

## HOW MANAGERIAL ENVIRONMENTAL CONCERN ENABLES THE SUSTAINABILITY GOVERNANCE IN HIGHER EDUCATION?

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### Abstract

This study examines how managerial environmental concern (MEC) enables sustainability governance in a private Indonesian university by tracing how environmental commitments become institutionalized. Using a 91-day qualitative case study, it triangulates semi-structured interviews with nine purposively selected participants, observations, and institutional documents, analyzed through thematic analysis supported by NVivo. Findings position MEC as a governance enabler that links leadership commitment to durable organizational arrangements through four connected mechanisms. First, MEC is embedded in strategic planning and performance management by integrating environmental indicators into institutional work plans and annual budgets. Second, it is structurally anchored through a dedicated coordinating team that mainstreams sustainability across planning, implementation, and evaluation, and formalizes operational guidance for energy efficiency, waste management, carbon footprint reporting, and green procurement. Third, MEC mobilizes scarce resources via incentive and control mechanisms, prioritizing funding for units showing strong green performance and requiring environmental criteria in infrastructure proposals. Fourth, MEC gains legitimacy through participatory forums involving academic and administrative staff and students in sustainability decisions. Together, these mechanisms stabilize sustainability initiatives beyond project-based efforts and offer a transferable pathway for private universities in developing contexts.

**Keywords:** *Green higher education, Green innovation strategy, Managerial environmental concern, Sustainability governance*

### INTRODUCTION

Universities increasingly occupy a pivotal position in contemporary sustainability transitions (O’Riordan et al., 2020). Higher education institutions are expected to contribute not only through research, but also by cultivating environmentally responsible citizens and demonstrating sustainable practices in campus operations (Anthony Jnr, 2021). In many countries, this expectation has become an institutional mandate universities are urged to translate global sustainability aspirations into locally meaningful actions across teaching, research, community service, and daily operations (Purcell et al., 2019). This broader mandate reshapes what performance means in higher education, so institutional success should not be assessed solely through conventional indicators) without accounting for universities’ long term ecological and social responsibilities within their regions and communities (Su et al., 2018). In Indonesia, this challenge is particularly salient. The higher education sector has expanded considerably over recent decades, yet concerns persist about uneven institutional quality and performance, especially when benchmarked against international standards and global ranking systems (Zwaan, 2025). At the same time, Indonesian universities operate amid rising public expectations and regulatory pressures that demand accountability, relevance, and responsiveness to societal challenges (Sukoco et al., 2021). These pressures are felt acutely by private universities, which often face intense competition, resource constraints, and the need to continuously demonstrate legitimacy to

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multiple stakeholders foundations or governing bodies, students and parents, accreditation agencies, and local communities (Cooper et al., 2014). Within this context, sustainability is not merely an ethical aspiration; it becomes a governance issue: how can a private university commit to sustainability in ways that are credible, implementable, and durable under real constraints? The sustainability agenda in higher education appears in programs such as green campus initiatives, waste reduction, energy efficiency, paperless administration, sustainable transportation, and integrating environmental topics into curricula (Anthony Jnr, 2021). These efforts may start from symbolic actions like tree planting, awareness events, or pilot projects in one unit, but the main challenge is embedding sustainability within governance and management systems (Priyadarshini & Abhilash, 2022). The gap between a university that runs sustainability projects and one that governs for sustainability is substantive, shown in whether environmental concerns shape strategic planning, budgeting, procurement, campus operations, and performance evaluation (Purcell et al., 2019; Cook & Barry, 1995). In many institutions, sustainability is still vulnerable to leadership changes, budget trade offs, and shifting priorities (Haffar & Searcy, 2017). Thus, the core issue is not starting sustainability activities, but institutionalizing them so that commitments endure amid organizational fluctuations (Dagiliūtė et al., 2018).

Recent organizational and strategic management discussions, often under green strategy and green innovation, suggest institutions can achieve environmental and performance gains when sustainability is integrated into strategy rather than treated as an add-on (Song & Yu, 2018). One framing concept is green innovation strategy (GIS), which emphasizes environmentally oriented innovation in products, processes, and management practices (Mat Nawi et al., 2025). However, the higher education context introduces distinctive governance complexity: universities are multi-actor institutions with academic autonomy, professional subcultures, and layered decision-making structures (Leišytė, 2025). What appears coherent in strategic rhetoric can fragment during implementation across faculties, administrative units, and student organizations. Therefore, beyond strategic intent, higher education institutions need governance mechanisms that translate environmental commitments into routines, incentives, and accountable practices (Dyer & Dyer, 2017).

