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FACTORS AFFECTING THE IMPLEMENTATION OF GREEN HUMAN RESOURCE MANAGEMENT AT KOREAN ENTERPRISES IN PHU THO PROVINCE

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Abstract

This study investigates the factors influencing the implementation of Green Human Resource Management (GHRM) in Korean enterprises operating in Phu Tho province, a rapidly developing economic region with a high concentration of Korean FDI projects. Although GHRM has been widely recognized as a strategic tool for promoting sustainability, its adoption among Korean firms in Vietnam remains limited and inconsistent. To address this gap, the study develops an empirical model incorporating five determinants: leadership perception, financial and material resources, employee awareness, legal regulations, and stakeholder pressure. A quantitative research design was employed using a structured questionnaire distributed to 393 Korean enterprises in Phu Tho province, yielding 239 valid responses. Data were analyzed through reliability testing, Exploratory Factor Analysis (EFA), and multiple linear regression. The results indicate that all five factors significantly and positively affect GHRM implementation. Employee awareness exhibits the strongest influence, followed by stakeholder pressure, legal regulations, leadership perception, and financial resources. These findings align with international research emphasizing the role of employee cognition and external institutional pressures in shaping sustainable HR practices. The study contributes to the limited body of literature on GHRM in foreign-invested enterprises in Vietnam by validating a multi-dimensional framework within the context of Korean corporate culture and the evolving regulatory environment of the newly merged Phu Tho province. Practically, the results provide actionable implications for Korean enterprises to strengthen environmental training, enhance leadership commitment, align with legal requirements, and respond proactively to stakeholder expectations in order to advance their green transformation goals.

Keywords: Green Human Resource Management, Korean enterprises, Institutional pressures, Phu Tho

1. Introduction

Sustainable development has become an essential orientation for enterprises worldwide as they face increasing pressure from climate change, environmental degradation, and the need for responsible resource use. Within this context, Green Human Resource Management (GHRM) has emerged as a strategic approach that integrates environmental considerations into core HR functions such as recruitment, training, performance evaluation, and employee engagement. For businesses adopting sustainable strategies, GHRM not only reduces negative environmental impacts but also enhances employee awareness, encourages green behavior, strengthens innovation, and improves corporate reputation in global value chains.

Phu Tho province, after its administrative merger with Vinh Phuc and Hoa Binh, has become a new economic region characterized by a large labor force, rapid industrial expansion, and a dense network of industrial parks. Korean enterprises dominate the local FDI sector, accounting for more than 80% of all FDI projects and contributing significantly to employment, budget revenue, and the formation of export-oriented manufacturing clusters. Despite this strong presence, the adoption of GHRM among Korean firms in Phu Tho remains limited and inconsistent. Existing initiatives, such as environmental training or workplace greening, are often fragmented and short-term, lacking integration into HR policies and corporate strategies.

Although international research has examined various determinants of GHRM implementation, ranging from institutional pressures and regulatory frameworks to leadership commitment and employee attitudes, studies focusing on foreign-invested enterprises (FIEs), especially Korean firms in Vietnam, remain scarce. Most Vietnamese studies on GHRM tend to describe policies or individual HR practices rather than empirically testing the drivers of GHRM adoption within specific cultural and organizational contexts. Moreover, the unique characteristics of Korean management culture, cross-national HR systems, and the evolving sustainability policies of the newly merged Phu Tho province have not been adequately examined in previous research.

These gaps highlight the need for an empirical investigation into the factors influencing the implementation of GHRM in Korean enterprises operating in Phu Tho. The present study contributes to the literature by identifying key determinants across leadership, financial capability, regulatory environment, employee awareness, and stakeholder pressure, thereby offering theoretical refinement and practical implications for promoting green transformation within FDI enterprises in Vietnam.

2. Literature review

2.1. Institutional Drivers of GHRM

At the macro level, the institutional environment, including government regulations, environmental standards, and global stakeholder expectations, plays a decisive role in shaping corporate sustainability behaviours. Institutional theory suggests that organizations often adopt environmental practices in response to coercive, normative, and mimetic pressures (DiMaggio & Powell, 1983). Empirical studies consistently show that regulatory tightening, monitoring mechanisms, and environmental compliance requirements significantly stimulate firms to integrate green elements into HRM systems (Khanna & Anton, 2002; Govindarajulu & Daily, 2004; Cherian & Jacob, 2012).

