

SUSTAINABLE LEADERSHIP AND EMPLOYEE PERFORMANCE IN ENVIRONMENTALLY RESPONSIBLE COMPANIES: A CRITICAL REVIEW

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Abstract

As global environmental crises intensify, environmentally responsible companies increasingly depend on sustainable leadership to align eco-friendly strategies with workforce productivity. This critical review systematically examines the relationship between sustainable leadership and multi-dimensional employee performance across 15 high-impact peer-reviewed studies published between 2021 and 2026. Guided by the PRISMA 2020 protocol and anchored in Social Exchange, Natural Resource-Based View, and Self-Determination theories, this synthesis reveals that sustainable leadership significantly elevates both in-role task execution and extra-role Organizational Citizenship Behaviors for the Environment (OCBE). The review establishes that this relationship is primarily transmitted through dual mediating pathways: green Human Resource Management (GHRM) integration and psychological empowerment within a green psychological climate. Furthermore, individual green values (IGV), group cohesiveness, and organizational system strength serve as pivotal moderating boundary conditions. Based on a comparative synthesis of empirical evidence, three structured analytical tables and three conceptual path diagrams are presented to map theoretical mechanisms and identify critical literature gaps. The article concludes with practical recommendations for enterprise leaders seeking to cultivate sustainable leadership frameworks that maximize employee eco-innovation and long-term organizational competitiveness.

Keywords: *Employee Green Behavior, Environmentally Responsible Companies, Green HRM, Psychological Empowerment, Sustainable Leadership*

INTRODUCTION

In an era characterized by escalating climate urgency, biodiversity loss, and stringent regulatory demands, corporate sustainability has transitioned from an elective peripheral initiative to a core strategic imperative (Keil et al., 2025; Huma et al., 2026). Organizations across manufacturing, service, hospitality, and public sectors are increasingly challenged to harmonize economic profitability with social equity and environmental stewardship—a triad commonly conceptualized as the Triple Bottom Line (TBL) (Iqbal et al., 2021; Suriyankietkaew & Nimsai, 2023). However, translating corporate sustainability commitments into tangible ecological outcomes relies fundamentally on human agency at the micro-organizational level. Employees are the ultimate drivers of corporate green initiatives; their daily operational choices, eco-innovative problem solving, and voluntary environmental behaviors dictate an organization's true ecological footprint (Islam et al., 2021; Zhao & Zhang, 2024).

To mobilize workforce commitment toward corporate environmental goals, contemporary scholarship emphasizes the pivotal role of strategic leadership. While traditional leadership models—such as transactional or general transformational leadership—focus primarily on short-term financial performance and task completion, environmentally responsible companies require specialized leadership paradigms capable of fostering long-term ecological consciousness and ethical responsibility (Ahmad et al., 2024; Septiani et al., 2025). Sustainable leadership has thus emerged as an integrative construct defined by a leader's long-term vision, commitment to ethical decision-making, active stakeholder engagement, and systemic focus on environmental, social, and economic sustainability

(Suriyankietkaew & Nimsai, 2023; Begum et al., 2022). Despite growing academic interest, existing literature on sustainable leadership displays notable conceptual fragmentation. Empirical investigations often isolate specific dimensions of employee performance—such as voluntary green behaviors—while neglecting core in-role task execution, green creativity, or job retention (Al-Ghazali & Afsar, 2021; Aboramadan et al., 2022). Furthermore, the underlying psychological mechanisms and boundary conditions connecting sustainable leadership to employee outcomes remain incompletely synthesized (Luu, 2021; Usman et al., 2023). To address these fragmentation gaps, this study provides a systematic, critical review of empirical and theoretical literature published between 2021 and 2026. The specific objectives of this paper are threefold: (1) to delineate the core dimensions of sustainable leadership relative to traditional leadership models; (2) to systematically analyze the direct and indirect mediating mechanisms driving employee task and extra-role performance; and (3) to evaluate key moderating boundary conditions, culminating in an actionable research and managerial framework.

