

Green Human Resource Management (GHRM) Practices and Sustainability in Academic Institutions

Vijay¹ and Shital Rajput¹

Institute of Business Management & Commerce Mangalayatan University, Aligarh, India-202146

Received:
10/07/2025
Revised:
25/07/2025
Accepted:
17/08/2025
Published:
23/09/2025

ABSTRACT

This study examines and consolidates literature on Green Human Resource Management (GHRM) and its contribution to fostering sustainability in academic institutions. This analysis positions GHRM within the Ability–Motivation–Opportunity (AMO) framework, reviews prevalent GHRM practices (including green recruitment, training, performance management, rewards, participation, and employee involvement), evaluates empirical evidence from recent studies and campus initiatives, identifies implementation challenges unique to higher education, and provides practical recommendations along with a research agenda for scholars and university administrators. The study contends that the incorporation of Green Human Resource Management (GHRM) into institutional strategy can expedite campus decarbonization, diminish resource consumption, and instill sustainability within institutional culture; however, success necessitates coherent policies, capacity enhancement, measurement frameworks, and incentives.

Keywords: Green HRM, Higher Education, Sustainability, Green Campus, Green Behavior, Academic Institutions.

INTRODUCTION:

Academic institutions—universities, colleges, and research institutes—serve a dual function in sustainability. They are both substantial resource users (energy, water, materials) and knowledge generators tasked with training future leaders and exemplifying sustainable practices. In recent years, numerous colleges have implemented "green campus" efforts, including energy efficiency, waste reduction, and sustainable procurement, in conjunction with curriculum reforms and research programs centred on sustainability. Achieving enduring, organization-wide environmental performance relies not solely on technical metrics but also on individuals – their competencies, motivations, routines, and conventions. Green Human Resource Management (GHRM) aligns HR practices with environmental objectives and is widely acknowledged as a vital mechanism for integrating sustainability into organizational operations and culture. Recent empirical reviews and case studies demonstrate positive correlations between Green Human Resource Management (GHRM) and pro-environmental employee behavior, as well as enhanced sustainability results in universities.

2. Green Human Resource Management

GHRM denotes HRM policies, methods, and systems that foster the sustainable utilisation of resources via employee conduct and organisational processes. The concept originated from the convergence of environmental management and human resource management literature, encompassing conventional HR activities (recruitment, training, appraisal, reward, participation) restructured to promote environmentally sustainable behaviours and competences. Fundamental

studies and theoretical analyses (e.g., Renwick et al.) characterise GHRM as the "HRM components of environmental management" and underscore its capacity to affect both human behaviours and organisational performance.

Two theoretical lenses commonly used in GHRM research are:

- Ability–Motivation–Opportunity (AMO): Human Resource strategies enhance employee capability (skills/knowledge), motivation (incentives/values), and opportunity (systems, participation) to exhibit preferred environmentally sustainable behaviors. Numerous research structure GHRM interventions based on these three levers.
- Social and organizational learning / culture theories: GHRM fosters the development of a sustainable organizational culture and social norms by role modelling, communication, and institutional commitments.

GHRM MATTERS FOR ACADEMIC INSTITUTIONS

Universities have unique characteristics that shape how GHRM works:

- Diverse stakeholder roles: teachers, administrative personnel, contract employees, students, and researchers – each cohort reacts distinctively to incentives and norms.
- Decentralized governance: faculties and departments frequently possess autonomy; centrally imposed policies may encounter implementation issues.
- Educational mission: campuses serve as venues for

learning and establishing norms; the implementation of GHRM can provide multiplicative impacts via students and community engagement.

- Reputational factors: sustainability rankings, financial opportunities, and regulatory demands (e.g., sustainability accreditation) generate external motivations for action.

Empirical research indicates that GHRM positively affects pro-environmental behaviour among university personnel and enhances sustainable university performance when integrated with infrastructure and strategy commitments.

4. Core GHRM practices for Universities

The following is a pragmatic delineation of GHRM practices tailored to the academic milieu, structured according to the AMO paradigm.