This article argues that managerial environmental concern (MEC) is a key but often under-specified condition enabling sustainability governance in higher education (Leal Filho et al., 2021). MEC is framed not as personal attitude, but as a governance orientation expressed in managerial decisions, structures, resource allocation, and participation (Makhloufi et al., 2023). In private universities, MEC is critical because executive leaders and foundations or boards shape priorities, budgets, and rules (Gonzalez-Perez et al., 2021; Stewart, 2014). When sustained among these decision makers, MEC helps sustainability move beyond narrative into durable institutional arrangements (Ren, 2021). Yet, despite the intuitive appeal of MEC, a conceptual and empirical gap remains in the higher education sustainability governance literature (Oliveira & Proença, 2025). Much existing scholarship emphasizes sustainability outcomes such as campus environmental indicators, curricular integration and student learning, or measuring and ranking green campus performance (Atici et al., 2021). Although these studies offer valuable insights and help normalize assessing universities on sustainability dimensions (Baker-Shelley et al., 2017), they often leave a core governance question unresolved: what mechanisms institutionalize sustainability commitments within a university's managerial system, especially under resource scarcity and organizational pressure?

A further gap is the sector imbalance: mechanism-based accounts of how green orientations become sustained practices are more common in corporate or manufacturing settings with clearer command structures and incentives (Bice, 2017). Higher education instead involves pluralistic governance, competing professional logics, and overlapping academic and administrative authority (Urbanek, 2025). In Indonesian private universities, added constraints include limited funds, uneven environmental literacy, and continued legitimacy pressures (Guild, 2020). Consequently, sustainability initiatives may lose momentum when they compete with immediate operational needs or are treated as peripheral to institutional survival and identity (Kasperson et al., 2022). Under this study, managerial environmental concern is theorized as a mechanism enabling sustainability governance in higher education, based on an in-depth qualitative case of a private Indonesian university (Tisdell et al., 2025). Rather than emphasizing performance outcomes, the focus is on governance pathways that institutionalize environmental concern (Scott, 2022). MEC becomes consequential when translated into mechanisms that organize collective action (Chou et al., 2017). In the case, commitments moved from isolated projects into strategic planning and budgeting, coordinating structures, resource and incentive controls, and participatory forums with staff and students, stabilizing initiatives beyond episodic activities (Tilbury, 2015). This article asks: How does managerial environmental concern enable sustainability governance in higher education, and through what mechanisms does commitment evolve into institutionalization within a private Indonesian university context? Addressing this question, the study contributes to sustainability governance literature in three ways. First, it clarifies MEC as an organizational governance orientation

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rather than abstract attitude, showing its operationalization through concrete mechanisms. Second, it provides a process model tracing movement from commitment to institutionalization, demonstrating how governance arrangements reduce the fragility of sustainability initiatives under constraints. Third, it offers context-sensitive insights from a private university in a developing country, where sustainability governance faces distinctive competitive pressures, accountability demands, and resource limitations.

## LITERATURE REVIEW

### Sustainability governance in higher education

Sustainability in higher education has evolved from a normative aspiration into an institutional expectation that universities demonstrate responsibility through core missions and campus operations (Buckner & Zhang, 2024). In many institutions, sustainability appears through green campus initiatives, operational efficiency programs, and curriculum integration, yet translating these into stable governance remains challenging because universities are multi-actor organizations with dispersed authority and competing priorities (Chou et al., 2017). A sustainability governance lens therefore emphasizes not only what programs exist, but also the governance arrangements through which sustainability is planned, resourced, coordinated, monitored, and legitimized over time (Leal Filho et al., 2021). Sustainability becomes durable when integrated into institutional routines and decision systems rather than treated as episodic projects (Bauer et al., 2021). This is especially relevant for private universities, where institutional legitimacy must be continuously maintained and resource limitations intensify trade offs between immediate operational needs and longer-term sustainability investments, requiring mechanisms that stabilize commitments under organizational pressure and scarcity (Bauer et al., 2021).