Global market dynamics further intensify these pressures. Multinational buyers, investors, and civil society actors increasingly require ESG compliance, ISO 14001 certification, and transparent reporting of green performance (Jabbour & Santos, 2008; Daily et al., 2012). In developing countries like

Vietnam, foreign-invested enterprises (FIEs) are often more exposed to such pressures because they participate in global supply chains with stringent sustainability requirements (Tang et al., 2018). For Korean enterprises operating in Phu Tho, institutional constraints arise from both Vietnam's environmental regulations and the sustainability frameworks mandated by parent corporations in Korea, creating a dual compliance obligation that shapes their adoption of GHRM.

2.2. Organizational-Level Drivers

At the organizational level, internal capabilities and managerial priorities determine the extent to which firms can effectively adopt GHRM practices. Leadership commitment has been identified as a pivotal driver because GHRM requires long-term planning, cross-functional coordination, and changes in HR policies and performance systems (Daily et al., 2012; Linnenluecke & Griffiths, 2010). Ecologically oriented leadership shapes a green organizational culture that, in turn, motivates employees to behave in environmentally responsible ways (Egri & Hornal, 2002; Robertson & Barling, 2013).

Resource availability represents another critical organizational factor. Firms with greater financial capacity and technological resources tend to invest more readily in environmental training, green technologies, and eco-friendly HR practices (Jabbour & Santos, 2008). Conversely, limited budgets or a lack of technical expertise can hinder the implementation of even basic green initiatives (Renwick et al., 2013). Organizational structure and culture also moderate GHRM adoption, especially in Asian management systems where hierarchical decision-making and standardized HR frameworks influence the diffusion of sustainability practices (Zoogah, 2011; Tang et al., 2018).

2.3. Employee-Level Drivers

Employee-level factors constitute the micro-foundations of GHRM. Research demonstrates that employees' environmental knowledge, attitudes, and behavioural intentions significantly shape the effectiveness of corporate green initiatives (Opatha, 2014; Kaur, 2021). Employees with higher environmental awareness are more likely to engage in green behaviours, comply with environmental standards, and support organizational sustainability goals (Zoogah, 2011; Pinzone et al., 2019).

Furthermore, employee motivation and environmental self-efficacy often serve as mediators linking GHRM practices with organizational outcomes (Paillé et al., 2014). When employees understand the environmental relevance of their work and perceive strong organizational support, GHRM transforms from symbolic policy into meaningful behavioural change (Daily et al., 2012). Without sufficient awareness and commitment among employees, GHRM practices risk becoming superficial or compliance-driven, failing to generate substantial environmental improvements.

2.4. Integrated Models and Interactions Among Factors

Recent literature increasingly highlights the need for integrated frameworks that capture the interplay between institutional, organizational, and employee-level determinants. Studies suggest that environmental regulations are most effective when coupled with a supportive organizational culture and a committed leadership team (Jabbour & Santos, 2008; Ahmed et al., 2020). Similarly, the success of leadership-driven GHRM strategies depends on employees' environmental motivation and the resources available to implement new HR systems (Tang et al., 2018; Renwick et al., 2013).

Integrated conceptual models such as those proposed by Daily et al. (2012) and Tang et al. (2018) emphasize that GHRM adoption is a multidimensional process influenced by external constraints, internal capabilities, and behavioural dynamics. However, most of these models were developed in

Western or advanced manufacturing contexts, limiting their applicability to emerging economies. This underscores the need for context-specific research that explores how institutional changes, cross-cultural management dynamics, and FDI characteristics shape GHRM in transitional economies like Vietnam.

2.5. Research Gaps and Justification for the Study

Despite the growing body of international research on GHRM, several knowledge gaps persist, particularly concerning foreign-invested enterprises in Vietnam. First, limited empirical studies examine GHRM adoption in Korean enterprises, even though they dominate the FDI landscape in provinces like Phu Tho and operate under unique hybrid governance systems shaped by both Korean corporate culture and Vietnamese regulatory frameworks (Kaur, 2021; Ahmed et al., 2020). Second, few Vietnamese studies integrate institutional, organizational, and employee-level factors in a comprehensive empirical model; most remain descriptive and lack theoretical testing (Tang et al., 2018; Renwick et al., 2013).

