos, supplies a language through which these teachings can be translated into educational purposes.

Indonesia hosts one of the largest systems of Islamic education in the world, spanning Islamic religious education (Pendidikan Agama Islam, PAI) in public schools, madrasahs, pesantren, and Islamic higher education. Their reach and moral authority place these institutions in a strategic position to cultivate what may be called ecological piety, a condition in which care for creation is experienced as an expression of faith. The policy environment is also shifting: Islamic education policy continues to be reshaped (Kosim et al., 2023), and recent madrasah initiatives pair a love-based curriculum with eco-theology (Subekhi & Nursikin, 2025).

Nevertheless, the translation of this normative richness into curriculum practice remains uneven. A content analysis of the PAI curriculum found that environmental education content is distributed across grade levels and themes such as natural resources and personal hygiene rather than organized around a coherent ecological vision (Wakhidah & Erman, 2022). Document and interview data from senior high schools show that the curriculum emphasizes the affective domain of environmental education, which implies that cognitive and psychomotor outcomes receive less deliberate attention (Rohman et al., 2024). Field studies report limited instructional materials, uneven teacher training, and the absence of school-wide eco-theological policies (Taufikin, 2025). Religion also does not automatically produce pro-environmental orientations: empirical evidence indicates that stewardship beliefs and belief in a controlling God can shape environmental guilt and support through opposing pathways (Eom et al., 2021).

Existing scholarship addresses this problem through four partly overlapping strands, each of which contributes something but leaves something unresolved. The first is the eco-theological strand. Studies in this strand articulate the normative foundations of Islamic environmental thought, including tawhid, amanah, and mizan (Muhammad et al., 2024; Nasir et al., 2022), and some extend them to learning design, such as tawhid-based green learning in Islamic higher education framed around the insan kamil (Masturin et al., 2022). Their strength is conceptual depth, but they rarely specify how these values should shape curriculum aims, content selection, pedagogy, and evaluation, and they seldom engage the risk that religious beliefs can produce opposing environmental orientations (Eom et al., 2021). The second is the eco-pesantren strand. Albar et al. (2024) report that integrating Islamic values with ecological principles through organic farming, waste management, and reforestation can strengthen environmental awareness in pesantren, and Mujahidin et al. (2025) argue that pesantren can

internalize khalifah fi al-ard and fiqh al-bi'ah through contextual and experiential learning. These studies show the power of lived institutional culture, but they are tied to the residential and communal setting of pesantren and do not show how such practices connect to the formal PAI curriculum or travel to other institution types.

The third is the green madrasah and school strand. Taufikin (2025) found in three Islamic elementary schools in Demak that eco-theology integration strengthened students' understanding and pro-environmental practices, with experiential learning and teacher modelling as decisive drivers. Shahida (2023) found, through participatory action research in Kolkata, that religious teachings can foster eco-ethical practices, although the small sample limits generalization. Initiatives such as the love-based madrasah curriculum (Subekhi & Nursikin, 2025) point in the same direction. This strand demonstrates classroom feasibility, yet its findings remain institution-specific and descriptive, and it typically treats eco-theology as an enrichment of teaching rather than as the organizing principle of the curriculum. The fourth is the ESD strand. Global ESD scholarship and policy supply competencies, indicators, and links to the Sustainable Development Goals (UNESCO, 2021; Huang et al., 2024), and Ferdinan et al. (2026) take a notable step toward operationalization by developing the Eco-Islamic Education Assessment Framework (EIEAF) for three Muhammadiyah boarding schools and linking it to SDG 4, SDG 13, and SDG 17. However, the EIEAF was designed as an assessment framework for boarding schools and not as a curriculum model that spans aims to evaluation, and ESD frameworks in general do not draw on Islamic theological categories as their organizing logic. Ferdinan et al. (2026) also found significant differences in implementation among the three schools that were explained by institutional leadership and policy rather than by shared theology, which indicates that values alone do not secure outcomes.

Read together, these strands reveal three gaps. First, they are fragmented: eco-theology, eco-pesantren, green madrasah practice, and ESD have developed largely in parallel, so no framework connects theological values, curriculum design, pedagogy, institutional culture, and assessment in one coherent structure. Second, they are context-bound: most empirical studies concern a single institution or educational level and are descriptive in orientation, which leaves open how findings might travel across PAI in schools, madrasahs, pesantren, and Islamic higher education. Third, they are weakly operationalized: theological values are named but seldom translated into design principles and measurable indicators aligned with ESD competencies, and the theological and pedagogical risks identified by Eom et al. (2021) are rarely addressed. A comprehensive curriculum integration model is therefore needed in Indonesian Islamic education for three reasons. The diversity of its institutions requires a shared framework that can be adapted rather than rebuilt for each setting. The evidence that implementation depends on pedagogy and leadership requires a model that goes beyond content to include institutional arrangements. And the demand for accountability in ESD requires indicators that make eco-theological aims assessable. Without such a model, practitioners are left with exhortation and isolated best practice.