### From green strategy to governance mechanisms

Green strategy research suggests organizations can improve environmental and competitive performance by integrating sustainability into strategic direction and innovation practices (Ahmed et al., 2023). In this literature, green innovation strategy refers to environmentally oriented innovation in products, processes, and management practices, supported by leadership commitment and organizational capabilities. In higher education, however, sustainability outcomes depend not only on strategic intent but also on governance mechanisms that align diverse actors and routines across academic and administrative domains (Wang & Liu, 2022). Without governance that mainstreams sustainability across planning, budgeting, operational rules, and participation, results may remain uneven, so research should focus more on managerial and governance mechanisms that make sustainability durable (Bauer et al., 2021).

### Managerial Environmental Concern (MEC) as an enabling governance orientation

Managerial environmental concern (MEC) is often framed as leaders' awareness, commitment, and sensitivity to environmental consequences. This article extends it by conceptualizing MEC as a governance orientation: a persistent concern expressed through decisions, policy instruments, structures, and participatory practices that shape collective behavior (Wang & Liu, 2022). This view is especially relevant in private universities, where key authority often lies with both executive leadership (rectorate) and the governing foundation, and where sustainability priorities endure only if they become institutionalized. As a governance orientation, MEC matters for three reasons. First, it can reframe institutional performance by expanding evaluation beyond narrow academic metrics toward sustainability responsibilities (Leal Filho et al., 2021). Second, MEC can shift sustainability from symbolism to a managerial object by embedding environmental considerations in planning and budgeting. Third, MEC can support compliance and continuity through resource allocation and organizational controls, which is critical in resource constrained institutions.

### Institutionalization the missing link in many sustainability studies

A recurring limitation in sustainability discussions is the focus on visible programs and indicators while underexplaining how sustainability becomes institutionalized (Bauer et al., 2021). Institutionalization means stabilizing priorities and practices through formal instruments such as plans, budgets, and procedures, organizational arrangements such as roles and structures, and routines that persist beyond short term campaigns. In universities, this is difficult because sustainability spans multiple units with different professional logics (Di Tullio & Rea, 2025). In private universities, resource constraints and legitimacy demand further complicate institutionalization. These conditions require mechanism based explanations of how leadership commitments become durable governance

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practices. This article addresses that need by positioning MEC as an enabler of institutionalization through specific governance mechanisms (Niedlich et al., 2020).

## A mechanism-based framework from commitment to institutionalization

Building on the sustainability governance perspective and the institutionalization problem, this study proposes a mechanism-based framework in which MEC enables sustainability governance through a pathway from commitment to institutionalization. The framework centers on four interlinked governance mechanisms that make sustainability stick (Bauer et al., 2021). embedding sustainability into strategic plans, performance indicators, and budgeting (Di Tullio & Rea, 2025). structural anchoring through coordinating arrangements and internal guidelines; resource control via incentives, prerequisites, and operational controls under scarcity; and participatory legitimacy through consultation and stakeholder involvement to build ownership and continuity. The framework answers how MEC enables sustainability governance in higher education and clarifies the article's contribution by offering a process model and propositions explaining institutionalization mechanisms in Indonesia's private university context.

## METHOD

### Research Approach

This study employed a qualitative case study approach to develop an in-depth, mechanism based understanding of how managerial environmental concern (MEC) enables sustainability governance in higher education, particularly within the context of a private university in Indonesia (Creswell & Creswell, 2018). A qualitative design was selected because the research objective is not to test predetermined causal relationships, but to examine how governance commitments are translated into institutionalized routines, structures, and decision processes, and how these are interpreted and enacted by different organizational actors.

### Research Questions

In line with the aims and qualitative case study approach of this research, the research question was formulated as an investigative and elaborative question namely: How are the stages and governance mechanisms of managerial environmental concern (MEC) carried out to enable sustainability governance and institutionalize sustainability commitments in a private university in Indonesia?