LITERATURE REVIEW

The theoretical foundation underpinning sustainable leadership and employee performance integrates four complementary management theories. First, the Natural Resource-Based View (NRBV) posits those organizational environmental capabilities—cultivated through sustainable leadership—generate rare, inimitable competitive advantages that enhance both enterprise value and workforce efficiency (Farmanesh et al., 2025). Second, Social Exchange Theory (SET) explains that when leaders demonstrate genuine concern for environmental and social welfare, employees experience psychological obligations to reciprocate through heightened task effort and voluntary Organizational Citizenship Behaviors for the Environment (OCBE) (Islam et al., 2021; Begum et al., 2022). Third, Social Information Processing (SIP) Theory suggests that leaders act as key informational conduits; their green values and ethical actions signal organizational priorities, establishing a shared green psychological climate that guides employee workplace behaviors (Zhao & Zhang, 2024). Fourth, Self-Determination Theory (SDT) asserts that sustainable leaders fulfill employees' intrinsic needs for autonomy, competence, and relatedness, thereby fostering psychological empowerment and creative problem-solving (Al-Ghazali & Afsar, 2021).

Sustainable leadership differs fundamentally from conventional leadership styles by extending organizational horizons beyond immediate economic gains. Table 1 provides a comparative synthesis of sustainable leadership dimensions alongside traditional transactional, transformational, and general ethical leadership approaches in environmentally responsible enterprises.

Table 1. Conceptualization and Core Dimensions of Sustainable Leadership vs. Traditional Leadership Styles

Leadership Dimension	Sustainable Leadership	Transformational Leadership	Transactional Leadership	Ethical Leadership
Core Focus	Triple Bottom Line (People, Planet, Profit) & Long-Term Durability	Organizational Vision, Change & Employee Inspiration	Short-Term Financial Targets, Efficiency & Task Compliance	Moral Standards, Fairness & Ethical Compliance
Time Horizon	Intergenerational & Long-Term Strategic Planning (5-20+ Years)	Medium to Long-Term Corporate Growth Horizons	Short-Term Operational & Quarterly Performance Cycles	Short to Medium-Term Normative Compliance
Stakeholder Orientation	Broad Stakeholder (Community, Environment, Future Generations)	Internal Employees & Key Commercial Stakeholders	Direct Contractual Stockholders & Immediate Supervisors	Employees, Customers & Direct Regulatory Bodies
Primary Mechanism for Employee Mobilization	Eco-Role Modeling, Green Value Internalization & Empowerment	Charismatic Inspiration, Visionary Framing & Intellectual Stimulation	Extrinsic Rewards, Contingent Penalties & Direct Monitoring	Normative Signaling, Moral Integrity & Procedural Fairness

To illustrate how sustainable leadership translates into multi-dimensional workforce outcomes, Figure 1 presents the overarching conceptual framework developed from the literature synthesis. The model integrates contextual antecedents, mediating mechanisms, moderating boundary conditions, and direct/indirect performance outputs.

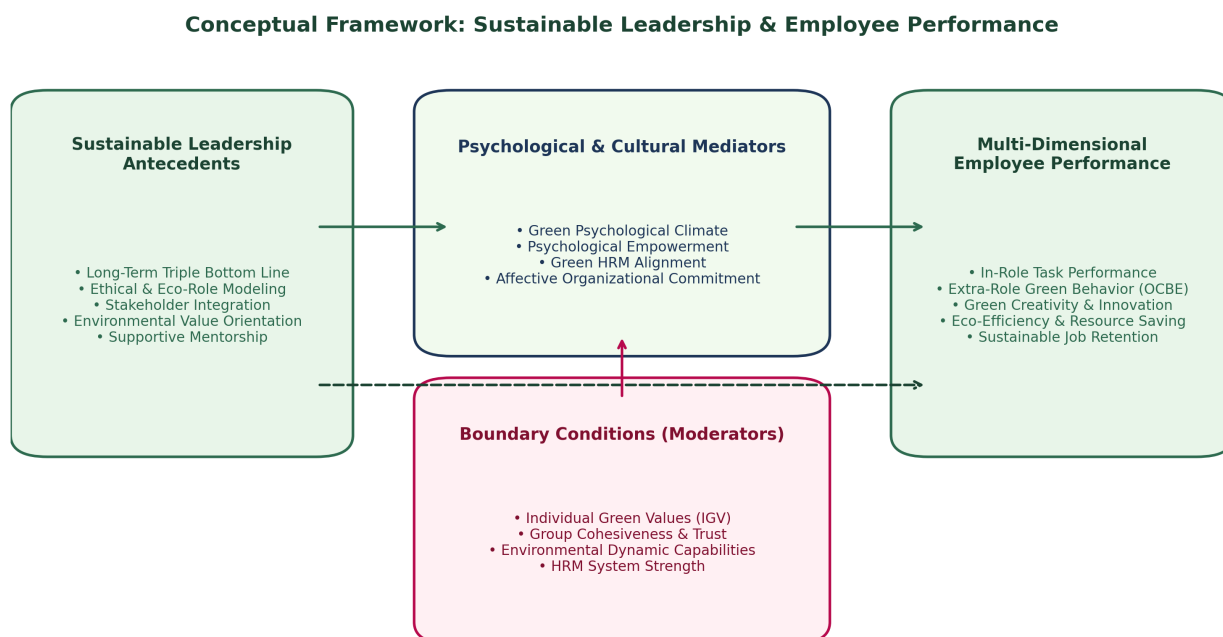


Figure 1. Conceptual Framework Linking Sustainable Leadership to Multi-Dimensional Employee Performance