This article responds by developing the concept of Green Islamic Education (GIE) as a model for integrating eco-theological values into the Islamic education curriculum. GIE is conceived as an approach in which tawhid-centred ecological values function as the organizing principle of curriculum aims, content, pedagogy, school culture, and assessment, so that care for creation is formed as an expression of faith rather than added as an extracurricular topic. Three questions guide the study: (1) Which eco-theological values recur in the recent literature and can serve as curriculum anchors? (2) How can these values be integrated across the components of the Islamic education curriculum? (3) What institutional and evaluative arrangements are needed to sustain integration? The article contributes a theoretically grounded model, an integration matrix for core PAI subjects, and a set of assessment indicators, all offered as propositions for empirical testing.

Method

This study employs a qualitative conceptual design based on library research. The aim is theory-building: to synthesize dispersed findings into an integrative model and not to measure the effect of an intervention. Conceptual synthesis is appropriate where, as here, a field has produced many context-bound studies but lacks a shared framework. The study therefore moves through three analytic stages: identification of recurrent themes in the literature, translation of those themes into curriculum components, and specification of propositions and indicators that allow the resulting model to be tested. Sources were identified through scholarly indexes and publisher platforms (Google Scholar, ScienceDirect, SpringerLink, Taylor & Francis Online, and Indonesian open journal systems indexed in Garuda and SINTA) using combinations of the terms *green Islamic education*, *eco-theology*, *Islamic environmental education*, *eco-pesantren*, *fiqh al-bi'ah*, *khalifah*, *PAI curriculum*, and *education for sustainable development*, in English and Indonesian. Inclusion criteria were: (a) peer-reviewed journal articles or scholarly book chapters; (b) publication between 2021 and 2026; (c) a focus on Islamic education or Islamic environmental ethics with an explicit curricular, pedagogical, institutional, or policy dimension; and (d) availability of verifiable bibliographic information. Exclusion criteria were opinion pieces without scholarly apparatus, theses, and duplicate records. The analytic corpus comprised 35 studies, complemented by three global sustainability documents that frame the problem (IPCC, 2023; Richardson et al., 2023; UNESCO, 2021). Reporting of the selection process follows the transparency principles of the PRISMA 2020 statement (Page et al., 2021).

The corpus was analyzed through reflexive thematic analysis (Braun & Clarke, 2021), which was applied in four steps: (1) familiarization with each source and recording of its context, design, and claims; (2) open coding of statements concerning theological values, curriculum content, pedagogy, institutional arrangements, outcomes, and constraints; (3) clustering of codes into candidate themes and refinement of those themes against the full corpus; and (4) model construction, in which the themes were mapped onto the conventional components of a curriculum (aims, content, pedagogy, organization and ethos, and evaluation) and cross-checked against the competencies and goals of ESD. Reflexive memos documented coding decisions so that the path from source to theme remains traceable. Credibility was supported by triangulating across source types (empirical case studies, mixed-methods studies, conceptual papers, and policy-oriented analyses) and across educational levels and national contexts. Dependability was supported by the audit trail described above. The principal limitation of the design is that a conceptual synthesis cannot establish causal effects; the model is therefore presented as a set of testable propositions, as discussed in Section 3.8.

Results and Discussion

The eco-theological foundation of Green Islamic Education

The first component of GIE is a foundation of values that makes ecological care an act of faith rather than an external policy requirement. Table 2 sets out seven values that recur in the literature, their textual anchors, ecological meanings, and implications for curriculum. At the centre stands *tawhid*. If creation is a coherent order that bears witness to its Creator (QS al-Isra 17:44), then ecological relationships are theological relationships, and environmental learning becomes a form of recognizing the signs of God (*ayat kawniyyah*). From *tawhid* follows *khalifah*: the Qur'an designates humans as vicegerents on earth (QS al-Baqarah 2:30; al-An'am 6:165), a role whose meaning is stewardship rather than domination. *Amanah* sharpens this responsibility by framing the earth and its resources as a trust (QS al-Ahzab 33:72), while *mizan* establishes the measure that humans are told not to transgress (QS al-Rahman 55:7-9).

