

LINKING GREEN HRM TO PRO-ENVIRONMENTAL BEHAVIOR THROUGH EMPLOYEE ENGAGEMENT

Siti Najma Millati^{1*}, Siti Zulaikha Wulandari², Filda Khoirun Nikmah³

¹⁻³Management, Faculty of Economic and Business, Jenderal Soedirman University, Indonesia

*Email corresponding author: siti.millati@mhs.unsoed.ac.id

Article Information: Received --- June 25, 2026, Published --- August 10, 2026

Abstract

Environmental sustainability has become a strategic priority for organizations, including the banking sector, requiring employees to actively engage in environmentally responsible practices. This study aims to examine the effect of Green Human Resource Management (GHRM) on employees' pro-environmental behavior (PEB) and to investigate the mediating role of employee engagement in this relationship. The study adopts a quantitative approach using a survey method and focuses on employees of state-owned banks in Central Java, Indonesia. Data will be collected through a structured questionnaire distributed to employees and measured using a five-point Likert scale. The proposed model consists of GHRM as the independent variable, employee engagement as the mediating variable, and PEB as the dependent variable. Data analysis will be conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. Drawing on Social Exchange Theory and the Ability–Motivation–Opportunity (AMO) framework, this study proposes that GHRM enhances employee engagement, which subsequently encourages employees to demonstrate pro-environmental behavior in the workplace. The study is expected to contribute to the growing literature on sustainable human resource management by providing empirical evidence from the banking sector in a developing country context. Furthermore, the findings are expected to offer practical insights for organizations in designing HR policies that support employee engagement and environmental sustainability initiatives.

Keywords: green HRM, employee engagement, pro-environmental behavior, sustainable HRM, banking sector

INTRODUCTION

Environmental sustainability is now a top priority for global organizations, including those in the financial services sector. Demands from various stakeholders are pushing companies to focus not only on profits but also on social and environmental responsibilities. In this context, employees' pro-environmental behavior (PEB), such as conserving energy, reducing waste, and supporting eco-friendly policies has become a crucial factor in the success of an organization's sustainability strategy (Elshaer et al., 2023; Zafar et al., 2022).

These developments have also driven a paradigm shift in human resource management (HRM), moving from a focus on productivity toward a sustainable HRM approach that encompasses the three pillars of the triple bottom line: profit, people, and planet (Mohiuddin et al., 2022). One manifestation of this is green human resource management (GHRM), which involves integrating environmental sustainability principles into HRM practices such as recruitment, training, performance evaluation, and reward systems.

Several studies indicate that GHRM has a positive impact on environmental performance, both through increased environmental awareness and employees' intrinsic motivation (Ahmad et al., 2023; Rau et al., 2022). However, this impact is generally indirect and mediated by psychological variables, one of which is employee engagement. Based on Social Exchange Theory, GHRM practices can be perceived as a form of organizational support that enhances employee engagement, which in turn fosters positive behaviors such as PEB (Abualigah et al., 2023; Yang & Li, 2023; Hu et al., 2022).

This phenomenon is relevant to the context of state-owned banks in Indonesia. BNI, BRI, and Bank Mandiri have integrated ESG principles into their HRM systems, ranging from green training, sustainability-based awards, to zero-waste programs, which directly reflect GHRM implementation while encouraging employee engagement in eco-friendly behaviors (Nurfitri, 2024; Febrinastri, 2024; Tempo, 2024).

Nevertheless, there are still several research gaps that need to be addressed. First, GHRM studies are still dominated by the manufacturing sector and have not extensively covered the banking sector. Second, there is inconsistency in findings regarding the influence of GHRM on PEB (Yadate, 2025). Third, the role of employee engagement as a mediating variable in the relationship between GHRM and PEB has been rarely studied, particularly in developing countries such as Indonesia.

Therefore, this study aims to examine the influence of GHRM on PEB with employee engagement as a mediating variable among employees of state-owned banks, to provide empirical contributions as well as practical recommendations for organizations in designing HRM policies that support sustainability goals.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Literature Review

Social Exchange Theory (SET) was first developed by Homans (1958) and later refined by Blau (1964), who viewed social relationships as a process of mutual exchange based on the principle of reciprocity. In an organizational context, SET explains how employees who perceive benefits from green human resource management (GHRM) practices, such as environmentally-based recruitment, will respond by increasing employee engagement and voluntary eco-friendly behaviors (Tran, 2023; Sweeney, 2024). This theory emphasizes three key elements: the reward-cost ratio in the adoption of green behavior, engagement as a form of reciprocity for organizational support, and autonomy as a form of employee control over pro-environmental behavior in the workplace.

In addition, the AMO theory (Appelbaum et al., 2000) states that individual performance is determined by ability, motivation, and opportunity. Within the GHRM framework, this theory explains how green skills training build ability, an environment-based reward system fosters motivation, and employee involvement in sustainability policies provides opportunity, which collectively generate pro-environmental behavior through the mediation of engagement (Rahman & Mansor, 2023).