Third, the recent administrative restructuring of Phu Tho province introduces a new regulatory context that may significantly influence corporate environmental behaviour, yet this has not been addressed in existing research. Fourth, cross-cultural dynamics between Korean managerial styles and Vietnamese labour characteristics remain understudied despite their potential influence on leadership perception, employee awareness, and sustainability-driven HRM.

To address these gaps, this study proposes and empirically tests a multidimensional model incorporating five determinants: leadership perception, financial resources, employee awareness, legal regulations, and stakeholder pressure, within the context of Korean enterprises in Phu Tho. Doing so contributes theoretical refinement to the GHRM literature and provides practical implications for promoting sustainable HR practices in FDI-dominated industrial regions.

3. Hypotheses and Recommended Research Model

In the context of Korean enterprises in Vietnam, especially in Phu Tho province, where many FDI enterprises are concentrated with standardized organizational models, factors such as parent enterprise culture, Korean-standard management systems, expectations from global partners, and characteristics of local labor resources will be factors that directly or indirectly impact GHRM. From there, the study forms the following preliminary research hypotheses:

H1: The awareness and commitment of business leaders positively influence the implementation of GHRM.

H2: The level of strictness and clarity of environmental regulations positively influences the decision to apply GHRM.

H3: Pressure from international customers and partners positively influences the decision to apply GHRM.

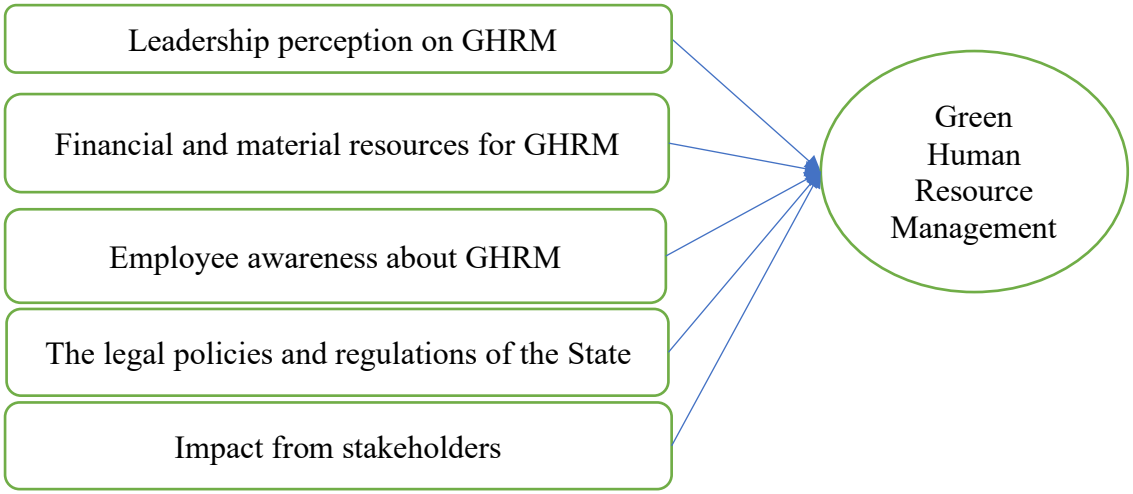
H4: The awareness of employees positively influences the decision to implement GHRM.

H5: The financial capacity of the business positively influences the decision to apply GHRM.

Chart 1: Author's Recommended Research Model

4. Research method

The study applies a quantitative research design to examine factors influencing the implementation of GHRM in Korean enterprises in Phu Tho province. A structured questionnaire was developed from established theoretical foundations, measuring five independent variables: leadership perception, financial and material resources, employee awareness, legal regulations, and stakeholder pressure, and one dependent variable representing GHRM implementation. All items used a five-point Likert scale



(1 = strongly disagree; 5 = strongly agree).

The research targeted Korean enterprises across industrial zones in Phu Tho. Due to the lack of a complete sampling frame, convenience sampling was adopted. Following Tabachnick & Fidell's (1996) rule ($n \geq 50 + 8m$), the minimum required sample size was 90 for five predictors. Rogers (2006) further recommends 150–200 responses for robust estimates. To ensure representativeness, questionnaires were distributed directly and online. Measurement items were adapted from prior studies on GHRM and sustainability management (Daily et al., 2012; Jabbour & Santos, 2008; Zoogah, 2011; Opatha, 2014), with each construct containing 4–5 observed indicators. Items were translated, expert-reviewed, and pilot-tested with 20 respondents to enhance clarity and contextual relevance in the Korean–Vietnamese business setting.