4.1 Ability — building green skills and knowledge

- Green induction and onboarding: instruction for new personnel that encompasses campus sustainability regulations, waste segregation processes, energy conservation expectations, and the university's sustainability objectives.
- Continuous training and capacity enhancement: workshops on energy-efficient laboratory administration, sustainable procurement for administrators, low-carbon pedagogical methods, and digital-first processes (minimising paper usage). Case studies demonstrate that training enhances knowledge and self-efficacy, which is associated with environmentally sustainable conduct.
- Role-specific competencies: integrate sustainability competencies into job descriptions for facilities managers, procurement officers, laboratory technicians, and student-facing personnel.

4.2 Motivation — aligning incentives and values

Performance evaluations using environmental KPIs: integrate sustainability metrics into annual assessments (e.g., completion of laboratory energy audits, reduction in departmental waste) and utilise them in career advancement determinations. Evidence suggests that performance management acknowledging environmental contributions promotes eco-friendly task behavior.

- Recognition and reward initiatives: “Green Champion” accolades, departmental sustainability grants, little financial incentives for achieving objectives, or allocated time for sustainability projects.
- Recruitment and selection: attract applicants with defined sustainability characteristics; integrate interview questions with environmental stewardship and embed sustainability-related selection criteria. Numerous GHRM studies emphasize green recruitment as an initial step in cultivating a workforce dedicated to sustainability.

4.3 Opportunity — enabling pro-environmental action

- Employee engagement and committees: form interdisciplinary green committees of faculty, administrative staff, facilities personnel, and students to collaboratively develop initiatives (e.g., zero-waste events, sustainable laboratories). Participatory strategies enhance ownership and practical viability in decentralised academic environments.
- Support for green workplace design and facilities:

provide recycling infrastructure, energy-efficient equipment, and sustainable procurement methods to eliminate practical obstacles to environmentally friendly conduct. Research emphasises that HR practices must be integrated with organisational resources (tools, infrastructure) to achieve effectiveness.

- Flexible work arrangements and digital-centric policies: mitigate commuting emissions through telecommuting alternatives and hybrid instruction, accompanied by guidelines and managerial assistance.

4.4 Integrative HR systems

GHRM is most effective when practices are systematically integrated across HR procedures, creating a “green HR system” that incorporates sustainability across the employment cycle, from recruiting to retirement. Reviews advocate for the alignment of HR systems with the institutional sustainability strategy to prevent inconsistent implementation.

REVIEW LITERATURE

5.1 Positive links to behaviour and outcomes

Meta-analyses and empirical research in organisational settings typically demonstrate that Green Human Resource Management (GHRM) practices are favourably correlated with employees' environmentally conscious behaviours, environmental performance, and, at times, financial performance. Research in academic institutions similarly indicates enhanced pro-environmental behaviour among personnel subsequent to GHRM interventions, including green training, participation initiatives, and modifications in performance appraisal.

5.2 Campus-level sustainability improvements

Case studies of “green campuses” demonstrate that the integration of human-centered interventions (behaviour change campaigns, training, participation) with infrastructure investments (retrofits, renewable energy, waste systems) enables institutions to attain quantifiable reductions in energy consumption, waste, and carbon footprint. The AASHE Sustainable Campus Index provides examples of exemplary campuses and emphasises the importance of institutional cooperation and stakeholder involvement.

5.3 Contextual moderators

Recent study indicates that contextual factors reduce the success of Green Human Resource Management (GHRM) at Higher Education Institutions (HEIs): technological competency, resistance to change, financing limitations, and local policy or regulatory pressures affect outcomes. Research conducted in several nations, such as Saudi Arabia, Indonesia, and India, reveals analogous trends, but with regional variances influenced by governance and resource limitations.

CASE EXAMPLES AND PRACTICAL INITIATIVES

6.1 Institutional sustainability indices and broader initiatives:

The Sustainable Campus Index (AASHE, 2021) emphasizes exemplary institutional practices in operations, curriculum, and research; recognized universities generally integrate policy, infrastructure, and community involvement.

6.2 Examples of Indian Higher Education (Policy and Campus-Level):

India exemplifies recent institutional advancements in sustainability through affiliation standards mandating green cover, campus energy initiatives like as piped natural gas delivery, and substantial funding for sustainability research networks, highlighting national-level catalysts for university sustainability. These illustrate how external policies and funding incentives can catalyse campus-level initiatives and generate demand for GHRM practices to implement reforms.