### Research Location

This study took place at a private university in Indonesia, anonymized as Higher Education X to protect institutional confidentiality and enable documentation of internal governance practices. Higher Education X is a medium sized university in Purwakarta, West Java, with around 247 lecturers and 5,003 students. Its regional context, marked by environmental issues and nearby industrial activity, makes sustainability a practical governance concern linked to operations, reputation, and stakeholder expectations. The site was purposively selected because sustainability has become a managerial and governance priority, reflected in planning, budgeting, and evaluation. This makes Higher Education X suitable for examining how MEC is translated into governance mechanisms, including embedding environmental indicators in plans and budgets, creating coordinating arrangements, using resource allocation and control instruments, and organizing participatory forums that support legitimacy and continuity, in line with the study's aim to explain how leadership commitments become institutionalized governance in a private university.

### Data Compilation

The data consist of (1) observable events and managerial practices related to sustainability governance, (2) institutional documents tracing how MEC is embedded in internal management systems, and (3) information from policy makers and implementers involved in sustainability decision processes (Creswell & Creswell, 2018). These sources were combined to capture MEC as both a leadership narrative and an enacted governance orientation reflected in routine decisions, formal instruments, and stakeholder interactions (Merriam & Tisdell, 2015). A triangulation approach was adopted to reduce single source bias. Three instruments guided compilation: an observation sheet to record on site events, managerial routines, and sustainability practices (Merriam & Tisdell, 2015). a document identification sheet to categorize materials such as strategic plans, work plans, budgets, internal guidelines, procurement procedures, monitoring reports, and meeting records; and a semi structured interview guide to elicit detailed accounts of how sustainability commitments are initiated, justified, implemented, and maintained through governance mechanisms (Yin, 2018).

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The instruments were derived from the study's analytical focus and refined through expert consultation (Creswell & Creswell, 2018). Data compilation occurred over 91 days (1 July to 29 September 2025), with interviews, observations, and document compilation conducted in an integrated manner to enable cross checking and elaboration. This iterative triangulation captured both formal and informal dimensions of MEC, including embedding in planning and budgeting, structuring governance roles and coordinating arrangements, applying resource allocation and control mechanisms under constraints, and cultivating participation and legitimacy through stakeholder forums (Yin, 2018).

## Data Analysis

Three qualitative datasets were obtained: interview transcripts, observation notes, and annotated institutional documents showing sustainability governance practices and the enactment of MEC in managerial routines (Yin, 2018). The analysis focused on explaining how MEC enables governance mechanisms that move from leadership commitment to institutionalization, not on quantifying sustainability outcomes (Poht, 2018). Thematic analysis was conducted iteratively in six stages: familiarization and memos, initial coding, clustering codes into candidate themes linked to governance mechanisms and institutionalization, reviewing and refining themes against the raw data, defining and naming themes as mechanism components in the commitment to institutionalization process, and writing the report as a process model with conceptual propositions supported where relevant by visuals (Braun & Clarke, 2019).

## Ethical Clearance

Compliance with applicable research ethics standards was maintained throughout the study. The purpose, procedures, and expected uses of data were communicated to prospective participants, and participation was voluntary based on informed consent; anonymity and confidentiality were strictly observed (Pietilä *et al.*, 2019). Personal identifiers were removed from transcripts and field notes, participants were coded (e.g., P1, P2, P3), and the university was anonymized as Higher Education X. Interviews were conducted by appointment, and participants could decline questions or withdraw at any time without penalty. Data were stored securely with restricted access and used only for academic purposes (Lavee & Itzhakov, 2023). Reported quotations were screened to avoid disclosing sensitive information, and interpretations aimed to represent participants fairly while maintaining analytic independence and reporting findings to support improvement without exposing identifiable organizational vulnerabilities.

