Independent University **Bangladesh (IUB)**

IUB Academic Repository

Conference and Proceedings International Conference on Economics, Business and Technology Manag

2025-11

Transition towards sustainable environmental performance of SME sector in Bangladesh through green practices: the mediating role of green innovation

Alam, S M Zobaer

School of Business and Entrepreneurship, Independent University, Bangladesh (IUB)

https://icebtm.iub.edu.bd

Downloaded from IUB Academic Repository

Transition Towards Sustainable Environmental Performance of SME Sector in Bangladesh through Green Practices: The Mediating Role of Green Innovation

S M Zobaer Alam[1], Abir Sen Gupta[2], Sayra Islam Saki[3], Md. Adnan Nizum[4], S. M. Sayem[5]
Department of Business Administration, Faculty of Business Studies, Bangladesh University of Professionals, Dhaka
[1]*zobaer6545@gmail.com,* [2]*abirsg123@gmail.com,* [3]*sayraislam5512@gmail.com,* [4]*mdadnannizum@gmail.com,* [5]*smsayem31@gmail.com*

Paper ID: ICEBTM-25-1092

Abstract- **Recent studies demonstrate growing awareness of environmental concerns in SMEs. This study explores the role of green practices in enhancing the sustainable environmental performance of SME sector in Bangladesh. Specifically, this research examines how green innovation mediates the relation of green practices and sustainable environmental performance. For research purposes, 403 data were obtained from SME Sector. SmartPLS4 and SPSS have been utilized to analyze the acquired data. PLS-SEM was harnessed to examine the correlation between predictor and predicted variables. The findings of the research clarify that green practices (environmental sustainability strategy, green supply chain management, green human resource management, green information technology) have substantial impact on sustainable environmental performance and green innovation directly impacts as well as mediates the relation between green practices and sustainable environmental performance. This study has meaningful implications for attaining environmental sustainability which may advance our nation to fulfill three SDG goals and achieve economic success.**

Keywords: **Green Practices, Green Innovation, Sustainable Environmental Performance, SME Sector, Environmental Sustainability**

I.INTRODUCTION

In modern era, maximum countries including Bangladesh are concentrating on economical proliferation while understating the environmental improvement. Despite the boons from nature we get, we make distinct harms to nature such as contaminating water or air etc. And nature also responds with floods, droughts etc.[1]. So Bangladesh has some environmental threats and firms should necessarily make themselves prepped to these threats. Pursuing green practices in the firms is pivotal for our country to foster sustainable development and becoming a panoramic economic trajectory [2]. In environmental context, "green" indicates those good-natured practices that facilitate protecting the environment and nurture natural assets. The SME sector can be a fitted sector for pursuing green practices. SMEs are the backbone of economy in emerging countries. SMEs can be portrayed by the employee numbers, operable assets, output sales [3]. SMEs generally contribute to the GDP growth and create employment opportunities. SMEs are significant economic strength in developing countries like Bangladesh, contribute more than 40% of the GDP. SMEs contribution to economic progression is substantial but adverse environmental deterioration straightway impact that economic progression [4]. SMEs impose a direct influence on environment like consuming energy or climate change [5]. [6] stated that the conjunctional distribution of green ideologies can aid in treating the challenges. Now-a-days firms are adopting several steps for improving congruence to attain the landmark of distinctive goals such as environmental and financial goals [7]. Green practices (environmental sustainability strategy, green supply chain management, green human resource management, green IT) aid to boost the sustainable environmental performance of the firm. Furthermore, green innovation can be a crucial strategy for SMEs to acquire a distinctiveness that will guide to long term success [8].

Besides that SMEs stumble to shine because of the definite assets, awareness or conventional thought process. Also many firms are still insouciant about green practices as they are not fully cognizant of this. The EPI (Environmental Performance Index) score of our country is 28.1 out of 100 and as a country we rank 175 out of 180 countries which shows the vulnerable condition of us. These findings accentuate the exigency of enhancing sustainable environmental performance in the firms for environmental sustainability and economic progression. However, the knowledge of green practices and green innovation can solve this problem. The inclusion of green innovation can facilitate sustainable environmental performance of the firms by providing high grade results in form of using water, settlement of the garbage etc. [9]. There are segregated studies which settle sustainable environmental performance by isolated green practices but there are very few studies which incorporate all those green practices together with the mediating role of green innovation. The intention of the study is to acquaint; how to attain environmental sustainability by improving sustainable environmental performance.