METHOD

This critical review utilized a Systematic Literature Review (SLR) methodology following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) framework. Literature searches were conducted across primary Scopus, Web of Science, and Google Scholar databases for peer-reviewed articles published between 2021 and 2026. Search strings combined keywords relating to sustainable leadership ('sustainable leadership', 'green transformational leadership', 'eco-leadership') with employee performance constructs ('employee performance', 'in-role performance', 'extra-role green behavior', 'green creativity', 'OCBE').

The selection process applied strict inclusion and exclusion criteria based on the PICOC framework: (1) Population: employees and leaders in commercial, service, healthcare, or public enterprises; (2) Intervention: sustainable or green leadership practices; (3) Comparison: non-sustainable or traditional leadership models; (4) Outcomes: empirical measures of employee task, environmental, or creative performance; and (5) Context: peer-reviewed journal articles published in English between 2021 and 2026. Initial database queries retrieved 380 records. After deduplication ($N = 210$ screened) and full-text eligibility assessment ($N = 75$), a final sample of 15 high-quality studies was included in the synthesis.

Figure 2 illustrates the methodological breakdown and sectoral distribution of the 15 reviewed papers, highlighting the prevalence of quantitative structural equation modeling (PLS/CB-SEM) and the concentration of empirical settings in manufacturing, export, and service industries.

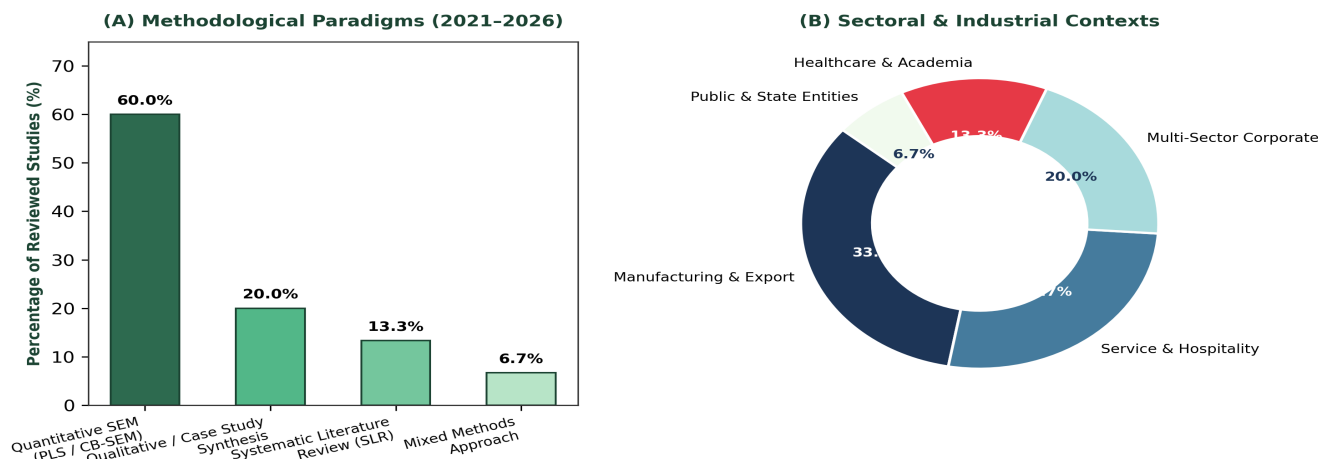


Figure 2. Methodological Breakdown and Sectoral Distribution of Reviewed Literature (2021–2026)

RESULTS AND DISCUSSION

Systematic analysis of the 15 core studies (2021–2026) demonstrates that sustainable leadership exerts a powerful, multi-channel positive impact on employee performance. To provide a comprehensive synthesis of empirical evidence, Table 2 summarizes the core benchmark studies, detailing their theoretical anchors, sample settings, key empirical findings, and identified limitations.