## RESULTS AND DISCUSSION

### Result

The findings show that MEC in Higher Education X enables sustainability governance through connected mechanisms that progressively turn environmental commitment into institutionalized managerial practice. MEC is visible not only as leaders' attitudes, but as a governance orientation shaping strategic priorities, routines, resource decisions, and participation arrangements. The evidence suggests a process pattern: commitment is articulated, translated into formal instruments and structures, reinforced through resource control and incentives, and stabilized through participation, creating continuity beyond short lived projects (Yin, 2018). Across interviews, observations, and documents, participants describe MEC as shifting how the university defines good management and responsible performance, with sustainability becoming a criterion for decision making rather than an optional ethical add on. This orientation is enacted jointly by the governing foundation and the rectorate, anchoring sustainability in both strategic authority and budgetary power, which supports institutionalization in a private university context where financial feasibility and stakeholder legitimacy must be maintained (Braun & Clarke, 2019). To present the findings transparently, this section uses a mechanism-based process model. The subsections follow the pathway from leadership commitment to institutionalization through four interlinked governance mechanisms embedding, structural anchoring, resource control, and participatory legitimacy. Although presented separately, these mechanisms operate in a mutually reinforcing way in practice (Yin, 2018)

### Stage 1 Commitment articulating sustainability as a governance priority

The first stage shows MEC emerging as an explicit leadership commitment. Participants describe how the foundation and rectorate reframed sustainability from a peripheral green program into a governance priority linked to institutional continuity (Braun & Clarke, 2019). This commitment is expressed through strategic dialogues and internal deliberations that redirect managerial attention toward environmental responsibility as part of long term

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organizational health, risk management, and regional relevance. This commitment is not framed as purely moral. Instead, it reflects leaders' reading of the university's position in its local environment and the private higher education landscape, where legitimacy depends on responding to community problems. From the MEC perspective, the environment is treated as part of the university's stakeholder field, meaning the campus is embedded in regional ecological pressures rather than separated from them (Oliveira & Proença, 2025). In leadership forums, environmental concern becomes a language that aligns institutional actors. Deans, heads of study programs, administrative leaders, and foundation representatives are brought into strategic discussions where sustainability is framed as an institutional identity issue, shifting from episodic actions toward shared sense making. In this way, MEC functions as an interpretive lens that guides priorities, shaping how leaders assess proposals, set targets, and allocate attention (McCarthy, 2025). This stage also highlights a private university governance feature: the foundation's commitment provides continuity across administrative cycles and stabilizes priorities beyond individual leaders' terms. When foundation actors and rectorate leaders jointly articulate sustainability as a priority, commitment gains organizational weight and is expected to appear in planning and budgeting, preparing the shift to the second mechanism, embedding (Brugmann, 1996).

## Stage 2 Embedding translating MEC into formal governance instruments

The second stage shows commitment becoming institutionalized through embedding. Here, MEC becomes visible in governance architecture such as strategic plans, unit work plans, budgeting frameworks, and performance indicators, integrating environmental indicators into the management cycle so sustainability is part of routine planning and evaluation (Brusca et al., 2018). Embedding occurs through two linked practices. First, sustainability is written into multi-year plans and annual work plans as environment-oriented goals that units translate into operations. Second, budgeting becomes the key site of institutionalization because environmental priorities are treated as funding priorities, shaping how units prepare proposals and how leaders evaluate them (O'Brien, 2014). A central implication of embedding is that sustainability becomes governable. When environmental indicators are included in plans and budgets, sustainability shifts from voluntary enthusiasm to a managerial object that can be monitored and discussed in evaluation meetings, expanding performance conversations beyond traditional metrics to include environmental consequences (Niemann & Hoppe, 2018).

Embedding also formalizes environmental criteria in performance monitoring. The institution combines academic indicators with green indicators so sustainability is handled in the same governance spaces as other priorities, creating policy coupling that integrates environmental considerations into existing routines rather than isolating them in a separate silo (Runhaar, 2016). This coupling increases the likelihood that sustainability commitments persist when organizational attention shifts. Embedding is not only reflected in documents, but also reshapes how actors understand their roles. Lecturers and staff describe being invited or required to reconsider everyday decisions through an environmental lens, even when sustainability is not their unit's core mission. In academic units this appears as integrating sustainability themes into relevant activities, while in administrative units it appears as practices such as paper reduction, energy management, and procurement decisions that consider environmental impacts (Sammalisto et al., 2015).