This study can amplify environmental knowledge of firm owners as well as employees. Our study can pitch in accomplishing 3 SDGs and they are: Industry, Innovation and Infrastructure (SDG9), Responsible Consumption and Production (SDG12) and also Climate Action (SDG13).

The primary objective of the study is to render an understanding how a firm can enrich sustainable environmental performance through green practices.

ISBN 978-984-35-5270-9 *https://icebtm.iub.edu.bd*

II. LITERATURE REVIEW AND CONCEPTUALIZATION OF CONSTRUCTS

A. Green Practices (GP)

The methods and applications which are implemented by businesses to protect environment can be denoted as green practices [10]. Some firms are aware of the necessity to demote ecological hazards but the progress reacting to the environmental challenge has been made by only few firms. Execution of those environmental strategies that demote ecological hazard can influence firm's overall performance positively [11]. Green Supply Chain Management can be depicted as, assimilation of ecological consideration into supply chain management [12]. Green HRM is one of those notion which transpose HRM exercises into green practices [13]. Higher officials of SMEs require to exercise Green Human Resource Management (GHRM) practices to accomplish environmental sustainability. Green IT is one of the incarnations of green business practices. Green IT practices are implemented to lessen energy usage and gain cost-efficient results [14]. As environment is being declined in our country, incorporating these green practices can enrich sustainable environmental performance.

Environmental Sustainability Strategy (ESS)

Environmental sustainability strategy can be defined as an enterprise's strategic adherence to carry out its business functions in a manner that reduce environmental harm, and foster environmental responsibility. This strategy includes specific functional behaviors, environmental consciousness, and organization's commitment to consolidating sustainability to its principles and long-term goals [3].

Green Supply Chain Management (GSCM)

The strategy that bring about the stream of materials within production chain by diverse stages like procurement, manufacturing, final product promotion to safeguard environment through shielding natural possessions as well as decreasing climate change is Green Supply Chain Management [15]. GSCM can be referred as gush of public along with accountable linkage between suppliers and allies [16].

Green Human Resource Management (GHRM)

Green Human Resource Management (GHRM) denotes incorporation of green principles into HR practices. It encompasses promoting a culture of environmental accountability in the workplace. It can be done by evolving workforces' ecological skills, inspiring active involvement in green practices, and harmonizing HR activities with enterprises sustainable environmental goals [17]. The development of GHRM from HRM can encompass additional facilities such as green competencies, green possibilities.

Green Information Technology (GIT)

[18] illustrated that transmission of electronic waste happens from developed countries to developing countries. GIT is the notion of redesigning IT infrastructure (Energy-efficient IT setups, Cloud Computing etc.) to curb firm's carbon footprint as well as environmental effect [14], [19].

B. Green Innovation (GI)

[20] describes GI as the innovation in technologies related to goods and processes that consists waste recycling, pollution reduction, and energy-efficiency. It is a system of doing things in organization in response of ecological degradation resulting from unethical business operations. GI practices are gaining admiration as a consequence of the interest towards businesses, shareholders as well as environment [21].

C. Sustainable Environmental Performance

Sustainable environmental performance refers to firm's capability to lessen its ecological footprint through environmentally-responsible actions [22]. Sustainable environmental performance of SMEs in Bangladesh are usually assessed through parameters such as emission minimization, pollution mitigation [23]. Bangladeshi SMEs that harmonize their environmental strategies with green practices are likely to show noticeable progress in sustainable environmental performance.

III. THEORETICAL BACKGROUND AND DEVELOPMENT OF HYPOTHESES

A. Theoretical Background

Our study encourages linkage between green practices and sustainable environmental performance of SME sector bolstered by various theoretical framework. One of the vital theory is Resource-Based-View (RBV) [24]. This theory indicates that accession to the firm's resources and abilities has a great magnitude to attain competitive benefits. As SMEs of Bangladesh are mostly relied on natural resources, NRDT theory (Natural Resource Dependency Theory) can be suitable for this study. In our study; we are employing AMO theory (Ability-Motivation-Opportunity) which aid workers by progressing environmental literacy which vouches firm's green goals [25]. [26] proposed the TPB (Theory of Planned Behavior) that addresses the factors which affects the behavior of workers.