Pro-Environmental Behavior

Pro-environmental behavior (PEB) refers to voluntary or formal actions taken by employees to reduce negative ecological impacts in the workplace, such as efficient resource use, waste reduction, and the transition to digital work systems (Yuriev et al., 2021; Zacher et al., 2023). In this study, PEB was measured using four indicators developed by Zabawa & Kozyra (2020): (1) conserving (efficient use of resources); (2) avoiding waste (minimizing waste and the use of single-use materials); (3) transforming (adoption of paperless work systems); and (4) influencing others (encouraging coworkers to adopt eco-friendly practices). The formation of EBP is influenced by

GHRM practices, employee engagement, individual environmental values, management support, and organizational culture (Assyofa et al., 2020).

Green Human Resource Management (GHRM)

Green human resource management (GHRM) is the integration of environmental sustainability principles into HRM systems, with the aim of fostering a workforce that is conscious of ecological issues (Faisal, 2023; Munawar et al., 2022). In the context of this study, GHRM is defined as the perceptions of employees at state-owned banks regarding HRM policies that support environmental sustainability, including prioritizing environmentally conscious candidates in recruitment, sustainable banking training, and rewards for resource efficiency. The effectiveness of GHRM is measured through five indicators proposed by Tang et al. (2017): (1) green recruitment and selection, (2) green training, (3) green performance management, (4) green pay and reward, and (5) green involvement.

Employee Engagement

Employee engagement is a positive psychological state characterized by vigor, dedication, and absorption in work (Schaufeli, 2017). Engaged employees do not merely show up physically, but internalize the organization's goals, including sustainability initiatives, as part of their personal commitment (Ariyanto et al., 2025; Bakker, 2017). According to the SET model, this level of engagement is influenced by organizational factors such as leadership, work culture, GHRM practices, and sustainability-based rewards.

Hypothesis Development

Iftikar et al. (2022) found that GHRM promotes pro-environmental behavior (PEB) among hotel employees in Pakistan through the AMO framework, while Kakar & Khan (2022) demonstrated a similar effect among 247 academics at educational institutions in Pakistan. Al-Sabi et al. (2024) and Gao et al. (2025) further noted that green employee empowerment, green training, and a green organizational culture significantly reinforce pro-environmental behavior. Based on these findings, the following hypothesis is formulated:

H1: Green human resource management has a positive influence on pro-environmental behavior.

Several studies indicate that Green Human Resource Management (GHRM) influences employee behavior not only directly but also through increased employee engagement. Gim et al. (2022) found that GHRM has a positive effect on work engagement, while Baykal and Bayraktar (2022) demonstrated that this effect occurs through work meaning and value alignment. These findings are supported by Noor et al. (2023) in the green banking sector in Indonesia, Umair et al. (2024) at universities in Pakistan, and Islam et al. (2025) in the manufacturing industry in Bangladesh, who consistently demonstrate that the implementation of GHRM enhances employee engagement across various organizational contexts. Based on these findings, the following hypothesis is formulated:

H2: Green human resource management has a positive effect on employee engagement.

Within the Job Demands-Resources (JD-R) framework, employees with adequate job resources tend to develop deeper engagement, which in turn drives various positive behaviors, including PEB. Min et al. (2024) demonstrated that employee engagement in CSR initiatives significantly drives PEB through the mechanism of psychological ownership. Albrecht et al. (2024) and Mankgele & Fatoki (2025) also confirm that employee pro-environmental engagement is positively associated with pro-environmental behavior, a relationship further strengthened by leadership and organizational support. Therefore:

H3: Employee engagement has a positive effect on pro-environmental behavior.

The influence of GHRM on PEB is not always direct but is commonly mediated by employees' psychological states. Ababneh (2021) explicitly found that employee engagement mediates the relationship between green HRM practices and individual green behavior. These findings are reinforced by Aboramadan et al. (2022) and Amjad et al. (2025), who confirmed the role of

engagement as a significant mediator in the relationship between sustainable HR practices and PEB. Referring to the AMO and SET theoretical frameworks, as well as existing empirical evidence, therefore:

H4: Employee engagement mediates the influence of green human resource management on pro-environmental behavior.

RESEARCH METHODS

Research Design

This study employs a quantitative approach using a survey method to collect data from a predetermined sample. Grounded in positivism, this research examines causal relationships among green human resource management (GHRM), employee engagement, and pro-environmental behavior (PEB) among employees of state-owned bank (Bank BUMN) in Central Java, conducted during May–June 2026. The research type is explanatory research, which aims to explain the causal relationships among variables through hypothesis testing (Sugiyono, 2021). The study investigates both the direct and indirect effects of GHRM on PEB, with employee engagement as a mediating variable. Primary data were obtained through questionnaires distributed to respondents.