Table 1. Eco-theological values and their curricular translation

Value	Textual anchor (examples)	Ecological meaning	Curricular translation
Tawhid	QS al-Isra 17:44	All creation glorifies God; humans are one part of an interdependent order	Nature as *ayat kawniyyah*; learning aims framed around awe and recognition
Khalifah	QS al-Baqarah 2:30; al-An'am 6:165	Humans are vicegerents with responsibility, not owners	Learning outcomes on responsible use; civic and leadership roles
Amanah	QS al-Ahzab 33:72	Resources are a trust to be returned in sound condition	Resource audits; accountability tasks in projects
Mizan	QS al-Rahman 55:7-9; al-Qamar 54:49	Creation is measured and balanced; transgression is prohibited	Ecological balance in science-religion integration; moderation as ethic
Fasad and *israf*	QS al-Rum 30:41; al-A'raf 7:56, 7:31	Corruption and waste on earth are moral failures with visible consequences	Case-based ethics on pollution, deforestation, consumption
Akhirah	QS al-Zalzalah 99:7-8	Even small deeds are accounted for	Reflective practice; habit tracking; intentionality (*niyyah*)
Rahmah	QS al-Anbiya 21:107	Mercy extends to all creation and future generations	Intergenerational justice; animal welfare; community service

The prohibitions on *fasad* (corruption on earth) and *israf* (waste) give the foundation its ethical edge. The Qur'an links visible corruption on land and sea to human action (QS al-Rum 30:41), forbids corruption after reform (QS al-A'raf 7:56), and prohibits wastefulness (QS al-A'raf 7:31). The theme of accountability (*akhirah*) and the all-encompassing scope of mercy (*rahmah*, QS al-Anbiya 21:107) complete the cluster by connecting individual habits to answerability before God and to the welfare of future generations. These values are consistent with a *maqasid* reading in which the protection of the environment (*hifz al-bi'ah*) is treated as a necessary condition for protecting religion, life, intellect, lineage, and wealth (Ferdinan et al., 2026). Two design implications follow. First, the foundation must be stated explicitly in a school's vision and in curriculum aims, because the evidence suggests that unarticulated values do not reliably translate into practice (Ferdinan et al., 2026; Taufikin, 2025). Second, the foundation should emphasize stewardship, accountability, and mercy rather than fatalistic or merely controlling images of God, given the evidence that different beliefs about God relate to environmental guilt and support through opposing pathways (Eom et al., 2021). In practice this means that learning materials should avoid presenting environmental harm as divine punishment to be passively endured and should instead foreground human agency within a framework of trust.

The Green Islamic Education model

Green Islamic Education is defined here as a curriculum approach in which tawhid-centred eco-theological values are made the organizing principle of aims, content, pedagogy, institutional culture, and evaluation, with the intention of forming ecological piety (*taqwa ekologis*): sustained, knowledgeable, and spiritually motivated care for creation. Figure 1

presents the model. It consists of five interdependent components arranged on a foundation: (1) the eco-theological foundation described above, (2) curriculum integration, (3) eco-pedagogy, (4) whole-institution eco-culture, and (5) partnership and assessment. The outcome is ecological piety, and a feedback loop of evaluation and continuous improvement links outcomes back to the foundation and the components.