B. Green Practices and Sustainable Environmental Performance

Environmental Sustainability Strategy (ESS) considerably improves ecological outcomes by incorporating sustainable practices which affirms a direct positive relationship to minimize waste, emissions, and resource usage [3]. [27] demonstrated that when organizations adopt GSCM practices such as environmental management systems, eco-design, and external collaboration, they achieve greater reductions in emission and waste. This approach equips firms to mitigate ecological footprint. [25] illustrated that green HRM practices positively influence employees eco-friendly behavior, which increases sustainable environmental performance. Green IT deliver better sustainable environmental performance by improving energy efficiency and minimizing emissions through efficient IT system. [19] discovered that GIT has a substantial positive impact on environmental outcomes.

H1: Green practices positively impact sustainable environmental performance of SME sector.

ISBN 978-984-35-5270-9 *https://icebtm.iub.edu.bd*

C. Green Innovation and Sustainable Environmental Performance

Green innovation can benefit the environmental sustainability through modern methods, mechanisms etc. [28] discovered that GI substantially boosts ecological outcome by fostering cleaner manufacturing processes and lowering harmful emissions. GI is increasingly viewed as a strategic driver of both sustainability and efficiency.

H2: Green innovation positively impacts sustainable environmental performance of SME sector.

D. Mediating Effect of Green Innovation

Environmental sustainability strategy (ESS) delivers a comprehensive framework that leads organizational efforts toward environmental responsibility. [29] illustrated that this GI may serve as the mediator by which ESS contributes on sustainable environmental performance. [30] stated that GI considerably mediates the relationship between GSCM and sustainable environmental performance. [28] stated that GI acts as an instrumental channel through which GHRM improves enterprises ecological performance. Several studies found that GIT foster real-time data collection, process optimization, and innovation in resource consumption [31]. Thus, GIT may stimulate sustainable environmental performance by mediating GI. Therefore, the following hypothesis has been proposed:

H3: Green innovation mediates the relationship between green practices and sustainable environmental performance of SME sector.

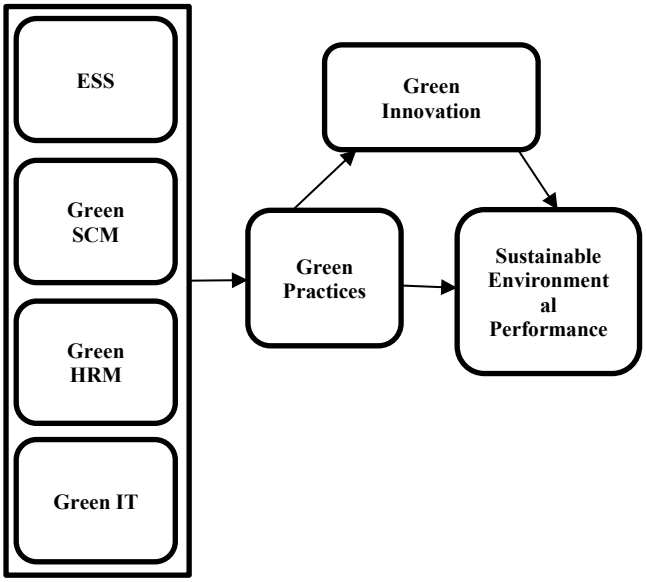


Fig. 1. Conceptual Framework (Source(s): Authors' own work)

IV. RESEARCH METHODOLOGY

A. Data Sampling

In order to get authentic perception of the study, people associated with different types of SMEs were selected as study's sample frame. Questionnaires has been disseminated amid respondents to utilize non-probability purposive sampling technique. [32] stated 10 times rule. For our study, we harnessed 32 items; so our sample size should not be less than 320. From the SME sector, we managed 403 data that considers adequate grounded on the settled rule.

B. Measurement Instrument

A structured survey questionnaire was used to measure items on a 5-point Likert scale ranging from "1= strongly disagree" to "5= strongly agree. In order to evaluate ESS, GSCM, GHRM 5 items were chosen from prior studies [3], [9]. To evaluate GIT, 5 items were chosen from prior studies [14]. Furthermore, to evaluate the mediating construct, GI and outcome construct, SEP, 6 items were chosen from prior studies [3], [33].

C. Data Analysis Techniques

The survey data was analyzed with the aid of statistical tools: SmartPLS4 and SPSS25. In order to transform data into analysis-ready besides descriptive statistics construction, SPSS has been considered. PLS-SEM has been used to estimate and analyze the credibility as well as reliability of the hypothesized relationships between independent and dependent variables. Data analysis part is divided into two steps: measurement model (to assess credibility and reliability of constructs), structural model (to test hypotheses).