Data collection took place in early 2025 through two channels: on-site distribution at Korean enterprises and online delivery via email/Google Forms to HR managers and supervisors involved in HR or sustainability activities. After screening, 239 responses, each from a different enterprise, were retained and analyzed using SPSS 22.

The analytical procedure included reliability testing (Cronbach's Alpha ≥ 0,6; item-total correlation ≥ 0,3), followed by Exploratory Factor Analysis (KMO > 0,5; Bartlett's $p < 0,05$; factor loadings ≥ 0,5; eigenvalues > 1). Multiple linear regression was then conducted to assess the effects of the independent variables on GHRM implementation, with diagnostic checks for multicollinearity (VIF < 2), significance ($p < 0,05$), and overall model fit (R^2, ANOVA). This approach enables empirical validation of the proposed model and quantifies the influence of each factor on GHRM adoption in Korean

enterprises.

5. RESEARCH RESULTS AND DISCUSSION

5.1. RESEARCH SAMPLE INFORMATION

The surveyed businesses operate in various industries and are located in Phu Tho province. A total of questionnaires were distributed to 393 enterprises, and 239 valid responses were collected (representing 61% of the distributed questionnaires), which, 118 businesses participating in the survey belong to the industrial and construction sector (49,4%), 84 are in the trade and services sector (35,1%), and 37 are in the agriculture, forestry, and fisheries (15,5%).

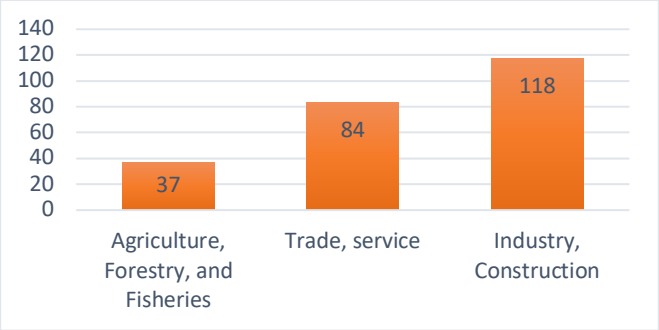


Chart 2: Statistics on the types of businesses

SOURCE: THE AUTHOR COLLECTED, PROCESSED, AND ANALYZED. (2025)

Among the 239 businesses interviewed, 70 have been operating for 5 to 10 years (accounting for 29,3%), 137 have been operating for over 11 years (accounting for 57,3%), and 32 have been operating for less than 5 years (accounting for 13,4%).

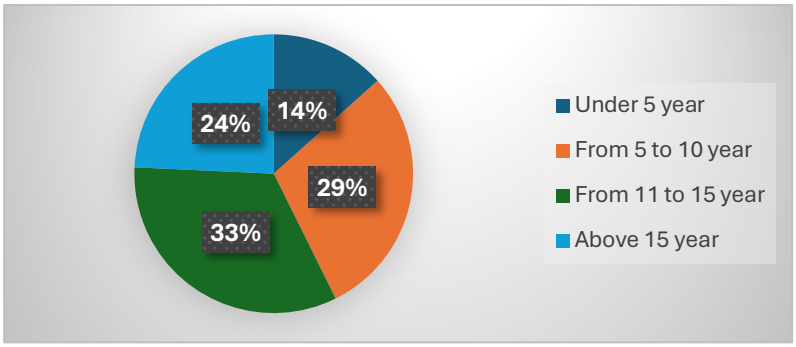


Chart 3: Proportion of enterprises by year of operation

SOURCE: THE AUTHOR COLLECTED, PROCESSED, AND ANALYZED. (2025)

In Vietnam, according to Decree 80/2021/ND-CP of the Government, businesses are classified based on two main criteria: the field of activity (Agriculture - Forestry - Fisheries, Industry - Construction, or Trade - Services) and the number of employees participating in social insurance and total revenue per year or total capital.