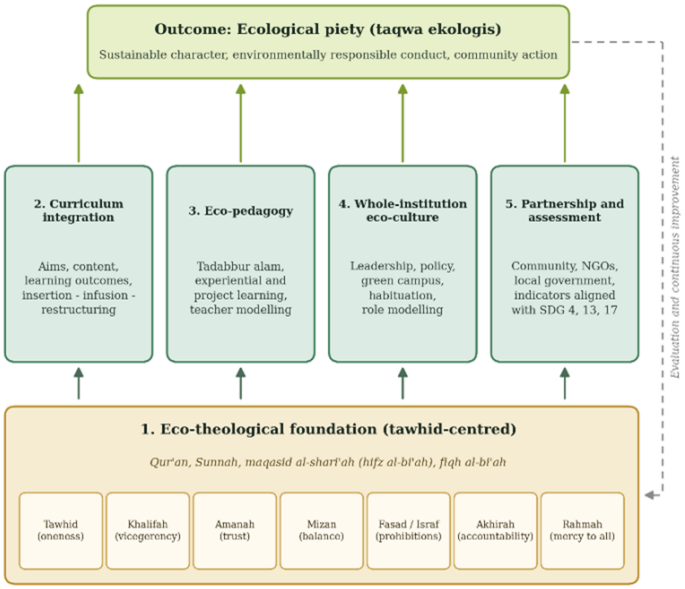


Figure 1. The Green Islamic Education (GIE) model

Three principles govern how the components operate. The first is *unity of faith and ecology*: ecological aims are formulated as religious aims, so that learners understand care for the environment as worship and character (*ibadah* and *akhlak*) and not as an additional civic duty. The second is *balanced domains*: outcomes are specified across cognitive (*ilm*), affective (*iman* and *ihsan*), psychomotor (*amal*), and spiritual (*taqwa*) domains, correcting the affective bias identified in current curricula (Rohman et al., 2024). The third is *whole-institution coherence*: the curriculum is supported by school routines, policies, and partnerships so that what is taught in class is visible in how the institution acts. The model integrates the strengths of earlier work, namely the theological anchoring of Masturin et al. (2022) and Mujahidin et al. (2025), the pedagogical findings of Taufikin (2025), and the institutional insights of Ferdinan et al. (2026), within a single curriculum logic.

Curriculum integration

Curriculum integration is the second component and answers the second research question. Three levels of integration can be distinguished. *Insertion* adds ecological topics to existing material, which is the most common current practice and corresponds to the dispersed content described by Wakhidah and Erman (2022). *Infusion* embeds an eco-theological perspective in existing topics, so that, for example, the study of *thaharah* in fiqh becomes also a study of water and waste. *Transformation* reorganizes aims and learning outcomes around ecological piety and treats environmental competence as a standing dimension of religious formation. GIE recommends moving from insertion toward infusion in the short term and toward transformation as institutional capacity grows, a progression consistent with the movement from isolated programs to integrated green curricula observed across schools of different readiness (Ferdinan et al., 2026).

Table 3 illustrates what infusion could look like in four core PAI subjects. The matrix is not a fixed syllabus but a design heuristic: teachers select a theme, specify outcomes in all four domains, and choose an activity that links classroom study to a local ecological issue. Each row is consistent with approaches reported in the literature, such as environmental-themed

Qur'anic verses and eco-friendly school programs (Juliani et al., 2024; Rofiq, 2022), Qur'anic learning built on an eco-theological perspective (Karman & Hakim, 2023), and the use of fiqh-based environmental ethics in *pesantren* (Mujahidin et al., 2025). Integration at the level of the textbook and module is also needed, since limited instructional materials are a recurrent constraint (Taufikin, 2025).

Table 2. Illustrative integration matrix for core PAI subjects

PAI subject	Eco-theological theme	Intended outcomes (cognitive - affective - psychomotor - spiritual)	Illustrative learning activity
Aqidah Akhlak	Tawhid and the signs of God in nature; ethics toward nature (*akhlak terhadap alam*)	Explains nature as a sign; shows empathy and gratitude; practices care; experiences awe in worship	*Tadabbur alam* walks; nature journals; ethical dilemma discussions
Al-Qur'an Hadis	Verses and traditions on *khalifah*, *mizan*, *fasad*, planting and sparing use of water	Interprets selected verses; links them to local issues; internalizes responsibility; recites with reflection	Thematic (*maudhu'i*) inquiry on a local environmental problem; verse-to-action pledges
Fiqh	*Fiqh al-bi'ah*: purity (*thaharah*), water, waste, animal welfare, waqf and zakat for environmental goods	Applies rulings to cases; prefers moderation; practices waste sorting and water saving; acts with accountability	Fiqh case clinics; ablution water audit; waste-bank management
Sejarah Kebudayaan Islam	Conservation traditions (*hima*, *harim*), waqf of gardens and waterworks, civilization and environment	Explains historical models; appreciates continuity; engages in heritage and restoration projects	Local waqf and heritage mapping; school garden restoration

Eco-pedagogy

Eco-pedagogy is the third component. The reviewed studies suggest that values become conduct when learners experience them, see them modelled, and practise them repeatedly. GIE therefore draws on four pedagogical strategies. *Tadabbur alam*, reflective observation of nature as a sign, links cognition to spiritual awe and fits naturally with the foundation of *tawhid*. *Experiential and project-based learning*, such as school gardens, reforestation, and waste management, translates *khalifah* and *amanah* into action, and these were the activities through which integration strengthened students' practices in the Demak case (Taufikin, 2025) and in *pesantren* programs (Albar et al., 2024). *Teacher modelling* (*uswah hasanah*) matters because the consistency between what teachers say and do emerged as decisive in the same study. *Contextual and local-wisdom-based learning* connects the curriculum to the immediate environment, as Mujahidin et al. (2025) recommend for *pesantren*. Because values-based approaches to ESD depend on teachers' ability to facilitate reflection and action (Huang et al.,

2024), professional development in eco-theology and in ecopedagogy is a necessary condition rather than an optional supplement (Rekan et al., 2024; Taufikin, 2025).