V. DATA ANALYSIS AND RESULTS

A. Respondent's profile

Basic information was collected from 403 respondents. Major respondents (47.9%) belong to the age group (25-34). Male (66.5%) are nearly two times higher than female ones (33.5%). Most of the respondents have completed their graduation (31%), the second highest educational qualification is post-graduation (26.3%). In this study, major responses have come from people working in different SMEs including job holders (38.5%);service sector of SME (27.8%) ; business (24.1%); students (with part-time job/business) (9.7%). Out of all respondents, majority of respondents have more than 6 years of working experience (24.8%) in SME sector of Bangladesh.

B. Measurement Model for First-Order Constructs

Item Loading, Composite Reliability, and Convergent Validity

Table 1 displays the factor loadings, where the loading values are adequate for representing the respective constructs. To establish the construct reliability and convergent validity, several statistical measures were performed, including factors loadings, composite reliability (CR), and average variance extract (AVE). Since the AVE values for all the measurement constructs used in this study transcend 0.50 threshold, the constructs illustrate sufficient convergent validity [34], [35]. The CR values for the constructs in this study, ranging from 0.818 to 0.862, are well above the baseline of 0.70, as recommended by [34]. This reflects that each latent construct is consistently represented by its corresponding measurement items.

ISBN 978-984-35-5270-9 https://icebtm.iub.edu.bd

TABLE 1
ITEM LOADING VALUE, COMPOSITE RELIABILITY AND CONVERGENT VALIDITY

Constructs	Items	Loading Value	CR	AVE
Environmental Sustainability Strategy	ESS1	0.789	0.862	0.610
	ESS2	0.759		
	ESS3	0.822		
	ESS5	0.753		
Green SCM	GSCM1	0.753	0.830	0.550
	GSCM2	0.716		
	GSCM3	0.764		
	GSCM5	0.732		
Green HRM	GHRM1	0.721	0.818	0.601
	GHRM2	0.827		
	GHRM4	0.775		
Green IT	GIT3	0.756	0.828	0.617
	GIT4	0.800		
	GIT5	0.800		
Green Innovation	GI1	0.751	0.856	0.597
	GI2	0.760		
	GI3	0.815		
	GI4	0.763		
Sustainable Environmental Performance of SME	EP2	0.769	0.853	0.592
	EP3	0.799		
	EP4	0.771		
	EP6	0.737		

Source(s): Authors' own work

Discriminant Validity

Following the evaluation of the convergent validity and reliability, the discriminant validity of the constructs was assessed. Discriminant validity examines the extent to which the constructs in the study are distinct from one another. The study executed the HTMT ratio (Table 2), which is regarded as a more comprehensive method for measuring the discriminant validity [35]. In order to achieve HTMT values below the recommended threshold 0.90, as suggested by [36]. Following this adjustment, the HTMT ratios for all measurement variables in the study were found to be below the recommended threshold of 0.90, it can be determined that the constructs demonstrate sufficient discriminant validity.

TABLE 2
HETEROTRAIT-MONOTRAIT (HTMT) RATIO

	ESS	GSCM	GHRM	GIT	GI	EP
ESS						
GSCM	0.774					
GHRM	0.695	0.871				
GIT	0.745	0.776	0.819			
GI	0.686	0.738	0.740	0.746		
EP	0.710	0.645	0.641	0.743	0.725	

Source(s): Authors' own work

Measurement Model for Second-Order Constructs

Composite Reliability and Convergent Validity

The second order construct, like the first order constructs, satisfies the requirements for convergent validity and reliability. Table 3 reflects that the CR value of 0.890 and AVE of 0.669 both surpass the acceptable thresholds, thereby affirming the construct's validity.

TABLE 3
COMPOSITE RELIABILITY AND CONVERGENT VALIDITY

	CR	AVE
GP	0.890	0.669

Source(s): Authors' own work

Discriminant Validity

Furthermore, the results displayed in Table 4 shows that the discriminant validity of GP fulfill the required threshold, affirming its adequacy as a higher order construct within the structural model.