Table 1: Kind of enterprise according to Decree 80/2021/ND-CP of the Government

Scale	Industry	Number of Employees (People)	Revenue/year (Billion VND)	Total Capital (Billion VND)
Micro	Agriculture - Forestry -	≤ 10	≤ 3	≤ 3

	Fishery, Industry - Construction			
	Trade - Services	≤ 10	≤ 10	≤ 3
Small	Agriculture - Forestry - Fishery, Industry - Construction	≤ 100	≤ 50	≤ 20
	Trade - Services	≤ 50	≤ 100	≤ 50
Medium	Agriculture - Forestry - Fishery, Industry - Construction	≤ 200	≤ 100	≤ 100
	Trade - Services	≤ 100	≤ 300	≤ 100
Large	Agriculture - Forestry - Fishery, Industry - Construction	≥200	≥100	≥100
	Trade - Services	≥100	≥300	≥100

Source: Decree 80/2021/ND-CP of the Government

The majority of surveyed enterprises are small and medium enterprises, accounting for 87,9%. Includes 132 small and micro enterprises (55,2%), 78 medium enterprises (32,6%), and 29 large enterprises (12,1%).

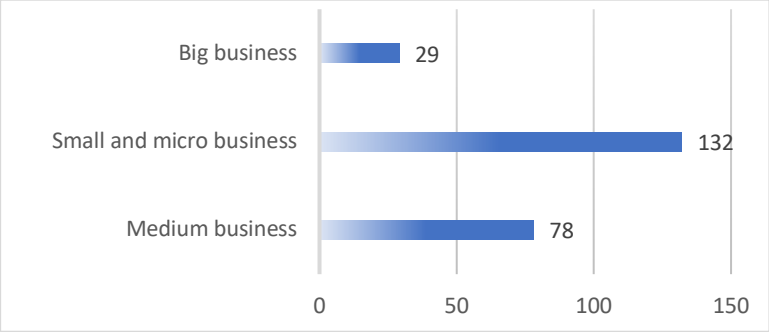


Chart 3: Proportion of enterprises by size

SOURCE: THE AUTHOR COLLECTED, PROCESSED, AND ANALYZED. (2025)

5.2. Results of testing the research model

The result of the analysis shows that all the scales have a Cronbach's Alpha higher than 0,5. In which: The Leadership perception on GHRM (LP) is 0,801. The Financial and material resources for GHRM (FM) are 0,792, the Employee awareness about GHRM (EA) is 0,870, the legal policies and regulations of the State (SL) are 0,856, and the Impact from stakeholders (IS) is 0,877. All scales have a total item correlation coefficient greater than 0,3, meet the requirements, and all are used for EFA factor analysis; no variables are eliminated.

The reliability analysis shows that all measurement scales meet the acceptable thresholds. Cronbach's Alpha coefficients range from 0,792 to 0,877 for the independent variables and 0,801 for the dependent variable (GHRM implementation). All corrected items–total correlations exceed 0,30, confirming

strong internal consistency.

Table 2: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Tota Correlation	Cronbach's Alpha if Item Deleted
SL1	13,79	12,441	,735	,808
SL2	13,81	12,383	,720	,812
SL3	13,77	13,079	,663	,827
SL4	13,60	12,989	,682	,823
SL5	14,32	14,278	,549	,855
IS1	14,06	17,504	,711	,851
IS2	13,74	17,834	,711	,851
IS3	13,76	18,453	,691	,856
IS4	14,14	17,783	,642	,868
IS5	13,86	16,985	,795	,830
EA1	13,28	7,503	,720	,837
EA2	13,45	7,937	,706	,841
EA3	13,38	8,196	,641	,856
EA4	13,03	7,747	,655	,853
EA5	13,29	7,359	,761	,826
LP1	10,23	5,550	,673	,725
LP2	10,15	5,313	,646	,736
LP3	10,19	5,590	,652	,735
LP4	10,38	5,683	,505	,809
FM1	8,72	7,730	,504	,786
FM2	8,69	5,902	,673	,706
FM3	8,74	6,884	,693	,698
FM4	8,62	7,423	,559	,761
GR1	9,63	5,260	,657	,801
GR2	9,95	4,993	,718	,774
GR3	9,90	5,855	,570	,837
GR4	9,83	5,109	,743	,763

SOURCE: THE AUTHOR COLLECTED, PROCESSED, AND ANALYZED. (2025)

THIS RESULT IS CONSISTENT WITH PREVIOUS GHRM STUDIES, SUCH AS THOSE BY DAILY ET AL. (2012) AND TANG ET AL. (2018), WHICH ALSO REPORTED CRONBACH'S ALPHA VALUES ABOVE 0,70 FOR MULTI-ITEM CONSTRUCTS MEASURING LEADERSHIP, EMPLOYEE AWARENESS, AND INSTITUTIONAL PRESSURE. THE FINDINGS REAFFIRM THAT THE CONSTRUCTS USED TO MEASURE