6.3 Evidence-based program models:

Numerous recent empirical studies from Indonesia, Saudi Arabia, and other areas illustrate GHRM interventions (such as training, green committees, and appraisal modifications) and suggest models for "Green Social Responsibility Programs" specifically designed for higher education institutions. Although context-dependent, they provide transferable design components.

7. Implementation challenges in academic institutions

Despite its potential, GHRM encounters practical and institutional obstacles:

1. Decentralised decision-making: Academic departments frequently manage funding and operational decisions, hindering centralised HR-led initiatives. Central HR must establish collaborations with faculties and campus entities.
2. Academic independence and incentives: Faculty promotion systems prioritise research and teaching; the incorporation of environmental KPIs without meticulous design may encounter resistance. It is essential to align sustainability objectives with research and teaching incentives, such as acknowledgement for sustainability-oriented pedagogy.
3. Resource limitations: Numerous higher education institutions function within stringent financial constraints; investments in training or incentives may be restricted. External funding and incremental strategies can be beneficial.
4. Measurement challenges: Correlating HR interventions with environmental results necessitates robust monitoring systems and data, which are frequently inadequate in higher education institutions. It is essential to establish explicit KPIs, baselines, and measurement methodologies. Cultural resistance: The institutional culture and individual opposition to change, particularly among long-serving employees, may impede acceptance. Change management, leadership modelling, and initial successes are crucial.

8. Practical roadmap for universities (recommended actions)

The following roadmap is written for university leadership and HR teams seeking to operationalize GHRM:

Phase 1 — Commitment and Diagnosis (0–6 months)

Obtain commitment from high leadership and include sustainability into the institutional plan and human resources policy.

- Perform a diagnostic audit: delineate current HR procedures, sustainability objectives, stakeholder groupings, and baseline environmental metrics (energy, waste, travel). Employ a multidisciplinary team of Human Resources, the sustainability office, facilities management, and academic members.

Phase 2 — Develop an integrated GHRM system (6–18 months)

Revise job descriptions to incorporate sustainability competencies where applicable.

- Develop environmentally sustainable onboarding and role-specific training modules: Formulate performance metrics and career acknowledgement systems for efforts connected to sustainability. Establish cross-functional sustainability committees with defined mandates and allocated budgets.

Phase 3 — Implement, evaluate, and expand (18–36 months)

Implement pilot GHRM practices in certain departments (e.g., facilities, laboratories, student services), gather data on behavioural modifications and resource utilisation, and adjust based on feedback.

- Articulate successes and insights transparently to foster momentum and alleviate opposition.
- Disseminate effective practices throughout the university and integrate sustainability key performance indicators into institutional reporting.

Phase 4 — Institutionalisation and Sustainability (3+ years)

Incorporate sustainability into promotional and hiring criteria where applicable.

Establish revolving funds derived from energy efficiency savings to finance continuous training and incentives.

Establish collaborations with external financiers and networks to get capacity-building resources.

MEASUREMENT AND EVALUATION

Good evaluation requires linking HR inputs to behavioural outputs and environmental outcomes. Suggested measures:

- Process indicators: quantity of personnel trained, implementation of green job descriptions, establishment of green committees.
- Behavioral indicators: self-reported environmentally sustainable behaviours, involvement in ecological initiatives, decrease in the utilisation of single-use products.
- Outcome indicators: energy consumption per square meter, water usage, garbage diverted from landfills, and carbon emissions from campus operations and commuting.

A mixed-method review, incorporating surveys,

interviews, and resource utilisation data, yields more comprehensive insights. Create a dashboard that integrates HR data with campus sustainability key performance indicators and publicly publish success to enhance reputational incentives.

10. Policy recommendations

For national policymakers and university consortia:

1. Promote GHRM by means of financial support and accreditation: integrate human-capacity components of sustainability into accreditation standards and funding requests. Examples include affiliation norms mandating green cover and national research funding focussing on sustainability. Supply capacity-building resources: national initiatives (e.g., Green Campus Programs) may furnish toolkits and training templates for higher education institutions.
2. Promote peer learning: institutions can exchange curriculum, human resources policy templates, and evaluation frameworks, utilising AASHE-style benchmarking effectively.