TABLE 4
HETEROTRAIT-MONOTRAIT (HTMT) RATIO

	GP	GI	EP
GP			
GI	0.826		
EP	0.778	0.725	

Source(s): Authors' own work

Explanatory Power of the model

The R^2 value, or the coefficient of determination, expresses the proportion of variance in the endogenous variables that is considered by the exogenous variables in the model.[35] stated that R^2 values of 0.75, 0.50, and 0.25 point to substantial, moderate, and weak levels of predictive power, respectively. In the current study, the model generates an R^2 value of 0.438, indicating that GP with GI as a mediator, explain 43.8% of the variance in EP. This indicates a moderate level explanatory power of the model.

C. Structural Model

Results of Direct Path Analysis

A structural model was developed based on the relationships outlined in the research framework of this study. The relationships between the exogenous and endogenous variables were examined through the path coefficients (β), T statistics, and *p* values. The significance of *p*-value influences whether the authors' proposed hypotheses are accepted or rejected. The hypotheses were tested at a significant level of $p < 0.05$. The findings show that all the hypotheses are statistically significant. H1 (GP → EP) exhibit a significant positive relationship between GP and EP, with $\beta = 0.452$, $t = 5.914$, and $p < .01$. Again, H2 (GI → EP) with $\beta = 0.268$, $t = 3.356$, and $p < .01$ reveals GI is positively related to EP and the result is statistically significant at $p < 0.01$ (Table 5).

ISBN 978-984-35-5270-9 https://icebtm.iub.edu.bd

TABLE 5
RESULTS OF DIRECT PATH ANALYSIS

Path	β	SD	T statistics	*p* values	Results
H1: GP → EP	0.452	0.076	5.914	0.000	Accepted
H2: GI → EP	0.268	0.080	3.356	0.001	Accepted

Source(s): Authors' own work

Results of Indirect Path Analysis

The mediating role of GI was evaluated by analyzing the specific indirect effects within the model. The analysis examined whether GI acts as a mediator in the relationship between GP and EP. The results related to H3 (GP → GI → EP; β = 0.179, $t = 3.105$, $p < .01$) substantiate that GI plays a significant mediating role in the relationship between GP and EP. This indicates that GP enhances EP not only through a direct path but also indirectly via its positive impact on GI, which in turn contributes to EP (Table 6).

TABLE 6
RESULTS OF SPECIFIC INDIRECT EFFECT

Path	β	SD	T statistics	*p* value	Result
H3: GP → GI → EP	0.179	0.058	3.105	0.002	Accepted

Source(s): Authors' own work

VI. DISCUSSION

Extensive studies on segregated green practices (ESS,GSCM,GHRM,GIT) yield eclectic findings on sustainable environmental performance and miss to encompass a comprehensive outlook. Our findings portray that, the unification of GP is a combined competency and the influence on sustainable environmental performance is more grasped when distinct elements of GP are considered as a single construct. Intermingling of distinct environmental actions expand more value which surpass the total value acquired from cultivating these actions individually [27]. This study probes the mechanism that SME sector can thrive sustainable environmental performance through GP. In H1; we can see that, there is a positive correlation between GP and EP (β value= 0.452, *p* value= 0.000). As per our findings; if a firm prefers interconnection of all the environmental actions, they can attain robust advantages which may steer them to economic success as well as attainment of SDG 12.

Regarding H2, GI favorably impacts EP (β value= 0.268, *p* value= 0.001). GI statistically impacts sustainable environmental performance significantly [6]. Businesses which concentrate on GI can secure sustainable environmental performance and motivate customers. If GI gets encouraged; industry will be facilitated by technological enhancement and environmental infrastructure which aligns with SDG 9.

The study also ascertains that GI can be a vital mediator between GP and EP. According to H3, it can be stated that GI positively mediates the relation between GP and EP of SME sector (β value = 0.179, *p* value = 0.002). This result is corresponding to previous result whereas GI works as a perfect mediator between GSCM, GHRM and environmental performance [28], [37]. Green practices with the mediation of GI can downsize emissions like depleting carbon footprint which correspond to climate action mollification (SDG 13).

6.1 IMPLICATIONS

A. Practical Implications

This study highlights incorporating green practices for long term success of organizations. Embracing green practices, an organization can be more efficient in attaining sustainability. According to our research findings, assimilating environmental sustainability strategy to organizational objectives can enrich firm's performance significantly. If SMEs want to do the part for environment, they can adopt GSCM practices such as environmental packaging, reducing use of hazardous materials etc. So it's essential to enrich employee's productivity beside environmental activities. Our findings points that, the higher the firm modernizes their effort and search out green services, the higher GIT gets executed in the firm. In addition, a GI-based strategy can significantly increase sustainable performance. Integration of GI as a mediator positively ameliorates sustainable environmental performance by linking green practices. Firms may get advantage from this holistic approach.