GHRM DETERMINANTS EXHIBIT STABLE RELIABILITY ACROSS DIFFERENT CULTURAL CONTEXTS, INCLUDING FOREIGN-INVESTED ENTERPRISES (FIES) IN VIETNAM.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,810
Bartlett's Test of Sphericity	Approx. Chi-Square	2598,960
	df	253
	Sig.	,000

SOURCE: THE AUTHOR COLLECTED, PROCESSED, AND ANALYZED (2025)

So, after analyzing the scale's assessment using internal consistency through the Cronbach's Alpha coefficient to ensure the reliability of the scale before moving on to the next analysis steps, the results for the Cronbach's Alpha coefficient and the correlation coefficients for the total of all observed variables of the five components of the research model all meet the requirements to continue using EFA analysis.

Table 4: Rotated Component Matrix[a]

	Component				
	1	2	3	4	5
IS5	,851				
IS2	,836				
IS1	,807				
IS3	,801				
IS4	,741				
EA1		,840			
EA5		,828			
EA2		,770			
EA3		,758			
EA4		,745			
SL1			,834		
SL2			,791		
SL3			,774		
SL4			,736		
SL5			,690		
LP1				,824	
LP2				,813	
LP3				,801	
LP4				,678	
FM3					,834
FM2					,819

FM4					,735
FM1					,713

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 6 iterations.

SOURCE: THE AUTHOR COLLECTED, PROCESSED, AND ANALYZED (2025)

The results of the EFA on the components of the research model show that all observed variables are spread over 5 factors, with a KMO index of 0,810, which is greater than 0,5. This indicates that the data is suitable for conducting EFA. Bartlett's test has a significance level (p-value) of sig = 0,000, which is less than 0,05. This result concludes that the observed variables are correlated overall. This cumulative variance aligns with thresholds reported in prior works. Ahmed et al. (2020) showed that GHRM-related constructs typically explain between 60% and 70% of the variance in organizational samples. The clear grouping of variables in this study supports the theoretical model that combines institutional, organizational, and employee-level drivers.

Based on the analysis results, the extracted factors all have eigenvalues greater than 1 (meeting the criteria), and the Cumulative percentage of Initial Eigenvalues is 65,601 > 50%. Therefore, we can conclude that the five extracted factors can explain 65,601% of the variance in the dataset. All observed variables have a factor loading greater than 0,5, and the observed variables are grouped into five factors: The Leadership perception on GHRM; The Financial and material resources for GHRM, The Employee awareness about GHRM; The legal policies and regulations of the State, and The Impact from stakeholders. From this, it concludes that the analysis criteria meet the requirements and the factor analysis results are significant. Therefore, the derived scales are acceptable.

5.3. Validation of research models and hypotheses

Table 5: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-,234	,250		-,933	,352		
	MSL	,204	,045	,242	4,528	,000	,773	1,294
	MIS	,187	,036	,259	5,203	,000	,891	1,122
	MEA	,351	,057	,322	6,168	,000	,809	1,235
	MLP	,177	,049	,180	3,601	,000	,885	1,130
	MFM	,133	,043	,151	3,110	,002	,934	1,071

a. Dependent Variable: MGR

SOURCE: THE AUTHOR COLLECTED, PROCESSED, AND ANALYZED (2025)

In the table, the Sig. Values of all variables are less than 0,05, indicating that all variables are statistically significant in the model. The Variance Inflation Factor (VIF) of each factor has values < 2, proving that the regression model does not violate multicollinearity, meaning the independent

variables are closely correlated with each other. All independent factors influence the dependent factor. The analysis results show that the regression model fits the data and the factors are statistically significant. The 5 hypotheses H1, H2, H3, H4, H5 are all accepted. The constructed regression equation is of the form:

MGR = -0,234 + 0,351MEA + 0,204MSL + 0,187MIS + 0,177MLP + 0,133MFM

The Standardized Coefficients Beta indicate the importance of each independent variable with the dependent variable. The larger the absolute value of the standardized regression coefficient, the greater the level of influence. Specifically, the standardized regression value for the MEA 32,2%; the factor of MIS affects 25,9%; the MSL affects 24,2%; the MLP affects 18,0%, and the MFM 15,1% on the implementation of GHRM.