Whole-institution eco-culture and partnerships

The fourth and fifth components concern the institution. The strongest empirical statement of their importance is the finding of Ferdinan et al. (2026) that differences in leadership, policy, and curriculum formalization account for large differences in implementation among schools sharing the same theological outlook. GIE therefore treats the school itself as a learning environment: the vision and policy declare ecological aims; routines of energy, water, and waste management are audited; and daily habituation, such as cleanliness as worship, makes the values visible. Studies of eco-*pesantren* show that such arrangements are feasible in boarding school settings, including forest conservation landscapes (Tantowi et al., 2023), modelling of environmentally friendly behaviour (Aulia et al., 2024), and organizational programs promoted by Muslim organizations (Maghfiroh et al., 2024; Mustofa et al., 2025). Partnerships with local farmers, non-governmental organizations, and government bodies enlarge the reach and credibility of these programs, and align the institution with SDG 17 (Ferdinan et al., 2026). A prophetic approach to environmental education and community empowerment illustrates how the institution can serve as an agent of local change (Purnomo et al., 2024).

Assessment and indicators

Assessment closes the loop and is the least developed element of the literature. GIE proposes assessment at two levels: the quality of implementation by component, and the ecological conduct and dispositions of learners. Table 4 offers indicators and evidence sources for each component. The first level draws on the logic of the EIEAF, which also evaluates spiritual values, curriculum and pedagogy, leadership and policy, role modelling, and partnerships (Ferdinan et al., 2026). The second level should attend both to behaviour and to its religious motivation, because evidence that moral education can influence pro-environmental behaviour, and that the role of Islamic religiosity needs examination, indicates that outcomes should be measured rather than inferred (Begum et al., 2021; Khoirurrijal et al., 2025). Where institutions aim to demonstrate contribution to ESD, indicators can be aligned with SDG targets on education for sustainable development (4.7), climate education (13.3), and partnerships (17.17), as in Ferdinan et al. (2026).

Table 4. Assessment indicators for the GIE model

GIE component	Indicators	Evidence sources
1. Eco-theological foundation	Learners articulate nature as sign, trust, and balance; vision statement explicitly states ecological aims	Reflective journals; vision and mission documents; interviews
2. Curriculum integration	Ecological outcomes mapped across subjects and across cognitive, affective, psychomotor, and spiritual domains; teaching materials available	Curriculum mapping; lesson plans; textbook and module analysis
3. Eco-pedagogy	Share of experiential and project-based learning; consistent teacher modelling; teacher training completed	Observation rubrics; teacher portfolios; training records
4. Whole-institution eco-culture	Written green policy; routine audits of energy, water, and waste; habituation routines in daily schedule	Policy documents; audit logs; observation

GIE component	Indicators	Evidence sources
5. Partnership and assessment	Active partnerships; ecological conduct of learners; alignment with SDG targets 4.7, 13.3, and 17.17	Partnership agreements; behaviour checklists; project reports

Discussion: contributions, implications, and propositions

Theoretically, the GIE model makes three contributions. First, it moves the discussion of Islamic environmental education from a list of values and best practices to a curriculum logic in which each value has a defined role in aims, content, pedagogy, culture, and assessment, thereby addressing the second gap identified in the Introduction. Second, it connects Islamic eco-theology with ESD without subordinating either to the other: ESD supplies the language of competencies, participation, and indicators, while the Islamic tradition supplies the source of meaning and motivation. This is consistent with the view that environmental education has been dominated by secular approaches and can be widened by religiously grounded and culturally relevant ones, and it positions Muslim educational institutions as active, and not merely recipient, actors in sustainability agendas (Ferdinan et al., 2026; Huang et al., 2024). Third, it incorporates a safeguard: by stressing stewardship, accountability, and mercy, the foundation addresses the risk that some theological framings dampen environmental motivation (Eom et al., 2021).