11. Research agenda

Key research priorities to enhance the empirical foundation for GHRM in higher education:

1. Longitudinal studies correlating specific GHRM initiatives with quantifiable campus sustainability results (energy, trash, emissions). Emerging cross-sectional studies exist; however, longterm causal evidence is still scarce.
2. Comparative analyses of governance paradigms (centralised versus decentralised institutions) and regions to discern context-specific facilitators and impediments.
3. Intervention studies evaluating combinations of AMO-aligned GHRM practices (e.g., training, appraisal, and infrastructure) to ascertain synergies and cost-effectiveness.
4. Research centred on faculty aimed at connecting academic incentives with sustainability, ensuring that teaching and research obligations include quantifiable sustainability outcomes.
5. Equity-centered research examining the effects of GHRM practices on various employee categories (tenure-track academics, casual staff, outsourced labour) and approaches to facilitate inclusive sustainability transitions.

CONCLUSION

Green HRM provides universities with a comprehensive, human-centric approach to integrating sustainability into their operations, culture, and educational practices. Theory, such as the AMO framework, along with increasing empirical evidence, suggests that integrated HR practices—spanning recruitment, training, assessment, reward, and participation—can alter behavior and enhance sustainable outcomes. Nonetheless, the decentralized governance, incentive frameworks, and resource limitations of higher education necessitate customized strategies: initiate pilots, assess outcomes, and expand;

synchronize academic incentives with sustainability objectives; and integrate human resource practices with facility investments and data systems. National policies, financial frameworks, and inter-institutional learning networks can expedite adoption. As universities prepare future generations, their effectiveness in implementing GHRM has far-reaching consequences beyond their campuses.

Acknowledgement

The Authors would like to thank to Mangalayatan University, Aligarh for providing the research facilities.

Funding Sources

There is no funding received from any sources.

Conflict of Interest

There is no conflict of interest to show.

REFERENCES

1. Zahrani, A.A. (2024) 'The influence of green human resource management on university sustainability', *PMC*. Available at: <https://doi.org/xxxxxx> (Accessed: 27 October 2025).
2. Renwick, D.W.S., Redman, T. and Maguire, S. (2016) 'Contemporary developments in Green (environmental) HRM', *The International Journal of Human Resource Management*, 27(2), pp. 1–17.
3. Akbar, Y. K., Maratis, J., Nawangsari, L. C., Putri, R. K., & SK, P. (2024). The effects of green human resource management practices on sustainable university through green psychological climate of academic and non-academic staff. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2375404>
4. Mohammed Aboramadan (2022). The effect of green HRM on employee green behaviors in higher education: the mediating mechanism of green work engagement. *International Journal of Organizational Analysis* 30 (1): 7–23. <https://doi.org/10.1108/IJOA-05-2020-2190>
5. Kim T. (2022). Assessing the Impacts of Individual and Organizational Factors on South Korea Hotels' Green Performance Using the AMO Model. *Int Environ Res Public Health*.;19(16):10440. doi: 10.3390/ijerph191610440.
6. Goel, Pankaj, Sandhya Mehta, Raman Kumar, and Fernando Castaño. (2022). "Sustainable Green Human Resource Management Practices in Educational Institutions: An Interpretive Structural Modelling and Analytic Hierarchy Process Approach" *Sustainability* 14, no. 19: 12853. <https://doi.org/10.3390/su141912853>

7. AASHE. (2021). Sustainable Campus Index — benchmarked best-practice campuses.
8. Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613–627. <https://doi.org/10.1002/hrm.21792>
9. Hussain, T., Eskildsen, J., Edgeman, R., Ismail, M., Shoukry, A. M., & Gani, S. (2019). Imperatives of sustainable university excellence: A conceptual framework. *Sustainability*, 11(19), 5242. <https://doi.org/10.3390/su11195242>
10. Mehta, K., & Chugan, P. K. (2015). Green HRM in pursuit of environmentally sustainable business. *Universal Journal of Industrial and Business Management*, 3(3), 74–81. <https://doi.org/10.13189/ujibm.2015.030302>
11. Mishra, P. (2017). Green human resource management: A framework for sustainable organizational development in an emerging economy. *International Journal of Organizational Analysis*, 25(5), 762–788. <https://doi.org/10.1108/IJOA-11-2016-1079>
12. Opatha, H., & Arulrajah, A. A. (2014). Green human resource management: Simplified general reflections. *International Business Research*, 7(8), 101. <https://doi.org/10.5539/ibr.v7n8p101>