The finding that employee awareness exerts the strongest influence aligns with the works of Zoogah (2011) and Opatha (2014), who argue that without employee-level cognitive and behavioral readiness, GHRM remains symbolic. In Korean firms operating in Vietnam, where hierarchical structures are strong, employees' understanding and acceptance of green values appear crucial for transforming policies into day-to-day practices.

Stakeholder pressure (β = 0,259) also plays a major role, consistent with Khanna & Anton (2002) and Cherian & Jacob (2012). Korean enterprises in Phu Tho are deeply embedded in global supply chains, especially electronics and automotive components, where partners increasingly demand ESG compliance. This contextual factor explains why stakeholder influence is stronger here than in domestic enterprises studied in earlier Vietnamese research.

The impact of legal regulations (β = 0,242) supports findings by Govindarajulu & Daily (2004), showing that environmental regulation is a motivating force for firms in emerging economies. With the expansion of the new Phu Tho province and its industrial restructuring, compliance requirements have become stricter, making legal pressure a significant driver of GHRM adoption.

Leadership perception exhibits a moderate effect (β = 0,180), similar to results reported by Egri & Hornal (2002). However, the coefficient is lower than expected compared with studies on multinational corporations, where leadership usually appears as the strongest predictor. This may reflect the management structure of Korean FDI firms, where many HR decisions are standardized by parent companies, limiting the autonomy of local leaders to initiate GHRM.

Financial resources (β = 0,151) still positively influence GHRM but account for the smallest effect. This slightly contrasts with findings from Jabbour & Santos (2008), who emphasized financial capacity as a major determinant. In the case of Korean enterprises, many firms operate under strong financial backing from parent corporations. Therefore, resource constraints may be less critical, and cultural or institutional factors may play a greater role.

The study confirms that GHRM implementation in Korean enterprises in Phu Tho is shaped by a combination of internal and external factors. Notably: Employee-level factors dominate, highlighting the importance of green knowledge, attitudes, and environmental consciousness, especially in contexts with hierarchical and standardized management systems. External pressures (stakeholders + legal frameworks) collectively create strong incentives for enterprises to integrate GHRM into their operations. This aligns with the growing influence of ESG requirements in global trade networks. Organizational leadership and resources, while significant, are less influential than in prior Western or

domestic studies. This suggests that FDI enterprises operate under dual institutional logics, Korean corporate governance, and Vietnamese regulatory systems, which may reduce the discretionary power of local managers.

6. Managerial Implications for Korean Enterprises in Phu Tho

The empirical findings provide several important implications for Korean enterprises seeking to strengthen their implementation of GHRM within the evolving sustainability landscape of Phu Tho province. The results highlight that employee awareness, stakeholder pressure, legal regulations, leadership perception, and financial resources all significantly shape green HR practices. Based on these findings, several managerial recommendations are proposed.

6.1. Strengthening Employee Awareness and Engagement

Since employee awareness demonstrated the strongest influence on GHRM implementation, Korean enterprises should prioritize capacity-building programs that embed environmental values deeply into workforce behavior. This can be achieved through: Integrating environmental content into onboarding and annual training to ensure all employees understand the corporate commitment to sustainability. Promoting green workplace practices, such as waste reduction, energy-saving routines, and proper handling of materials, coupled with recognition or reward systems for exemplary behavior. Developing internal communication campaigns using culturally appropriate messages that resonate with both Korean managerial culture and Vietnamese workers, thereby bridging perception gaps. Enhancing green literacy will help transform GHRM from policy into daily organizational practice.

6.2. Responding Proactively to Stakeholder Pressure

Stakeholder pressure, including requirements from global customers, supply chain partners, and parent companies, plays the second-most influential role in shaping GHRM. Korean enterprises should exploit this pressure as a driving force for internal improvement, rather than merely complying at a minimal level. Aligning HR policies with ESG and international sustainability standards (e.g., ISO 14001, green procurement criteria, and Korean corporate sustainability frameworks). Regular reporting to stakeholders on environmental initiatives, HR green performance, and improvements across departments. Strengthening collaboration with key partners, including suppliers and contractors, to ensure sustainability practices extend beyond the boundaries of the enterprise. By proactively responding to stakeholder expectations, Korean firms can enhance competitiveness and maintain strong positions in global value chains.