B. Policy Implications

The authority should make policies to accomplish organizational objectives. As in the research, the main objective is enhancing sustainable environmental performance to attain environmental sustainability, thus the policies should be made by policy makers like this way; how they can lessen waste, deplete pollution etc. Adopting these policies will help to enrich the reputation of the firm. Government should be aware and take steps so that the sustainable environmental performance gets assured in the SMEs.

VII.CONCLUSION

From our study, the correlation between green practices and sustainable environmental performance is very strong and green innovation positively mediates the relation between them. By adopting multifaceted green strategies which includes all these elements, SME sector of Bangladesh may be capable of building more vigorous and more eco-friendly stand for success which will elevate global market attraction and also local business credibility.

7.1 LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

ISBN 978-984-35-5270-9 https://icebtm.iub.edu.bd

In spite of the contribution and implications, this study contains some limitation which can be completed in future studies. Firstly, this study obtained data from SME sector in Bangladesh. As SME sector is a vast sector, it wasn't possible to cover all the SMEs. Also this research didn't ascribe other probable mediators which enriches sustainable environmental performance such as green capability. Researchers will be facilitated by more knowledge of the interrelated nature of the green practices and sustainability performance and firms will get benefit to become more environmentally aware.

REFERENCES

[1] C. Zhixia, Md. M. Hossen, S. S. Muzafary, and M. Begum, "Green Banking for Environmental Sustainability-Present Status and Future Agenda: Experience from Bangladesh," *Asian Econ. Financ. Rev.*, vol. 8, no. 5, pp. 571–585, 2018, doi: 10.18488/journal.aefr.2018.85.571.585.

[2] R. K. Datta, "Bangladesh towards green growth: a review of environmental sustainability indicators," *J. Environ. Sci. Econ.*, vol. 3, no. 2, pp. 17–40, May 2024, doi: 10.56556/jescae.v3i2.889.

[3] S. U. Rehman, S. Bresciani, D. Yahiaoui, and E. Giacosa, "Environmental sustainability orientation and corporate social responsibility influence on environmental performance of small and medium enterprises: The mediating effect of green capability," *Corp. Soc. Responsib. Environ. Manag.*, vol. 29, no. 6, pp. 1954–1967, 2022, doi: 10.1002/csr.2293.

[4] Md. Qamruzzaman and R. Kler, "Do Clean Energy and Financial Innovation Induce SME Performance? Clarifying the Nexus between Financial Innovation, Technological Innovation, Clean Energy, Environmental Degradation, and SMEs Performance in Bangladesh," *Int. J. Energy Econ. Policy*, vol. 13, no. 3, pp. 313–324, May 2023, doi: 10.32479/ijeep.14185.

[5] T. Fawcett and S. Hampton, "Why & how energy efficiency policy should address SMEs," *Energy Policy*, vol. 140, p. 111337, May 2020, doi: 10.1016/j.enpol.2020.111337.

[6] A. S. Awwad Al-Shammari, S. Alshammrei, N. Nawaz, and M. Tayyab, "Green Human Resource Management and Sustainable Performance With the Mediating Role of Green Innovation: A Perspective of New Technological Era," *Front. Environ. Sci.*, vol. 10, June 2022, doi: 10.3389/fenvs.2022.901235.

[7] J. A. E. Perez, F. Ejaz, and S. Ejaz, "Green Transformational Leadership, GHRM, and Proenvironmental Behavior: An Effectual Drive to Environmental Performances of Small- and Medium-Sized Enterprises," *Sustainability*, vol. 15, no. 5, Art. no. 5, Jan. 2023, doi: 10.3390/su15054537.

[8] Le and Govindan, "Boosting green innovation on corporate performance: Managerial environmental concern's moderating role - Le - 2024 - Business Strategy and the Environment - Wiley Online Library." Accessed: May 11, 2025. [Online]. Available: https://onlinelibrary.wiley.com/doi/full/10.1002/bse.3795

[9] S. Ullah, T. Mehmood, and T. Ahmad, "Green intellectual capital and green HRM enabling organizations go green: mediating role of green innovation," *Int. J. Innov. Sci.*, vol. 15, no. 2, pp. 245–259, Apr. 2022, doi: 10.1108/IJIS-12-2021-0222.