Population and Sample

The population of this study consists of all employees or staff working at Bank BUMN in Central Java. As the exact population size is unknown, the minimum sample size was determined using the Cochran formula:

$$n_o = Z^2 \cdot p \cdot q / e^2 = (1.96^2 \times 0.5 \times 0.5) / 0.1^2 = 0.9604 / 0.01 = 96$$

Data Collection and Instrument Development

Data were collected through a structured questionnaire distributed digitally via Google Forms, in coordination with Bank BUMN management. The questionnaire covers three research variables: GHRM, employee engagement, and PEB. Responses were measured using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The operationalization of each variable is presented in Table 1.

Table 1 Conceptual and Operational Definition of Variables

Variable	Conceptual Definition	Operational Definition	Indicator
Green Human Resource Management (GHRM)	An HR management approach that integrates environmental values into HR practices, such as recruitment, training, performance evaluation, and organizational policies to support environmental sustainability (Tang et al., 2017).	Employees' perceptions of HR policies that promote environmental sustainability, including recruitment, training, performance evaluation, and rewards.	According to Tang et al. (2017): 1) Green recruitment and selection 2) Green training 3) Green performance management 4) Green pay and reward 5) Green involvement

Variable	Conceptual Definition	Operational Definition	Indicator
Employee Engagement	A state of positive employee engagement with their work, characterized by enthusiasm, dedication, and deep involvement (Schaufeli, 2017).	A form of employee engagement demonstrated through energy, enthusiasm, and focus in performing daily tasks.	According to Schaufeli (2017): 1) Vigor 2) Dedication 3) Absorption
Pro-environmental Behavior	Behavior that individuals consciously engage in to reduce negative impacts on the environment and support environmental conservation efforts (Zabawa & Kozyra, 2020).	Formal and voluntary actions taken by employees to support environmental sustainability in the workplace.	According to Zabawa & Kozyra (2020): 1) Conserving 2) Avoiding waste 3) Transforming

Table 2 Likert Scale Measurement

Skor	Description
1	Strongly Disagree (SD)
2	Disagree (D)
3	Neutral (N)
4	Agree (A)
5	Strongly Agree (SA)

Source: Sugiyono (2021)

Data Analysis Techniques

This study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 4, a multivariate analysis method that enables simultaneous estimation of the outer model and inner model (Hair et al., 2019). The analysis proceeds in two stages:

Measurement Model Evaluation (Outer Model)

Convergent validity is assessed by examining outer loading values (≥ 0.70) and Average Variance Extracted ($AVE \geq 0.50$) for each indicator (Hair et al., 2019). Discriminant validity is evaluated using the Heterotrait-Monotrait Ratio (HTMT), where a value below 0.85 indicates adequate discriminant validity between variable pairs (Hair et al., 2019). Reliability is assessed through Composite Reliability ($CR \geq 0.70$) and Cronbach's Alpha ($CA \geq 0.60$); CR is preferred in PLS-SEM as it does not assume equal weights across indicators (Ghozali & Latan, 2015).

Structural Model Evaluation (Inner Model)

Three metrics are used to evaluate the structural model: (1) Coefficient of Determination (R^2), where values ≥ 0.75 , ≥ 0.50 , and ≥ 0.25 indicate strong, moderate, and weak variance

explanation, respectively; (2) Predictive Relevance (Q^2), obtained via blindfolding in SmartPLS, where $Q^2 > 0$ indicates adequate predictive accuracy; and (3) Effect Size (f^2), where values of 0.02, 0.15, and 0.35 denote small, medium, and large effects, respectively (Hair et al., 2019).

Hypothesis Testing

Hypothesis testing is conducted using the bootstrapping method, which is non-parametric and does not require normality of data distribution. A hypothesis is supported when t-statistic > 1.96 or p-value < 0.05 on a two-tailed test (Ghozali & Latan, 2015). Direct effects (H1–H3) are evaluated through path coefficients, while the mediating role of employee engagement (H4) is examined via specific indirect effect. Mediation is considered significant when the confidence interval of the indirect effect excludes zero at the 95% confidence level. Full mediation occurs when the direct path coefficient (c') equals zero after the mediator is introduced; partial mediation occurs when $c' \neq 0$ but decreases in value (Hair et al., 2019).

RESULTS AND DISCUSSION

The text conducted using the SEM-PLS analysis method produced the following research model:

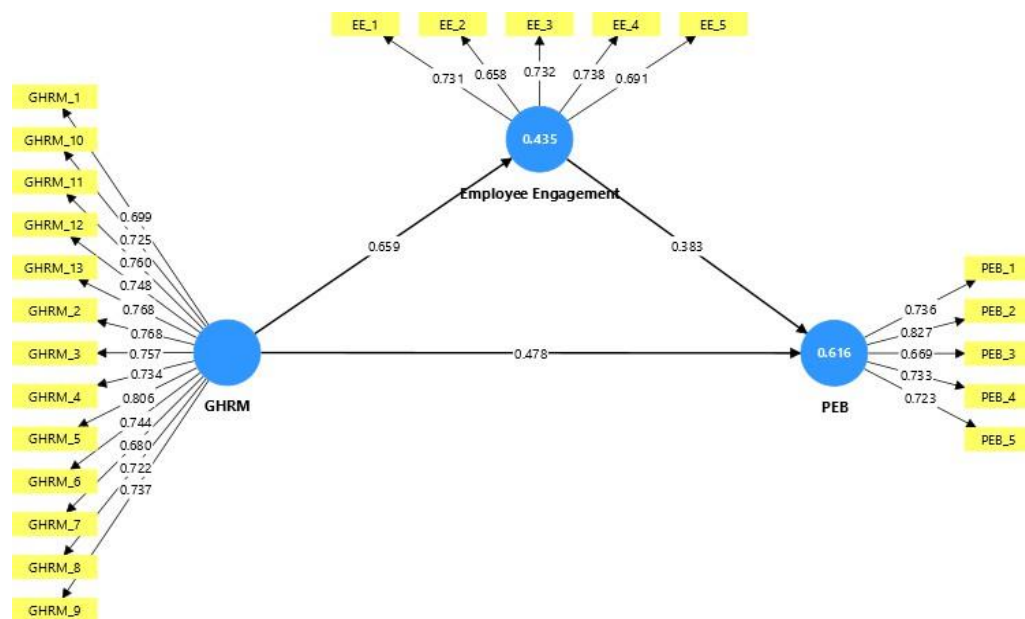


Figure 1 SEM-PLS Model

Convergent Validity Test

Table 1 Loading Factor Analysis

	GHRM	EE	PEB
GHRM_1	0,699		
GHRM_2	0,768		
GHRM_3	0,757		
GHRM_4	0,734		
GHRM_5	0,806		
GHRM_6	0,744		
GHRM_7	0,680		

	GHRM	EE	PEB
GHRM_8	0,722		
GHRM_9	0,737		
GHRM_10	0,725		
GHRM_11	0,760		
GHRM_12	0,748		
GHRM_13	0,768		
EE_1		0,731	
EE_2		0,658	
EE_3		0,732	
EE_4		0,738	
EE_5		0,691	
PEB_1			0,736
PEB_2			0,827
PEB_3			0,669
PEB_4			0,733
PEB_5			0,723

The results of the outer loading test show that all indicators have the highest loading values for the constructs they measure, thus accurately representing those constructs. The outer loading values for the GHRM variable range from 0.680 to 0.806, for Employee Engagement from 0.658 to 0.738, and for Pro-Environmental Behavior from 0.669 to 0.827. Although some indicators had outer loading values below 0.70, all indicators were retained because they remained within the recommended range and the Average Variance Extracted (AVE) value for each construct met the criterion of ≥ 0.50 . Thus, all indicators were deemed valid and suitable for use in subsequent analysis stages (Hair et al., 2019).

Discriminant Validity Test

Table 2 Discriminant Validity

	EE	GHRM	PEB
EE			0,879
GHRM	0,769		0,831
PEB			

Table 2 shows that all Heterotrait-Monotrait Ratio (HTMT) values meet the criteria for discriminant validity. The HTMT values between GHRM and Employee Engagement were 0.769, between GHRM and Pro-Environmental Behavior were 0.831, and between Employee Engagement and Pro-Environmental Behavior were 0.879. All values were below the threshold recommended by Hair et al. (2019), so each construct was deemed to have adequate discriminant validity.

Reliability Test

Table 3 Reliability

	Cronbach's Alpha	Composite reliability (rho_c)	AVE	Description
EE	0,757	0,836	0,505	Passed
GHRM	0,932	0,941	0,552	Passed

	Cronbach's Alpha	Composite reliability (rho_c)	AVE	Description
PEB	0,792	0,857	0,547	Passed

Table 3 shows that all research variables have Cronbach's Alpha values above 0.70. In addition, the Composite Reliability (rho_c) values for each variable are also above 0.70. Based on these results, it can be concluded that all indicators in this study have a good level of reliability and are therefore capable of consistently measuring the research variables.

R-Square Test

Table 4 R-Square

	R-square	R-square adjusted	Description
EE	0,435	0,429	Passed
PEB	0,616	0,607	Passed

Based on Table 4, the coefficient of determination (R^2) for Employee Engagement is 0.435, which means that GHRM explains 43.5% of the variation in Employee Engagement, while 56.5% is influenced by other factors outside the model. Meanwhile, the R^2 value for Pro-Environmental Behavior is 0.616, indicating that GHRM and Employee Engagement together explain 61.6% of the variation in Pro-Environmental Behavior. According to Hair et al. (2019), these two values indicate that the model's predictive ability falls into the moderate-to-good category.