6.3. Leveraging Legal Regulations as a Strategic Tool

Legal regulations from the Vietnamese government and particularly from the newly formed Phu Tho province have a significant influence on GHRM adoption. Korean enterprises should shift from a compliance-based mindset to a strategic compliance approach, where regulatory adherence becomes an opportunity for innovation and brand enhancement. Managers should update internal HR and environmental procedures in accordance with national strategies on green growth, renewable energy, and environmental protection. Develop a compliance monitoring system to ensure that HR activities related to environmental responsibilities are consistent with provincial regulations. Participate in provincial training programs and green initiatives, thereby strengthening relationships with local authorities and gaining early access to policy information. A proactive engagement with regulations helps reduce operational risks and positions enterprises as responsible investors.

6.4. Enhancing Leadership Commitment and Green Vision

Leadership perception significantly shapes the degree to which GHRM is implemented. In many Korean firms, decision-making regarding HR and environmental management follows top-down structures. Therefore, the role of Korean and Vietnamese senior managers is crucial. Leaders should clearly articulate a green vision and integrate GHRM objectives into corporate strategies, departmental KPIs, and annual business plans. Establish cross-functional "Green HR Task Forces", led by senior management, to coordinate HR initiatives with environmental management systems. Encourage leadership development programs that incorporate sustainability competencies, helping mid-level managers understand and promote GHRM. When leaders actively demonstrate commitment, employees are more likely to adopt green behaviors, and GHRM becomes embedded in the organizational culture.

6.5. Allocating Financial and Material Resources Effectively

Although financial resources exhibited the smallest but still significant influence, Korean enterprises must ensure adequate funding for GHRM-related activities. Insufficient resources may limit the quality of training programs, performance systems, and green technologies. To optimize resource allocation, enterprises should: Prioritize cost-effective GHRM practices, such as digital training modules, standardized green evaluation criteria, and low-cost behavioral interventions. Integrate GHRM with existing corporate management systems, reducing duplication and ensuring efficient use of budgets. Seek government incentives (tax reductions, support programs for green certification, or technological upgrading) available in Phu Tho's industrial development policies. Effective resource management ensures the sustainability of GHRM initiatives without generating excessive financial burdens. The study highlights that Korean enterprises in Phu Tho can enhance their environmental performance and competitiveness by viewing GHRM as a strategic capability rather than a compliance requirement. By strengthening employee awareness, leveraging stakeholder expectations, aligning with legal regulations, reinforcing leadership commitment, and investing appropriately in green initiatives, these firms can build a workforce that is environmentally responsible and aligned with long-term sustainability goals.

7. Conclusion

This study identifies and empirically examines the key factors influencing the implementation of Green Human Resource Management (GHRM) in Korean enterprises operating in Phu Tho province. Using data from 239 enterprises and applying reliability testing, exploratory factor analysis, and multiple regression analysis, the research confirms that all five determinants of employee awareness, stakeholder pressure, legal regulations, leadership perception, and financial resources significantly contribute to the level of GHRM adoption.

Among these factors, employee awareness emerges as the strongest predictor, highlighting the crucial role of environmental knowledge and pro-environmental behavior in driving the success of GHRM initiatives. Stakeholder pressure and legal regulations also demonstrate substantial influence, reflecting the growing expectations from global customers, parent corporations, and Vietnamese regulatory authorities for sustainable business practices. Leadership perception and financial resources, although less influential, remain essential internal drivers that support the translation of environmental strategies into HR practices.

The findings contribute to the literature by providing empirical evidence from a context that has received limited scholarly attention: Korean-invested enterprises in an emerging economy undergoing institutional restructuring. The study also deepens theoretical understanding by validating a multi-level framework that integrates institutional, organizational, and individual determinants of GHRM.

In practical terms, the results offer clear managerial implications for Korean enterprises in strengthening employee engagement, aligning with regulatory frameworks, enhancing leadership commitment, and coordinating with stakeholders to promote sustainability. These insights also support local policymakers in designing targeted interventions that encourage GHRM adoption in foreign-invested enterprises within the newly merged Phu Tho province.

Overall, by addressing both theoretical gaps and practical needs, this research provides a foundation for future studies on green transformation, cross-cultural management, and sustainable HRM in the context of international investment in Vietnam.

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