Practically, the model is relevant to four audiences. Curriculum developers can use the integration matrix to move from insertion toward infusion and to prepare modules that fill the gap in instructional materials. Teachers can use the pedagogical repertoire as a basis for planning and for professional learning communities. School leaders can use the institutional indicators for audit and planning, and policymakers, including those developing madrasah curricula that combine love-based and eco-theological aims (Subekhi & Nursikin, 2025), can use the model to articulate expectations and to support teacher training and instructional resources. Because Indonesian educational policy continues to evolve (Kosim et al., 2023), the model is designed to be adaptable to different levels and institutional types. Because this study is conceptual, the model should be treated as a set of propositions to be tested: *Proposition 1.* Institutions that state ecological aims in tawhid-centred terms and specify outcomes across cognitive, affective, psychomotor, and spiritual domains will show more coherent ecological conduct among learners than institutions that add ecological topics episodically. *Proposition 2.* The relationship between curriculum integration and learners' ecological conduct is mediated by experiential pedagogy and teacher modelling. *Proposition 3.* Institutional leadership, policy, and partnerships moderate the strength of this relationship. *Proposition 4.* Framing environmental responsibility in terms of stewardship, accountability, and mercy yields stronger pro-environmental motivation than framings that emphasize divine control.

Several limitations should be acknowledged. The synthesis rests on published studies that are concentrated in Indonesia and Malaysia and in particular institutional types, with a predominance of qualitative and small-sample designs; the transferability of the model to other settings therefore requires care. As in any thematic synthesis, theme development involves interpretation, although the audit trail and triangulation across source types were intended to limit its subjectivity. Finally, the model has not been tested empirically. Future research could employ design-based research to develop and refine GIE modules with teachers, quasi-experimental or mixed-methods designs to test Propositions 1 to 3, experimental studies to test Proposition 4, and comparative work across levels (primary, secondary, and higher education) and institutional types (public schools, madrasahs, and *pesantren*).

Conclusion

This article set out to formulate Green Islamic Education as a model for integrating eco-theological values into the Islamic education curriculum. The synthesis of recent literature shows that (1) Islamic scholarship and educational practice converge on a tawhid-centred

cluster of values, namely *khalifah*, *amanah*, *mizan*, and the prohibition of *fasad* and *israf*; (2) environmental content is already present in the Islamic education curriculum but is dispersed, weighted toward the affective domain, and often dependent on isolated programs; and (3) the translation of values into conduct depends on pedagogy, teacher modelling, institutional leadership, and partnerships. In response, the GIE model organizes five interdependent components, namely the eco-theological foundation, curriculum integration, eco-pedagogy, whole-institution eco-culture, and partnership and assessment, around the aim of forming ecological piety. The model contributes a curriculum logic that connects Islamic theology with ESD, an integration matrix for core PAI subjects, a set of assessment indicators, and four propositions for empirical testing. Its practical value lies in giving curriculum developers, teachers, school leaders, and policymakers a shared structure for moving from exhortation and isolated best practice toward deliberate, evaluable integration. The next step is empirical: to develop and test GIE modules in diverse institutions, to examine the mechanisms specified in the propositions, and to refine the model on the basis of evidence.

References

Albar, M. K., Hamami, T., Sukiman, S., & Roja Badrus Z, A. (2024). Ecological pesantren as an innovation in Islamic religious education curriculum: Is it feasible? *Edukasia Islamika, 9*(1), 17-40. https://doi.org/10.28918/jei.v9i1.8324

Anshori, A. A., & Pohl, F. (2022). Environmental education and Indonesia's traditional Islamic boarding schools: Curricular and pedagogical innovation in the Green Pesantren Initiative. In *Supporting modern teaching in Islamic schools: Pedagogical best practice for teachers* (pp. 31-44). Routledge. https://doi.org/10.4324/9781003193432-4

Aulia, R. N., Abbas, H., & Jasin, F. M. (2024). Eco-pesantren modeling for environmentally friendly behavior: New lessons from Indonesia. *International Journal of Evaluation and Research in Education, 13*(1), 223-229. https://doi.org/10.11591/ijere.v13i1.25930

Aziz Rekan, A., & Mokhtar, M. I. (2025). The development of Eco-Tahfiz in Malaysia: Bridging Islamic education and environmental sustainability. *Ulumuna, 29*(1), 1-31. https://doi.org/10.20414/ujis.v29i1.1431

Bakri, M. (2021). Eco-pesantren assessment study of Islamic boarding school in Banda Aceh, Indonesia. *Journal of Islamic Architecture, 6*(3), 143-150. https://doi.org/10.18860/JIA.V6I3.7967

Begum, A., Jingwei, L., Haider, M., Ajmal, M. M., Khan, S., & Han, H. (2021). Impact of environmental moral education on pro-environmental behaviour: Do psychological empowerment and Islamic religiosity matter? *International Journal of Environmental Research and Public Health, 18*(4), 1604. https://doi.org/10.3390/ijerph18041604

Bensaid, B. (2023). An overview of Muslim spiritual eco-education. *Journal of Dharma, 48*(4), 465-494.

Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology, 18*(3), 328-352. https://doi.org/10.1080/14780887.2020.1769238

Eom, K., Tok, T. Q. H., Saad, C. S., & Kim, H. S. (2021). Religion, environmental guilt, and pro-environmental support: The opposing pathways of stewardship belief and belief in a controlling god. *Journal of Environmental Psychology, 78*, 101717. https://doi.org/10.1016/j.jenvp.2021.101717

Ferdinan, Abdillah, Rahman, A., & Bahtiar, A. R. (2026). Eco Islamic education and its contribution to sustainable development goals in Muhammadiyah boarding schools of South Sulawesi. *Discover Sustainability, 7*, Article 310. https://doi.org/10.1007/s43621-026-02647-6

Hidayat, M. (2023). Islamic eco-theology: Religious narratives in the climate crisis in Indonesia. *Bulletin of Indonesian Islamic Studies, 2*(2), 197-212. https://doi.org/10.51214/biis.v2i2.678

Huang, R. X., Pagano, A., & Marengo, A. (2024). Values-based education for sustainable development (VbESD): Introducing a pedagogical framework for education for sustainable development (ESD) using a values-based education (VbE) approach. *Sustainability, 16*(9), 3562. https://doi.org/10.3390/su16093562

Intergovernmental Panel on Climate Change. (2023). *Climate change 2023: Synthesis report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Core Writing Team, H. Lee, & J. Romero, Eds.). IPCC. https://doi.org/10.59327/IPCC/AR6-9789291691647

Irawan, B. (2022). Islamic boarding schools (pesantren), Sufism and environmental conservation practices in Indonesia. *HTS Teologiese Studies/Theological Studies, 78*(4), Article 8009. https://doi.org/10.4102/hts.v78i4.7073

Juliani, Mahdi, H., Sari, S. W., Sari, S. I., & Nazwa, N. R. (2024). Green Islamic school: Integrating environmental education in the Islamic education curriculum. *Cendekiawan: Jurnal Pendidikan dan Studi Keislaman, 3*(3), 565-574. https://doi.org/10.61253/cendekiawan.v3i3.270

Karman, A. R., & Hakim, L. (2023). The Qur'anic learning based on Islamic eco-theology at pesantren. *Jurnal Pendidikan Islam, 9*(2), 169-186. https://doi.org/10.15575/jpi.v9i2.24933

Khoirurrijal, M. F., Ala, A., & Huda, H. (2025). Integrating religious and environmental education in Indonesian eco-pesantren: Does student religiosity enhance environmental awareness? *Environmental Education Research*. https://doi.org/10.1080/13504622.2025.2600602

Kim, Y. (2021). Deforestation and Islamic ethics: A search for the eco-religious links between Islam and sustainable development in Indonesia. *Suvannabhumi: Multidisciplinary Journal of Southeast Asian Studies, 13*(2), 109-134. https://doi.org/10.22801/svn.2021.13.2.109

Kosim, M., Muqoddam, F., Mubarok, F., & Laila, N. Q. (2023). The dynamics of Islamic education policies in Indonesia. *Cogent Education, 10*(1). https://doi.org/10.1080/2331186X.2023.2172930

Lutfauziah, A., Al-Muhdhar, M. H. I., Suhadi, & Rohman, F. (2023). Curriculum development for environmental education at an Islamic boarding school. *Journal of Turkish Science Education, 20*(3), 490-503. https://doi.org/10.36681/tused.2023.028

Lutfauziah, A., Al-Muhdhar, M. H. I., Suhadi, & Rohman, F. (2024). Does environmental education curriculum affect student's environmental culture in Islamic boarding school? *Revista de Gestao Social e Ambiental, 18*(5), 1-16. https://doi.org/10.24857/rgsa.v18n5-079

Maghfiroh, M., Iryani, E., Yani, M. T., Zaini, N., & Mahfud, C. (2024). Promoting green pesantren: Change, challenge and contribution of Nahdlatul Ulama in Indonesia. *Nazhruna: Jurnal Pendidikan Islam, 7*(2), 409-435. https://doi.org/10.31538/nzh.v7i2.4668

Maslani, Qadir, A., Muhyidin, A., & Hidayat, W. (2023). Ecopedagogy in action: An ethnographic exploration of environmental preservation strategies in pesantren. *Jurnal Pendidikan Islam, 9*(2), 211-222. https://doi.org/10.15575/jpi.v9i2.29347