Goodness of Fit Test

Table 5 Goodness of Fit Test

	AVE	R-Square
EE	0,505	0,435
GHRM	0,552	0,616
PEB	0,547	
Mean	0,535	

Based on Table 5, the f^2 value for the effect of GHRM on employee engagement is 0.769, indicating a very large effect. Meanwhile, the effect of GHRM on PEB yields an f^2 value of 0.335, which is also classified as large. The effect of employee engagement on PEB, at 0.215, falls into the moderate effect category. This category is defined based on criteria from Hair et al. (2019), which state that an f^2 value of 0.02 indicates a small effect, 0.15 a moderate effect, and 0.35 a large effect.

Hypothesis Testing

Table 6 Path Coefficients

Structural Path	β	t-statistic	p-value
EE $\rightarrow$ PEB	0,383	4,437	0,000
GHRM $\rightarrow$ EE	0,659	10,301	0,000
GHRM $\rightarrow$ PEB	0,478	4,753	0,000

Table 6 presents the results of the bootstrapping tests for all direct relationships between variables, showing that the overall t-statistic is greater than 1.96 and the p-value is less than 0.05. Based on these results, all direct hypotheses in this study are accepted.

1. Hypotesis 1: the effect of employee engagement on pro-environmental behavior. The test results show that the EE → PEB path has a standard deviation coefficient of 0.086, a t-statistic of 4.437, and a p-value of 0.000. Since the t-statistic (4.437) is greater than 1.96 and the p-value (0.000) is less than 0.05, it can be concluded that Employee Engagement has a positive and significant effect on Pro-Environmental Behavior. Thus, hypothesis 1 is accepted.
2. Hypotesis 2: the effect of green human resource management on employee engagement. A t-statistic value that far exceeds the threshold of 1.96 and a p-value below 0.05 indicate that green human resource management has a positive and significant effect on employee engagement; in fact, it is the path with the highest level of significance among the three hypotheses tested, so hypothesis 2 is accepted.
3. Hypotesis 3: the effect of green human resource management on pro-environmental behavior. It can be seen that the t-statistic value (4.753) is greater than 1.96 and the p-value (0.000) is less than 0.05; therefore, green human resource management is proven to have a direct, positive, and significant effect on pro-environmental behavior. Therefore, hypothesis 3 is accepted.

Table 7 Path Coefficient Mediation

Structural Path	β	t-statistic	p-value
GHRM → EE → PEB	0,252	4,233	0,000

Table 7 presents the results of the mediation hypothesis test using the bootstrapping procedure to test the significance of the indirect effect between green human resource management and pro-environmental behavior through employee engagement as a mediating variable.

4. Hypotesis 4: the effect of green human resource management on pro-environmental behavior through employee engagement as a mediating variable. The test results show that the mediation path GHRM → EE → PEB has a standard deviation coefficient of 0.060, a t-statistic of 4.233, and a p-value of 0.000. Since the t-statistic (4.233) is greater than the critical value of 1.96 and the p-value (0.000) is less than 0.05, it can be concluded that employee engagement significantly mediates the effect of green human resource management on pro-environmental behavior. Therefore, hypothesis 4 is accepted.

These findings indicate that green human resource management not only has a direct effect on pro-environmental behavior (as shown in hypothesis 3), but also has an indirect effect through increased employee engagement. In other words, the more effectively green human resource management practices are implemented in an organization, the higher the resulting level of employee engagement, and in turn, this will encourage pro-environmental behavior in the workplace.

CONCLUSION

This study aims to analyze the effect of green human resource management (GHRM) on pro-environmental behavior (PEB), with employee engagement as a mediating variable, among employees of state-owned banks in Central Java Province. Based on a PLS-SEM analysis using SmartPLS 4, the following conclusions were drawn.

1. GHRM has a positive and significant effect on PEB ($\beta = 0.478$; $t = 4.753$; $p < 0.001$), thus H1 is accepted. This finding indicates that better implementation of GHRM encourages an increase in employees' pro-environmental behavior.

2. GHRM has a positive and significant effect on employee engagement ($\beta = 0.659$; $t = 10.301$; $p < 0.001$), so H2 is accepted. This indicates that GHRM practices can increase employees' engagement and involvement within the organization.
3. Employee engagement has a positive and significant effect on PEB ($\beta = 0.383$; $t = 4.437$; $p < 0.001$), therefore H3 is accepted. Employees with high levels of engagement tend to exhibit behavior that supports organizational sustainability.
4. Employee engagement partially mediates the effect of GHRM on PEB ($\beta = 0.252$; $t = 4.233$; $p < 0.001$), so H4 is accepted. These results show that GHRM enhances PEB both directly and through increased employee engagement.

However this study was conducted in accordance with systematic scientific procedures, there are several limitations that must be acknowledged and taken into account when interpreting the results of this study.