## Stage 3 Structural anchoring coordinating sustainability governance

Embedding alone is insufficient if implementation remains fragmented. The third stage shows MEC becomes more effective when structurally anchored through coordinating arrangements that mainstream environmental considerations across the institution. Findings describe a dedicated team under the planning and finance leadership line, tasked with integrating environmental aspects across planning, implementation, and evaluation (Klettner et al., 2014). This structural anchoring matters for three reasons. First, it strengthens role clarity and coordination. In complex universities, sustainability actions can be dispersed; without coordination, efforts become isolated, duplicative, or inconsistent. The coordinating team serves as a governance device bridging units so environmental indicators and practices are interpreted coherently across faculties and administrative departments (Gkrimpizi et al., 2023). Second, structural anchoring supports procedural continuity. Participants describe environmental aspects being mainstreamed across the management cycle, not only during campaigns. Sustainability governance becomes routine as planning templates, evaluation routines, and internal guidance systematically incorporate environmental considerations. Mechanistically, the structure turns MEC from a value into an operating system (Bennett & Satterfield, 2018). Third, the coordinating structure enables internal guidelines that operationalize MEC. The institution develops environment-based management guidance for building energy efficiency standards, waste procedures, carbon footprint reporting, and green procurement. These guidelines advance institutionalization by

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translating commitments into actionable standards that can be implemented and audited. Structural anchoring also reflects a governance logic for private universities: sustainability must align with managerial efficiency. Positioning the coordinating team close to planning and finance links sustainability to resource planning and evaluation, treating it as effective management rather than an external moral agenda (Margiutomo & Jayanti, 2025). This may strengthen compliance by tying sustainability to the institutional core.

## Stage 4 Resource control governing sustainability under constraints

The fourth stage shows MEC mobilizes scarce resources through allocation, incentives, and control. In private universities with limited budgets, sustainability is easily postponed, so MEC matters when leaders use resource governance tools to protect and prioritize environmental actions. Budget trade offs persist, but MEC reshapes decisions through foundation led budgetary control and incentives. Units with stronger environmental performance may receive funding or facility priority, while infrastructure proposals must include impact analysis and energy efficiency planning as approval prerequisites (Aniekan et al., 2024). By turning MEC into decision rules, incentives and controls make sustainability criteria influence funding, prompting managers to integrate environmental considerations into proposals (Garcia et al., 2016). Resource control also appears in procurement and operations through environmental purchasing criteria, waste management, and recycling partnerships, showing MEC is enacted through material decisions, not only strategy (Kazancoglu et al., 2021). Conceptually, resource control stabilizes institutionalization by reducing dependence on discretionary goodwill. The mix of incentives and prerequisite based controls helps sustain environmental priorities in resource constrained settings (Negash & Lemma, 2020).

## Stage 5 Participatory legitimacy making sustainability governance socially durable

Institutionalization is not only technical but also social and political. The fifth stage shows MEC strengthens sustainability governance by building legitimacy through participation and consultation. Findings describe regular forums, from senate meetings to faculty dialogues, to discuss priorities, gather feedback, and involve stakeholders in decision making (Hensengerth & Lu, 2019). Participation serves three functions. First, it provides information from students, staff, and academics who experience sustainability issues in daily campus life, improving the practical design of measures. Second, it reduces resistance to behavioral changes, such as cutting paper use, shifting to digital systems, sorting waste, following procurement rules, and managing energy, by giving stakeholders voice and framing policies as collective choices. Third, it strengthens legitimacy and ownership because stakeholders feel their input is genuinely considered, which supports compliance, momentum, and the integration of sustainability into organizational identity and routine practice. Participation also complements earlier mechanisms. Indicators and coordination can feel bureaucratic without social legitimacy, while participatory energy can fade without routines and resource protection. Findings suggest MEC works best when technical instruments and social legitimacy reinforce each other through visible managerial commitment and consistent resource prioritization.

## Integrating the mechanisms A process model from commitment to institutionalization

Synthesizing the findings, MEC operates as an enabling governance mechanism through a pathway from leadership commitment to institutionalization. The pathway is: (1) leaders frame environmental concern as a governance priority linked to responsibility and long term viability; (2) commitment is embedded in strategic planning, budgeting, and performance indicators so sustainability becomes a routine managerial object; (3) a coordinating structure mainstreams environmental aspects across the management cycle and produces operational guidelines; (4) resource control through incentives, prerequisites, and procurement and operational policies protects and prioritizes sustainability under constraints; and (5) participatory forums build legitimacy, reduce resistance, and foster shared ownership that stabilizes governance socially. As a result, sustainability initiatives become less episodic and more durable because they are anchored in institutional architecture (plans, budgets, guidelines, structures) and reinforced by both financial rationalities and stakeholder legitimacy.