[10] K. Govindan, R. Khodaverdi, and A. Vafadarnikjoo, "Intuitionistic fuzzy based DEMATEL method for developing green practices and performances in a green supply chain," *Expert Syst. Appl.*, vol. 42, no. 20, pp. 7207–7220, Nov. 2015, doi: 10.1016/j.eswa.2015.04.030.

[11] J. Good, P. Singh, and S. Ezzedeen, "Environmental Sustainability Strategy, Creativity, Innovation and Organizational Performance: The Role of Green Human Resource Management," *Am. Bus. Rev.*, vol. 26, no. 2, Nov. 2023, doi: 10.37625/abr.26.2.475-502.

[12] I. Miroshnychenko, R. Barontini, and F. Testa, "Green practices and financial performance: A global outlook," *J. Clean. Prod.*, vol. 147, pp. 340–351, Mar. 2017, doi: 10.1016/j.jclepro.2017.01.058.

[13] K. Farzana, "Green HRM: Sustainable Practices to Promote Employment," 2020, doi: DOI:%2010.9790/487X-2209010106.

[14] A. Arulrajah and S. Senthilnathan, "Green Information Technology and Environmental Performance of the Banks," July 23, 2020, *Social Science Research Network, Rochester, NY*: 3660157. doi: 10.22495/jgrv9i3art2.

[15] S. Sahoo and L. Vijayvargy, "Green supply chain management practices and its impact on organizational performance: evidence from Indian manufacturers," *J. Manuf. Technol. Manag.*, vol. 32, no. 4, pp. 862–886, Nov. 2020, doi: 10.1108/JMTM-04-2020-0173.

[16] R. E. Khoury, N. Nasrallah, O. F. Atayah, M. M. Dhiaf, and G. F. Frederico, "The impact of green supply chain management practices on environmental performance during COVID-19 period: the case of discretionary companies in the G-20 countries," *Benchmarking Int. J.*, vol. 30, no. 6, pp. 2139–2165, May 2022, doi: 10.1108/BIJ-11-2021-0636.

[17] F. Ahmad, M. B. Hossain, K. Mustafa, F. Ejaz, K. F. Khawaja, and A. Dunay, "Green HRM Practices and Knowledge Sharing Improve Environmental Performance by Raising Employee Commitment to the Environment," *Sustainability*, vol. 15, no. 6, Art. no. 6, Jan. 2023, doi: 10.3390/su15065040.

[18] H. Mallawarachchi and G. Karunasena, "Electronic and electrical waste management in Sri Lanka: Suggestions for national policy enhancements," *Resour. Conserv. Recycl.*, vol. 68, pp. 44–53, Nov. 2012, doi: 10.1016/j.resconrec.2012.08.003.

[19] C. Gimenez, V. Sierra, J. Rodon, and J. A. Rodriguez, "The role of information technology in the environmental performance of the firm: The interaction effect between information technology and environmental practices on environmental performance," *Acad. Rev. Latinoam. Adm.*, vol. 28, no. 2, pp. 273–291, June 2015, doi: 10.1108/ARLA-08-2014-0113.

[20] Y.-S. Chen, S.-B. Lai, and C.-T. Wen, "The Influence of Green Innovation Performance on Corporate Advantage in Taiwan," *J. Bus. Ethics*, vol. 67, no. 4, pp. 331–339, Sept. 2006, doi: 10.1007/s10551-006-9025-5.

[21] S. A. Afridi, B. Afsar, A. Shahjehan, W. Khan, Z. U. Rehman, and M. A. S. Khan, "Impact of corporate social responsibility attributions on employee's extra-role behaviors: Moderating role of ethical corporate identity and interpersonal trust," *Corp. Soc. Responsib. Environ. Manag.*, vol. 30, no. 2, pp. 991–1004, 2023, doi: 10.1002/csr.2017.

[22] X. Wang and W. Bian, "Analyzing the Role of Corporate Social Responsibility for Sustainable Environmental Performance: Mediating Roles of Environmental Strategy and Environmental Outcomes," *Front. Psychol.*, vol. 13, June 2022, doi: 10.3389/fpsyg.2022.906610.

[23] M. N. Hasan, S. Anastasiadis, and L. J. Spence, "Polluting SMEs and the construction of their environmental

ISBN 978-984-35-5270-9 *https://icebtm.iub.edu.bd*

behaviours: Evidence from Bangladesh," *Bus. Strategy Dev.*, vol. 4, no. 2, pp. 109–122, 2021, doi: 10.1002/bsd2.132.