1. The research sample included only 96 employees of state-owned banks in Central Java Province from BRI, BNI, Bank Mandiri, BTN, and BSI. Differences in organizational characteristics, work culture, and human resource policies among the banks, coupled with an uneven distribution of respondents, limit the generalizability of the research findings.
2. This study used only employee engagement as a mediating variable. Other variables, such as green self-efficacy, organizational identity, or organizational climate, may also help explain the relationship between green human resource management (GHRM) and pro-environmental behavior (PEB) and should therefore be considered in future research.

BIBLIOGRAPHY

- Ababneh, O. M. A. (2021). How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes. *Journal of Environmental Planning and Management*, 64(7), 1204–1226. <https://doi.org/10.1080/09640568.2020.1814708>
- Aboramadan, M., Kundi, Y. M., & Becker, A. (2022). Green human resource management in nonprofit organizations: effects on employee green behavior and the role of perceived green organizational support. *Personnel Review*, 51(7), 1788–1806. <https://doi.org/10.1108/PR-02-2021-0078>
- Abualigah, A., Koburtay, T., Bourini, I., Badar, K., & Gerged, A. M. (2023). Towards sustainable development in the hospitality sector: Does green human resource management stimulate green creativity? A moderated mediation model. *Business Strategy and the Environment*, 32(6), 3217–3232. <https://doi.org/10.1002/bse.3296>
- Ahmad, J., Al Mamun, A., Masukujjaman, M., Mohamed Makhbul, Z. K., & Mohd Ali, K. A. (2023). Modeling the workplace pro-environmental behavior through green human resource management and organizational culture: Evidence from an emerging economy. *Heliyon*, 9(9). <https://doi.org/10.1016/j.heliyon.2023.e19134>
- Albrecht, S. L., Dalton, J. R., & Kavadas, V. (2024). Employee pro-environmental proactive behavior: the influence of pro-environmental senior leader and organizational support, supervisor and co-worker support, and employee pro-environmental engagement. *Frontiers in Sustainability*, 5. <https://doi.org/10.3389/frsus.2024.1455556>
- Al-Sabi, S. M., Al-Ababneh, M. M., Al Qssem, A. H., Afaneh, J. A. A., & Elshaer, I. A. (2024). Green human resource management practices and environmental performance: the mediating role of job satisfaction and pro-environmental behavior. *Cogent Business & Management*, 11(1).

<https://doi.org/10.1080/23311975.2024.2328316>

- Amjad, M. A., Soomro, M. A., & Khan, A. A. (2025). Engaging Minds and Greening Workspaces: Investigating the Mediating Role of Employee Engagement in Strengthening the Relationship Between Green HRM Practices and Organizational Sustainability Outcomes. *Journal of Management & Social Science*, 2(2). <https://rjmss.com/index.php/7/about>
- Ariyanto, E., Wijaya, M. H., & Mutiara Sari, A. N. (2025). The Effect of Employee Engagement (Vigor, Dedication, and Absorption) on Job Satisfaction at PT Pelindo 1. *International Journal of Current Science Research and Review*, 08(02). <https://doi.org/10.47191/ijcsrr/V8-i2-11>
- Assyofa, A. R., Rani, A. M., & Yuliawati, T. (2020). Green Behaviors Factors on Green Human Resources Management Practice on the Employees of “The First Movers on Sustainable Banking” in Indonesia. *Proceedings of the 2nd Social and 43 Humaniora Research Symposium (SoRes 2019)*. <https://doi.org/10.2991/assehr.k.200225.022>
- Bakker, A. B. (2017). Strategic and proactive approaches to work engagement. *Organizational Dynamics*, 46(2), 67–75. <https://doi.org/10.1016/j.orgdyn.2017.04.002>
- Baykal, E., & Bayraktar, O. (2022). Green human resources management: A novel tool to work engagement. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.951963>
- Elshaer, I. A., Azazz, A. M. S., & Fayyad, S. (2023). Green Management and Sustainable Performance of Small- and Medium-Sized Hospitality Businesses: Moderating the Role of an Employee’s Pro-Environmental Behavior. *International Journal of Environmental Research and Public Health*, 20(3). <https://doi.org/10.3390/ijerph20032244>
- Faisal, S. (2023). Green Human Resource Management—A Synthesis. *Sustainability*, 15(3), 2259. <https://doi.org/10.3390/su15032259>
- Febrinastri, F. (2024, Juni 06). Wujud Komitmen Kembangkan Karyawan, BRI Dinobatkan sebagai Tempat Kerja Terbaik oleh HR Asia. *Suara Kalbar*. <https://kalbar.suara.com/read/2024/06/06/190000/wujud-komitmen-kembangkan-karyawan-bri-dinobatkan-sebagai-tempat-kerja-terbaik-oleh-hr-asia>
- Gao, H., Al Mamun, A., Masukujjaman, M., & Yang, Q. (2025). Exploring the nexus of green human resource management, leadership and organizational culture on workplace pro-environmental behavior. *Humanities and Social Sciences Communications*, 12(1), 987. <https://doi.org/10.1057/s41599-025-05071-9>
- Gim, G. C. W., Ooi, S. K., Teoh, S. T., Lim, H. L., & Yeap, J. A. L. (2022). Green human resource management, leader–member exchange, core self-evaluations and work engagement: the mediating role of human resource management performance attributions. *International Journal of Manpower*, 43(3), 682–700. <https://doi.org/10.1108/IJM-05-2020-0255>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hu, X., Khan, S. M., Huang, S., Abbas, J., Matei, M. C., & Badulescu, D. (2022). Employees’ Green Enterprise Motivation and Green Creative Process Engagement and Their Impact on Green