## Discussion

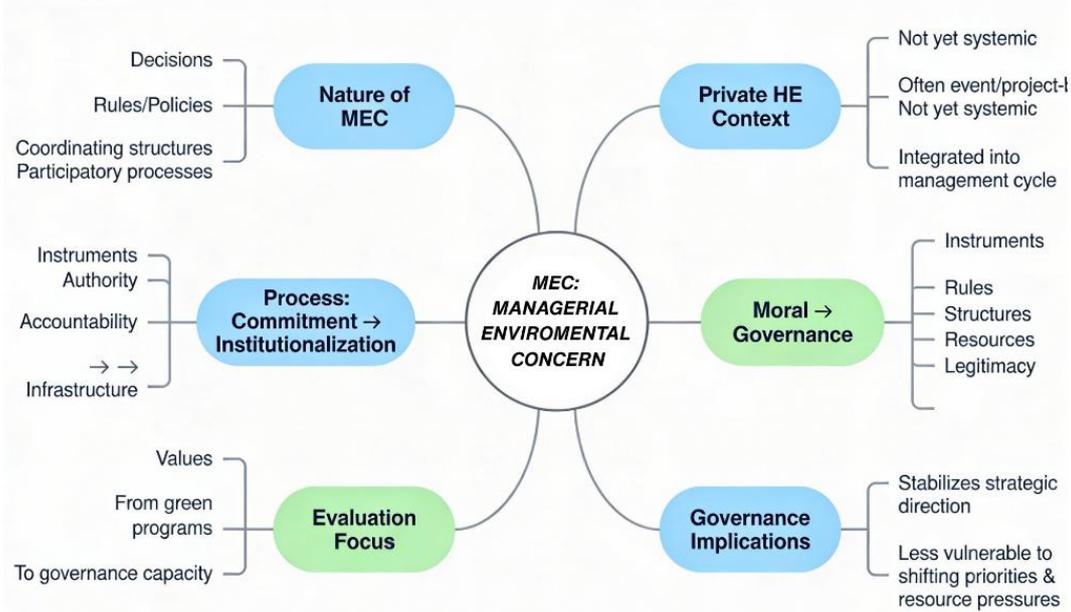
### Interpreting MEC as sustainability governance

Findings indicate MEC is not merely an individual leader preference but a governance orientation expressed through decisions, rules, coordinating structures, and participatory processes that steer organizations toward sustainable practice. In private higher education, where sustainability efforts often remain event or project based, MEC matters because it can shift sustainability from a moral agenda to a governance agenda supported by instruments, authority, and accountability. Sustainability is therefore advanced not only through persuasion but

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through integration into the institution's management cycle. The process model from commitment to institutionalization shows MEC bridging value based concern with organizational infrastructure, including rules, structures, resources, and legitimacy. This shifts attention from whether campuses run green programs to how they build governance capacity so sustainability is not fragile. In governance terms, MEC stabilizes strategic direction and prevents sustainability from easily shifting with changing priorities and resource pressures (Bishoyi & Misra, 2022).



**Figure 1.** Mind Map of Managerial Environmental Concern Enables Sustainability Governance in Higher Education

Source: Thematic Analysis with Nvivo and Display by Canva

## Mechanism pathway From commitment to institutionalization

Leadership commitment foundation and rectorate is necessary but insufficient it becomes stable sustainability governance only when converted into mechanisms embedding into plans, KPIs, and budgets coordination structures resource controls incentives, funding prerequisites, operational policies and participatory forums that build legitimacy. This sequence moves sustainability beyond temporary projects into routine planning, implementation, evaluation, and decision making (Thabrew et al., 2009). Conceptually, institutionalization operates on two levels at once formal instruments documents, guidelines, structures, procedures and socio-political conditions as legitimacy, acceptance, shared ownership. Embedding and structure create the framework, while resource control and participation supply enforcement and acceptance, reducing fragmentation and resistance in multi actor universities (Ransome, 2025).