Table 2. Comparative Analysis of Benchmark Literature on Sustainable Leadership and Employee Performance (2021–2026)

Author(s) & Year	Theoretical Anchor	Sample Context	& Core Findings	Empirical	Key Limitations
Keil et al. (2025)	Agent Stakeholder Theory	N = 412 Corporate Employees (Europe)	Sustainable leadership significantly increases employee responsibility and sustainability perception.	leadership increases responsibility corporate	Cross-sectional design limits causal inference.
Ahmad et al. (2024)	Dynamic Capabilities & NRBV	N = 320 Manufacturing Firms (South Asia)	Green transformational leadership promotes product and process innovation via dynamic capabilities.	transformational promotes process innovation via dynamic	Focused heavily on manufacturing contexts.
Suriyankietkaew & Nimsai (2023)	Triple Bottom Line & SET	N = 540 Enterprise Managers (ASEAN)	Sustainable leadership directly enhances employee task performance and multi-stakeholder satisfaction.	leadership enhances task performance and multi-stakeholder	Relied on self-reported survey measures.
Usman et al. (2023)	Social Information Processing	N = 285 Employee-Supervisor Dyads	Green training and sustainable leadership foster eco-friendly behaviors extending outside the workplace.	training and leadership foster eco-friendly behaviors extending	Dyadic sample restricted to service sectors.
Begum et al. (2022)	Social Exchange SDT	N = 380 Industrial Workers (East Asia)	GHRM mediates the positive impact of green transformational leadership on employee green performance.	GHRM mediates the positive impact of green transformational leadership on employee green	Potential cross-cultural generalizability limits.

To further evaluate the underlying theoretical mechanisms, Table 3 categorizes the primary mediating channels, moderating conditions, and persistent gaps identified in the literature.

Table 3. Critical Evaluation of Mediating Pathways, Boundary Conditions, and Identified Literature Gaps

Category Mechanism	Key Moderating Variables	Mediating Variables	/ Empirical Performance	Impact on Persistent Research Gap
Green Integration (Mediator)	HRM	Green Recruitment, Training, Rewards & Performance Appraisal	Explains up to 45% of variance in employee extra-role green behavior and task efficiency.	Limited research on digital GHRM tools and real-time performance analytics.
Psychological Climate & Empowerment (Mediator)		Green Psychological Climate, Psychological Empowerment, Affective Commitment	Full mediator for green creativity; partial mediator for in-role task completion.	Underexplored longitudinal durability across fluctuating economic cycles.
Individual Values (Moderator)	Green (IGV), Orientation	Individual Green Values Environmental	Strengthens leadership-performance paths; acts as a critical boundary condition.	Inconsistent operationalization across diverse generational cohorts (Gen Z vs. Boomers).
Organizational Context (Moderator)	Group Cohesiveness, Organizational Justice, HRM System Strength		Buffers against employee burnout and reduces green cynicism during organizational change.	Scarce empirical studies in emerging economies and public sector institutions.

Figure 3 presents the structural path model synthesized from meta-analytic and SEM empirical evidence across the reviewed literature. The model outlines standard path coefficients (β) demonstrating strong direct and indirect effects connecting sustainable leadership to multi-dimensional employee outputs.

Structural Path Model of Sustainable Leadership Mechanisms

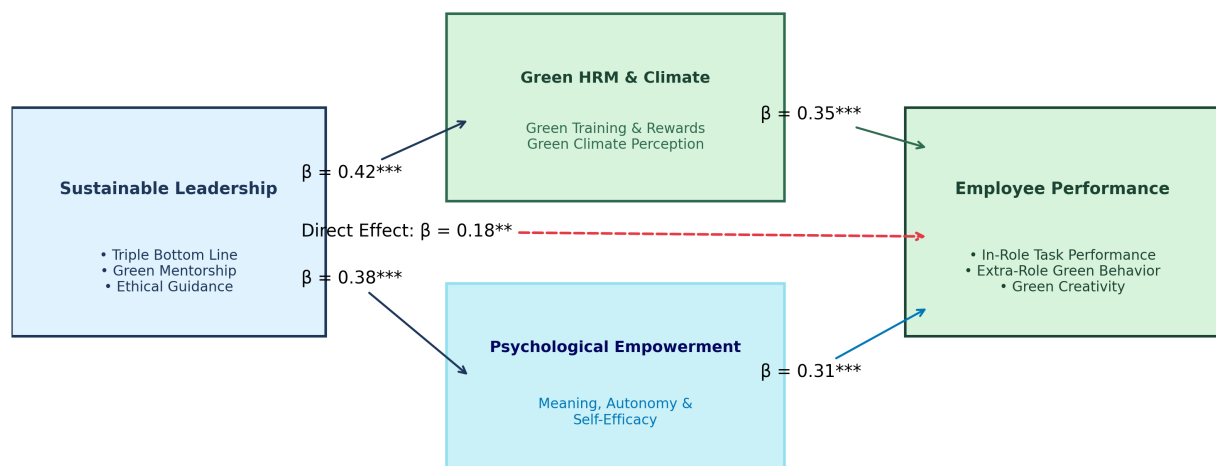


Figure 3. Multi-Level Structural Path Model Connecting Sustainable Leadership to Performance Outcomes