- Creative Performance. *International Journal of Environmental Research and Public Health*, 19(10). <https://doi.org/10.3390/ijerph19105983>
- Hutauruk, D. (2025, Juni 05). BNI Dorong Ekonomi Hijau Lewat Inisiatif GoGreen. *KONTAN.CO.ID*. <https://keuangan.kontan.co.id/news/bni-dorong-ekonomi-hijau-lewat-inisiatif-gogreen> 44
- Iftikar, T., Hussain, S., Malik, M. I., Hyder, S., Kaleem, M., & Saqib, A. (2022). Green human resource management and pro-environmental behavior nexus with the lens of AMO theory. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2124603>
- Imam Ghozali, & Hengky Latan. (2015). Partial Least Squares: Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0, -2/E. *Badan Penerbit Undip*.
- Islam, M. F., Al Masud, A., Emon, Md., Shuvro, R. A., Jony, M. T. I., & Akter, T. (2025). Integrating green HRM for productivity and sustainability: green innovation, engagement and pro-environmental behavior as key mediators. *Future Business Journal*, 11(1), 24. <https://doi.org/10.1186/s43093-025-00433-w>
- Kakar, A. S., & Khan, M. (2022). Exploring the impact of green HRM practices on pro-environmental behavior via interplay of organization citizenship behavior. *Green Finance*, 4(3), 274–294. <https://doi.org/10.3934/GF.2022013>
- Komitmen Penuh Bank Mandiri terhadap Prinsip ESG. (2024, 08 Mei). *Tempo*. <https://www.tempo.co/info-tempo/komitmen-penuh-bank-mandiri-terhadap-prinsip-esg-60863>
- Krisnawati, K., & Amalia, L. (2023). Pengaruh Green Human Resource Management Terhadap Employee Green Behavior Dimediasi Oleh Green Organization Identity. *Innovative: Journal Of Social Science Research*, 3(4), 9531–9545. <https://j-innovative.org/index.php/Innovative/article/view/3989>
- Kundi, Y., Sardar, S., & Badar, K. (2021). Linking performance pressure to employee work engagement: the moderating role of emotional stability. *Personnel Review*. <https://doi.org/10.1108/pr-05-2020-0313>
- Mandiri. (2025). ESG – Training & Development for Employee. *Website Bank Mandiri*. <https://www.bankmandiri.co.id/en/esg-training-development>
- Mankgele, K. P., & Fatoki, O. (2025). Environmentally specific empowering leadership and organizational citizenship behavior toward the environment: The roles of green work engagement, psychological ownership, and environmental concern. *Asian Management and Business Review*, 143–159. <https://doi.org/10.20885/AMBR.vol5.iss1.art10>
- Min, Y. A., Hao, M., Yang, X., Ling, D. Y., & Yuan, J. S. (2024). How employee corporate social responsibility participation promotes pro-environmental behavior. *Frontiers in Earth Science*, 12. <https://doi.org/10.3389/feart.2024.1393386>
- Mohiuddin, M., Hosseini, E., Faradonbeh, S. B., & Sabokro, M. (2022). Achieving Human Resource Management Sustainability in Universities. *International Journal of Environmental Research and Public Health*, 19(2), 928. <https://doi.org/10.3390/ijerph19020928>