Masturin, M., Ritonga, M. R., & Amaroh, S. (2022). Tawhid-based green learning in Islamic higher education: An insan kamil character building. *Qudus International Journal of Islamic Studies, 10*(1), 215-252. https://doi.org/10.21043/qijis.v10i1.14124

Muhammad, M., Yaqin, M. Z. N., Mahfud, F. K. R., & Alahmadi, F. M. S. (2024). Freedom that is not absolute: Ecological ethics and human-nature relationship in the Qur'an. *Studia Ecologiae et Bioethicae, 22*(4), 17-27. https://doi.org/10.21697/seb.5821

Mujahidin, M. D., Imron, A., & Abdiliah, M. H. (2025). Internalizing ecotheological values: Strategies of pesantren in fostering environmentally conscious character. *Santri: Journal of Pesantren and Fiqh Sosial, 6*(2), 155-170. https://doi.org/10.35878/santri.v6i2.1908

Mustofa, M. L., Zenrif, M. F., & Barizi, A. (2025). Towards an Islamic ecotheology: Indonesian Muslim organizations in climate mitigation and adaptation efforts. *Problemy Ekorozwoju, 20*(2), 21-31. https://doi.org/10.35784/preko.7089

Nasir, N. M., Nair, M. S., & Ahmed, P. K. (2022). Environmental sustainability and contemporary Islamic society: A Shariah perspective. *Asian Academy of Management Journal, 27*(2), 211-231. https://doi.org/10.21315/aamj2022.27.2.10

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ, 372*, n71. https://doi.org/10.1136/bmj.n71

Purnomo, J., Anantanyu, S., Saptaningtyas, H., & Mangunjaya, F. M. (2024). Prophetic approach in environmental education and community empowerment: A case study of sustainable pesantren development. *Revista de Gestao Social e Ambiental, 18*(8). https://doi.org/10.24857/rgsa.v18n8-047

Rekan, A. A., Mokhtar, M. I., Tengku Kasim, T. S. A., & Yusoff, Y. M. (2024). Instructional approach of Islamic education teachers to gearing up future Muslim generations with environmental education. *Asia-Pacific Journal of Educators and Education, 39*(2), 249-272. https://doi.org/10.21315/apjee2024.39.2.13

Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., et al. (2023). Earth beyond six of nine planetary boundaries. *Science Advances, 9*(37), eadh2458. https://doi.org/10.1126/sciadv.adh2458

Rofiq, M. A. (2022). Internalizing Islamic education values in raising environmental awareness character: A case study at Madrasah Tsanawiyah Negeri 2 Malang. *Journal of Islamic Education Research, 3*(1), 31-44. https://doi.org/10.35719/jier.v3i1.218

Rohman, A., Kurniawan, E., Syifauddin, M., Muhtamiroh, S., & Muthohar, A. (2024). Religious education for the environment: Integrating eco-theology in the curriculum of Islamic religious and character education to enhance environmental education in Indonesia. *Nadwa: Jurnal Pendidikan Islam, 18*(2), 201-226. https://doi.org/10.21580/nw.2024.18.2.21094

Shahida. (2023). Green academia: Integrating Islamic teachings in education for a sustainable future. *Journal of Islamic Thought and Civilization, 13*(2), 86-103. https://doi.org/10.32350/jitc.132.06

Subekhi, K., & Nursikin, M. (2025). Pengembangan model kurikulum berbasis cinta dan ekoteologi di madrasah pendekatan design-based research. *Insight: Islamic Education and Learning, 1*(3), 155-163.

Tantowi, A., Cholid, N., Junaedi, M., & Nursikin, M. (2023). Eco-pesantren: Islamic education in forest conservation landscapes. *Fudan Journal of the Humanities and Social Sciences, 16*(4), 541-567. https://doi.org/10.1007/s40647-023-00386-w

Taufikin, T. (2025). Integrating eco-theology in Islamic education: A case study on fostering ecological awareness through religious pedagogy. *el-Tarbawi, 18*(1), 1-32. https://doi.org/10.20885/tarbawi.vol18.iss1.art1

UNESCO. (2021). *Learn for our planet: A global review of how environmental issues are integrated in education*. UNESCO Publishing.

Wakhidah, N., & Erman, E. (2022). Examining environmental education content on Indonesian Islamic religious curriculum and its implementation in life. *Cogent Education, 9*(1), 2034244. https://doi.org/10.1080/2331186X.2022.2034244