

## BICM Research Seminar 48

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Paper details	
Title	<b>Corporate Resource Efficiency and Environmental Performance in Bangladesh: Measures, Evaluation and Management for Sustainable Development</b>
Authors	<b>Dr. Shobod Deba Nath</b> Professor Department of International Business University of Dhaka
	<b>Md. Rezaul Karim</b> Assistant Professor Department of Accounting & Information Systems University of Dhaka
	<b>Ratan Ghosh</b> Assistant Professor Department of Accounting & Information Systems Bangladesh University of Professionals (BUP)
	<b>Gourav Roy</b> Lecturer Bangladesh Institute of Capital Market (BICM)
Presentation details	
Presenter researcher	<b>Md. Rezaul Karim</b>
Date	01 September 2025 (Monday)
Time	04:00 – 5:00 PM
Venue	BICM Multipurpose Hall
Expected Participants	Faculty Members of BICM & Invited Guests
Discussants	<b>Dr. Sudipta Bose</b> Senior Lecturer and Program Director, Master of Professional Accounting (MPAC) Newcastle Business School
	<b>Dr. Mohammad Anamul Haque</b> Assistant Professor Department of Statistics Shahjalal University of Science and Technology

## About the Presenter

Mr. Md. Rezaul Karim is an Assistant Professor (on study leave) in the Department of Accounting, University of Dhaka, Bangladesh, and currently, a PhD candidate in Accounting and Finance at the University of Newcastle, Australia. He achieved first position in all academic programs from SSC to MBA, receiving numerous awards including the Dean's Honor, Dean's Merit, Prime Minister's Gold Medal, and President's Gold Medal. His teaching and research expertise cover financial accounting, management accounting, financial management, auditing, taxation, accountability, and sustainability. Mr. Karim has published 18 articles in reputed journals such as the Journal of Accounting & Organizational Change, China Journal of Accounting Research, and Accounting Research Journal. He has secured research grants totaling BDT 1.68 million as principal or co-investigator and serves as a reviewer for journals including Corporate Social Responsibility and Environmental Management and Applied Economics. He participated in many international conferences including AFAANZ Conference, 2025.

The paper abstract is given below. If you have any questions regarding the seminar or you wish to present a paper or invite a guest researcher, please do not hesitate to contact S. M. Kalbin Salema, Assistant Professor, BICM at [kalbin@bicm.ac.bd](mailto:kalbin@bicm.ac.bd).

## Corporate Resource Efficiency and Environmental Performance in Bangladesh: Measures, Evaluation and Management for Sustainable Development

Dr. Shobod Deba Nath<sup>1</sup>, Md. Rezaul Karim<sup>2</sup>, Ratan Ghosh<sup>3</sup> & Gourav Roy<sup>4</sup>

### Abstract

This study investigates the firm-level determinants of Natural Resource Efficiency Ratio (NRE) in non-financial firms in Bangladesh and its impact on the firm performance, offering novel insights grounded in the Natural Resource-Based View (NRBV) and stakeholder theory. Using 2,569 firm-year observations from 206 companies over the period 2001–2021, the study employs Feasible Generalized Least Squares (FGLS) and system Generalized Method of Moments (GMM) estimations to address issues of unobserved heterogeneity and potential endogeneity. The analysis reveals that firm-specific factors such as size, operational efficiency, liquidity, and leverage significantly influence NRE. Larger and more efficient firms tend to manage natural resources more effectively, while high leverage and older firm age are linked to reduced efficiency, suggesting that financial pressure and institutional inertia may hinder sustainable practices. Governance attributes, particularly gender diversity and board independence, are found to positively affect NRE, underscoring the value of inclusive and accountable corporate leadership in driving environmental outcomes. Subsample analyses across firm sizes and industries highlight substantial heterogeneity in these relationships, indicating that resource efficiency strategies must be tailored to organizational and sectoral contexts. Additionally, the study has been extended further by exploring the impact of NRE on the corporate profitability. Corporate Profitability has been measured by two widely used accounting-based performance indicators – Return on Assets (ROA) and Return on Equity (ROE). Results reveal that there is a negative and statistically significant relationship with NRE and ROA, indicating that natural resources efficient firms make more profit compared to the firms which do not account for efficient natural resource consumption. This result stands strong after a battery of analysis to address endogeneity and unobserved heterogeneity. However, the study finds no statistically significant relationship between NRE and ROE. This study contributes to the literature by introducing a quantifiable measure of firm-level NRE and impact of natural efficiency on the firm performance. The findings offer practical implications for regulators, policymakers, and firms aiming to enhance sustainability through targeted interventions that prioritize operational efficiency, financial resilience, and board-level diversity to improve natural resource efficiency.

**Keywords:** Natural Resource Efficiency, Determinants; Natural Resource Based View, Stakeholder Theory; Sustainability.

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