- Muchsinati, E. S., Salwa, H., & Fatyandri, A. (2025). Pengaruh Green Human Resource Management terhadap Perilaku Hijau Individu dengan Knowledge Management sebagai Variabel Mediasi pada Perusahaan Manufaktur di Batam. *Jurnal Samudra Ekonomi Dan Bisnis*, 16(3), 611–624. <https://doi.org/10.33059/jseb.v16i3.10912>
- Munawar, S., Yousaf, D. H. Q., Ahmed, M., & Rehman, D. S. (2022). Effects of green human resource management on green innovation through green human capital, environmental knowledge, and managerial environmental concern. *Journal of Hospitality and Tourism Management*, 52, 141–150. <https://doi.org/10.1016/j.jhtm.2022.06.009>
- Nguyen, H.-D., Tho, B. D., Ho, D. B., Nguyen, D.-D., & Phuong, K. Q. C. (2025). Connecting green human resource management practices with employee's pro-environmental behaviors: the role of self-efficacy and psychological green climate in the emerging hospitality industries. *Environmental Research Communications*, 7. <https://doi.org/10.1088/2515-7620/adcd5>
- Noor, J., Tunnufus, Z., Handrian, V. Y., & Yumhi, Y. (2023). Green human resources management practices, leadership style and employee engagement: Green banking context. *Heliyon*, 9(12), Bond. <https://doi.org/10.1016/j.heliyon.2023.e22473>
- Nurfitri, A. (2024, November 05). BNI Genjot Penerapan ESG di Semua Lini, dari Green hingga Inklusivitas Karyawan. *Warta Ekonomi*. <https://wartaekonomi.co.id/read548547/bni-genjot-penerapan-esg-di-semua-lini-dari-green-bond-hingga-inklusivitas-karyawan>
- PT Bank Negara Indonesia (Persero) Tbk. (2023). Moving Towards A Sustainable Future. *Website BNI*. https://www.bni.co.id/Portals/1/BNI/Perusahaan/HubunganInvestor/Docs/SR-BNI-2023-ENG-final_highres.pdf
- Rahman, N. B. A. A., & Mansor, Z. D. (2023). A Conceptual Paper on the Relationship between GHRM and Pro-Environmental Behavior via Employee Empowerment. *Information Management and Business Review*. <https://api.semanticscholar.org/CorpusID:259451115>
- Rau, H., Nicolai, S., & Stoll-Kleemann, S. (2022). A systematic review to assess the evidence-based effectiveness, content, and success factors of behavior change interventions for enhancing pro-environmental behavior in individuals. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.901927>
- Satata, D. B. M. (2021). Employee Engagement as An Effort to Improve Work Performance: Literature Review. *Ilomata International Journal of Social Science*, 2(1), 41–49. <https://doi.org/10.52728/ijss.v2i1.152>
- Schaufeli, W. (2017). The Utrecht Work Engagement Scale (UWES). *Test manual*.
- Sugiyono. (2021). Metode penelitian kuantitatif, kualitatif, dan R&D (3rd ed.). *Alfabeta*.
- Suliyanto. (2018). Metode Penelitian Bisnis : Untuk Skripsi, Tesis, Dan Disertas (Aditya Cristian, 2018). *Andi*. 46
- Sweeney, A. (2024). Sharing the Leadership Space: Toward a Contextual Understanding of Shared Leadership Patterns in Organizational Teams. *Journal of Leadership & Organizational Studies*, 31(2), 166–191. <https://doi.org/10.1177/15480518241246026>
- Tang, G., Chen, Y., Jiang, Y., Paillé, P., & Jia, J. (2017). Green human resource management practices:

scale development and validity. *Asia Pacific Journal of Human Resources*, 56(1), 31–55. <https://doi.org/10.1111/1744-7941.12147>

Tran, N. K. H. (2023). An empirical investigation on the impact of green human resources management and green leadership on green work engagement. *Heliyon*, 9(11). <https://doi.org/10.1016/j.heliyon.2023.e21018>

Umair, S., Waqas, U., Mrugalska, B., & Bystrov, I. (2024). Linking transformational leadership to green human resource management (GHRM) and employee engagement in green initiatives. *International Journal of Sustainable Engineering*, 17(1), 1083–1095. <https://doi.org/10.1080/19397038.2024.2434703>

W. Chin. (2000). A PARTIAL LEAST SQUARES LATENT VARIABLE MODELING APPROACH FOR MEASURING INTERACTION EFFECTS: RESULTS FROM A MONTE CARLO SIMULATION STUDY AND VOICE MAIL EMOTION/ADOPTION STUDY (J. I. DeGross, 2000). *International Association for Information Management*.

Yadate, D. A. (2025). The effect of green human resource management on employee green behavior. *Corporate Social Responsibility and Environmental Management*, 32(1), 404–418. <https://doi.org/10.1002/csr.2956>

Yang, M., & Li, Z. (2023). The influence of green human resource management on employees' green innovation behavior: The role of green organizational commitment and knowledge sharing. *Heliyon*, 9(11). <https://doi.org/10.1016/j.heliyon.2023.e22161>

Yuriev, A., Boiral, O., Francoeur, V., & Paillé, P. (2021). Overcoming the barriers to pro-environmental behaviors in the workplace: A systematic review. *Journal of Cleaner Production*, 182, 379–394. <https://doi.org/10.1016/j.jclepro.2018.02.041>

Zabawa, J., & Kozyra, C. (2020). Eco-Banking in Relation to Financial Performance of the Sector—The Evidence from Poland. *Sustainability*, 12(6), 2162. <https://doi.org/10.3390/su12062162>

Zacher, H., Rudolph, C. W., & Katz, I. M. (2023). Employee Green Behavior as the Core of Environmentally Sustainable Organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 10(1), 465–494. <https://doi.org/10.1146/annurev-orgpsych-120920-050421>

Zafar, H., Tian, F., Ho, J. A., & Zhang, G. (2022). Environmentally specific servant leadership and voluntary pro-environmental behavior in the context of green operations: A serial mediation path. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1059523>