## Why MEC matters in resource-constrained private universities

MEC in a resource constrained private university depends on resource control: leaders must protect sustainability through consistent allocation decisions, such as funding priority for units with strong green performance and environmental prerequisites for infrastructure proposals (Rathnasekara & Gooneratne, 2020). Institutionalization also requires commitment that can be verified through policy instruments and budgeting decisions, not just statements. The foundation is crucial for keeping priorities stable and ensuring MEC has real consequences for priority setting, investment approval, and compliance design (Sabella et al., 2021).

## Participation as legitimacy infrastructure

Mechanism oriented sustainability governance still needs a humanistic dimension through involvement of the academic community and campus space users. Participation via consultation forums strengthens policy legitimacy, improves policy design, and reduces resistance to behavioral change, building legitimacy infrastructure that supports policy acceptance and durability (Birnbaum, 2016). Participation also supports organizational learning. Regular dialogue helps identify what works, what creates friction, and what should be adjusted so sustainability is not seen

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as an administrative burden. Therefore, participatory legitimacy strengthens acceptance and enables adaptive sustainability governance in the dynamic, demand intensive higher education context (Newig & Kvarda, 2012).

## Conceptual propositions and contribution

This article advances mechanism-based propositions that enrich sustainability governance literature in higher education, especially for private universities in Indonesia. MEC becomes an enabler when embedded in formal instruments such as plans, KPIs, and budgets, making sustainability a governable object that can be monitored and evaluated; it requires structural anchoring to enable cross unit coordination and prevent fragmented commitments; in resource constrained contexts it needs resource control through incentives, prerequisites, and operational policy controls so sustainability gains enforcement capacity and stable prioritization; and it becomes more durable when supported by participatory legitimacy that builds shared ownership and reduces resistance (Figueiró *et al.*, 2022). The article's contribution is shifting the focus from measuring sustainability to explaining the mechanisms that institutionalize sustainability. By formulating MEC as an enabler operating through a sequence of governance mechanisms, this study offers a framework that can be analytically transferred to other private universities in Indonesia and comparable developing country contexts. The framework also helps researchers and practitioners distinguish symbolic interventions from interventions that genuinely build sustainability governance capacity (Nurunnabi, 2016).

## Practical implications for leaders and policymakers

Private university sustainability governance should start with commitment but quickly be embedded in planning and budgeting to avoid staying rhetorical. Coordination structures, internal guidelines, and fair, transparent resource control can mainstream sustainability and sustain initiatives under limited resources (Meuleman, 2018). For policymakers and quality assurance bodies, sustainability is better promoted when performance instruments assess governance mechanisms, not only environmental outputs. Policy can encourage embedded indicators, coordination structures, procurement and reporting policies, and participation spaces to strengthen durable transformation in higher education (Domorenok *et al.*, 2021).

## Limitations and future research

As a qualitative single case study, the findings are contextual and not intended for statistical generalization. The study's strength is analytic generalization, meaning the identified mechanisms can be tested, compared, or refined in other settings. Future research could compare multiple private university cases, examine variation in the foundation's role, or analyze how MEC mechanisms interact with faculty level academic cultures. Mixed method studies may also assess how the strength of specific governance mechanisms relates to the long term stability of sustainability implementation (Warshaw & Ciarimboli, 2020).

## CONCLUSION

This study examined how managerial environmental concern (MEC) enables sustainability governance in higher education by tracing mechanisms that embed and sustain commitments within a private university in Indonesia. Using a qualitative case study with triangulated interviews, observations, and documents, the study positions MEC as a governance orientation rather than a personal managerial attitude. Findings show a mechanism-based pathway from commitment to institutionalization: embedding in strategic planning, performance indicators, and budgeting; structural anchoring through coordination and internal guidelines; reinforcement through resource allocation and control under constraints; and legitimization through participatory forums that build ownership and reduce resistance. Together, these mechanisms shift sustainability beyond project-based efforts into routine governance. The study contributes a process model and propositions for institutionalizing sustainability in private higher education in developing contexts. Practically, leaders should integrate embedding, coordination capacity, transparent resource governance, and participation, while future research can test the model via multi case, longitudinal, and mixed method designs linking mechanisms to longer term continuity and outcomes.

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