[24] J. Barney, "Firm Resources and Sustained Competitive Advantage - Jay Barney, 1991." Accessed: May 24, 2025. [Online]. Available: https://journals.sagepub.com/doi/abs/10.1177/014920639101700108

[25] J. Wen, H. Hussain, J. Waheed, W. Ali, and I. Jamil, "Pathway toward environmental sustainability: mediating role of corporate social responsibility in green human resource management practices in small and medium enterprises," *Int. J. Manpow.*, vol. 43, no. 3, pp. 701–718, Sept. 2021, doi: 10.1108/IJM-01-2020-0013.

[26] L. Beck and I. Ajzen, "Predicting dishonest actions using the theory of planned behavior," *J. Res. Personal.*, vol. 25, no. 3, pp. 285–301, Sept. 1991, doi: 10.1016/0092-6566(91)90021-H.

[27] A. Al-Sheyadi, L. Muyldermans, and K. Kauppi, "The complementarity of green supply chain management practices and the impact on environmental performance," *J. Environ. Manage.*, vol. 242, pp. 186–198, July 2019, doi: 10.1016/j.jenvman.2019.04.078.

[28] J. Aftab, N. Abid, N. Cucari, and M. Savastano, "Green human resource management and environmental performance: The role of green innovation and environmental strategy in a developing country," *Bus. Strategy Environ.*, vol. 32, no. 4, pp. 1782–1798, 2023, doi: 10.1002/bse.3219.

[29] V. Albino, A. Balice, and R. M. Dangelico, "Environmental strategies and green product development: an overview on sustainability-driven companies," *Bus. Strategy Environ.*, vol. 18, no. 2, pp. 83–96, 2009, doi: 10.1002/bse.638.

[30] N. A. Abu Seman *et al.*, "The mediating effect of green innovation on the relationship between green supply chain management and environmental performance," *J. Clean. Prod.*, vol. 229, pp. 115–127, Aug. 2019, doi: 10.1016/j.jclepro.2019.03.211.

[31] S. Murugesan, "Harnessing Green IT: Principles and Practices," *IT Prof.*, vol. 10, no. 1, pp. 24–33, Jan. 2008, doi: 10.1109/MITP.2008.10.

[32] W. Black and B. J. Babin, "Multivariate Data Analysis: Its Approach, Evolution, and Impact," in *The Great Facilitator: Reflections on the Contributions of Joseph F. Hair, Jr. to Marketing and Business Research*, B. J. Babin and M. Sarstedt, Eds., Cham: Springer International Publishing, 2019, pp. 121–130. doi: 10.1007/978-3-030-06031-2_16.

[33] S. K. Singh, M. D. Giudice, R. Chierici, and D. Graziano, "Green innovation and environmental performance: The role of green transformational leadership and green human resource management," *Technol. Forecast. Soc. Change*, vol. 150, p. 119762, 2020, doi: https://doi.org/10.1016/j.techfore.2019.119762.

[34] J. F. Hair, J. J. Risher, M. Sarstedt, and C. M. Ringle, "When to use and how to report the results of PLS-SEM," *Eur. Bus. Rev.*, vol. 31, no. 1, pp. 2–24, Jan. 2019, doi: 10.1108/EBR-11-2018-0203.

[35] J. Henseler *et al.*, "Common Beliefs and Reality About PLS: Comments on Rönkkö and Evermann (2013)," *Organ. Res. Methods*, vol. 17, no. 2, pp. 182–209, Apr. 2014, doi: 10.1177/1094428114526928.

[36] J. Henseler, C. M. Ringle, and M. Sarstedt, "A new criterion for assessing discriminant validity in variance-based structural equation modeling," *J. Acad. Mark. Sci.*, vol. 43, no. 1, pp. 115–135, Jan. 2015, doi: 10.1007/s11747-014-0403-8.

[37] N. U. Khan, M. Anwar, S. Li, and M. S. Khattak, "Intellectual capital, financial resources, and green supply chain management as predictors of financial and environmental performance," *Environ. Sci. Pollut. Res.*, vol. 28, no. 16, pp. 19755–19767, Apr. 2021, doi: 10.1007/s11356-020-12243-4.

ISBN 978-984-35-5270-9 *https://icebtm.iub.edu.bd*