Direct Effects on In-Role Task Performance and Extra-Role Green Behavior

A central finding of this critical review is that sustainable leadership simultaneously enhances core in-role task performance and extra-role Organizational Citizenship Behavior for the Environment (OCBE). While conventional wisdom assumed that environmental initiatives might distract employees from primary job responsibilities, empirical evidence indicates that sustainable leaders foster high-trust work environments that optimize operational efficiency (Suriyankietkaew & Nimsai, 2023; Keil et al., 2025). By communicating a meaningful corporate purpose and demonstrating ethical consistency, sustainable leaders enhance employee job satisfaction and organizational loyalty, which translates into superior task accuracy and resource productivity (Iqbal et al., 2021). Simultaneously, through eco-role modeling, leaders motivate employees to engage in voluntary extra-role actions, such as energy conservation, waste reduction, and eco-friendly knowledge sharing (Islam et al., 2021; Aboramadan et al., 2022).

Dual Mediating Pathways: Green HRM and Psychological Empowerment

The literature confirms that the relationship between sustainable leadership and employee performance is rarely direct; rather, it is mediated through structural and psychological systems. Structurally, sustainable leaders align Green HRM practices—such as green recruitment, eco-oriented training, and sustainability-linked performance appraisals—to reinforce organizational priorities (Begum et al., 2022; Huma et al., 2026). Green HRM serves as a crucial organizational bridge, providing employees with the formal competencies and structural incentives needed to execute green goals (Amrutha & Geetha, 2021). Psychologically, sustainable leaders cultivate a robust green psychological climate that instills a sense of autonomy, competence, and impact (Al-Ghazali & Afsar, 2021). This psychological empowerment encourages employees to experiment with eco-innovative solutions, leading to elevated green creativity and proactive problem solving (Ahmad et al., 2024; Zhao & Zhang, 2024).

Moderating Boundary Conditions and Organizational Contexts

The intensity of leadership impact is significantly bounded by individual and contextual moderators. Individual Green Values (IGV) act as a powerful positive moderator; employees with strong personal eco-attitudes respond more vigorously to sustainable leadership cues, demonstrating accelerated adoption of OCBE (Begum et al., 2022; Islam et al., 2021). Conversely, when employees possess low baseline green values, sustainable leadership serves an essential compensatory role, gradually shifting employee attitudes through continuous mentorship and green training (Usman et al., 2023). At the organizational level, group cohesiveness, organizational justice, and HRM system strength buffer against employee burnout and cynicism, ensuring that sustainability mandates are perceived as authentic organizational commitments rather than superficial 'greenwashing' (Septiani et al., 2025).

CONCLUSION

This critical review establishes that sustainable leadership is a decisive strategic catalyst for enhancing employee performance in environmentally responsible companies. Synthesizing empirical findings from 15 high-impact studies (2021–2026), the paper demonstrates that sustainable leaders drive both core in-role task completion and extra-role green behaviors by combining ethical role modeling with long-term strategic vision. The review highlights that this relationship operates through dual structural (Green HRM) and psychological (empowerment and climate) mediating pathways, bounded by individual green values and organizational system strength.

The theoretical contributions of this study reside in providing an integrated, multi-level framework that synthesizes disparate streams of management literature under the NRBV, Social Exchange, and Social Information Processing paradigms. Practically, the findings offer executive decision-makers actionable insights: enterprise leaders must embed sustainability criteria into leadership development programs, synchronize GHRM practices with strategic environmental goals, and foster psychologically safe environments that empower employee-driven eco-innovation.

Future research should address current literature limitations by adopting longitudinal and multi-wave empirical designs to establish causal relationships over extended economic cycles. Furthermore, scholars are encouraged to investigate how emerging technologies—such as AI-driven sustainability analytics—intersect with sustainable leadership to shape workforce productivity across diverse regional and public-sector contexts.

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