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# Journal of Sustainable Economic and Business (JOSEB)

Vol. 3 No. 4 October 2026: 637-650

ISSN (Online): 3063-0207

<https://journal.arepublisher.com/index.php/joseb>

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## Green Transformational Leadership, Work Motivation, and Sustainable Employee Performance: The Role of Employee Engagement

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### ABSTRACT

**Objectives:** This study comprehensively investigates the underlying mechanisms through which green transformational leadership and work motivation influence sustainable employee performance. Specifically, the research evaluates the pivotal mediating role of employee engagement within the highly analytical and bureaucratic environment of Bank Indonesia, the nation's central bank.

**Methodology:** We employed an explanatory quantitative research design utilizing a cross-sectional survey approach. The empirical data were collected from a carefully determined sample of 158 permanent employees across four strategic departments at Bank Indonesia using a stratified random sampling approach. To test the complex structural relationships and mediation effects, we applied Partial Least Squares Structural Equation Modeling (PLS-SEM) using the SmartPLS 4 software, executing a rigorous bootstrapping procedure with 5,000 subsamples.

**Finding:** The empirical analysis reveals a compelling theoretical anomaly where green transformational leadership does not directly drive sustainable employee performance. Conversely, intrinsic work motivation exerts a strong, positive, and direct impact on the sustainability of employee performance. More importantly, both green leadership and work motivation are highly effective in cultivating deep employee engagement. Consequently, employee engagement emerges as a significant driver of sustainable performance, acting as a full mediator for green transformational leadership and a partial mediator for work motivation.

**Conclusion:** Employee engagement functions as an absolute psychological bridge in a central banking context. Without this deep emotional and cognitive involvement, top-down environmental leadership visions and latent intrinsic motivation cannot effectively materialize into resilient, long-term sustainable performance.

**Keywords:** Employee Engagement; Green Transformational Leadership; Partial Least Squares; Sustainable Employee Performance; Work Motivation.

**Article Doi:** <https://doi.org/10.70550/joseb.v3i4.836>

**How to Cite:** H, S. H., & Ariyanto, A. (2026). Green Transformational Leadership, Work Motivation, and Sustainable Employee Performance: The Role of Employee Engagement. *Journal of Sustainable Economic and Business*, 3(4), 637-650. <https://doi.org/10.70550/joseb.v3i4.836>

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Submitted: 03-08-2026

Revised: 22-09-2026

Accepted: 29-09-2026

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### INTRODUCTION

The current decade marks a highly critical turning point in global economic and organizational history, where sustainability issues have rapidly evolved from mere corporate social responsibility initiatives into absolute global survival mandates through the Sustainable Development Goals (SDGs). The urgency of achieving these multidimensional targets is

empirically underscored by recent global risk assessments. For instance, the World Economic Forum in its 2025 global risks report explicitly ranks climate action failure, extreme weather events, and environmental degradation as the most severe risks threatening the stability of the global economic landscape over the next decade (World Economic Forum, 2025). Complementing this macro perspective, recent empirical studies highlight a massive threat of productivity loss on a global scale. Environmental degradation and climate-induced stress are projected to severely disrupt human capital resilience and long-term economic stability, assuming organizations fail to execute a swift transition toward green governance and sustainable operational frameworks (Afrin et al., 2023; Hendri, 2025).

Narrowing the focus to the national level, empirical data from the Indonesian Central Bureau of Statistics in 2025 confirm that Indonesia faces formidable challenges in aligning its macroeconomic growth with sustainability indicators (Badan Pusat Statistik, 2025). The failure to maintain the psychological and physical well-being of workers, which aligns with SDG 3, coupled with poor resource consumption efficiency representing SDG 12, is widely believed to create a bottleneck effect. This bottleneck ultimately hinders the broader national objectives of achieving inclusive economic growth and executing effective climate risk mitigation strategies. In light of these challenges, corporate entities and public institutions alike are compelled to reevaluate their internal paradigms, shifting from a pure profit or output-driven focus toward a more holistic, sustainable approach to human capital management.

Responding to these immense global and national pressures, the financial sector is universally recognized as the primary driving force capable of catalyzing systemic change. As the highest monetary authority in the country, Bank Indonesia naturally assumes a central and pioneering role in orchestrating Sustainable Finance and Green Macprudential policies. However, a logical consequence of dictating green policies to the external banking industry is the absolute necessity for a fundamental and credible transformation within the internal institutional scope of the central bank itself. The human resource governance within Bank Indonesia must authentically reflect a sustainable culture before it can legitimately drive the national banking ecosystem toward environmental compliance. It is precisely at this intersection that the achievement of sustainable employee performance becomes highly crucial for the institution. In the modern era, employee performance is no longer solely measured by the quantitative output or the successful completion of monetary targets. Instead, it is evaluated by the capacity of the workforce to maintain a stable and high level of productivity over extended periods without sacrificing the psychological resilience of the individuals or compromising the environmental sustainability of the workplace ecosystem (Hendri, 2025).

The operational characteristics of work at Bank Indonesia further complicate this sustainability objective. Employees in strategic departments are routinely burdened with high analytical, cognitive, and policymaking responsibilities. Navigating global economic volatility, analyzing vast amounts of financial data, and formulating macroeconomic policies require an extraordinary level of mental stamina. To align these demanding operational realities with the new green mandate, traditional management approaches are increasingly deemed insufficient. The institution requires a visionary leadership model, specifically green transformational leadership, to effectively embed environmentally friendly practices into the organizational DNA (Aulia & Nawangsari, 2023). Through this specific leadership style, an efficient and environmentally conscious work ethic can be internalized as a daily operational culture rather than an occasional compliance checklist.

In addition to visionary leadership support, the maintenance of sustainable performance heavily relies on the presence of pure, internal work motivation. Employees dealing with complex financial data and tight deadlines need a strong intrinsic drive to persist without experiencing cognitive depletion. Yet, drawing upon contemporary organizational psychology, leadership visions and internal motivations cannot operate effectively in a vacuum. They absolutely require a robust psychological medium to be converted into resilient and actual performance. This medium is employee engagement, which represents the cognitive, emotional, and physical attachment of employees to their roles. Without deep engagement, the energy provided by leaders and personal motivation dissipates before it can influence long-term performance outcomes. Engagement acts as the necessary glue that binds the employee's personal values to the broader organizational objectives, a dynamic that is highly relevant in the banking sector (Putra Pertama & Indiyati, 2025). For the central bank, this emotional attachment is crucial to manifesting long-term sustainability mandates.

Despite the conceptual clarity of this integration, empirical realities often present a different picture. A preliminary diagnostic survey conducted on 30 Bank Indonesia employees confirmed a worrying gap in sustainable performance practices. The initial findings revealed that 67 percent of the surveyed employees still focused entirely on final work outputs without integrating eco-friendly values into their processes. Furthermore, 57 percent admitted to bypassing resource efficiency protocols simply to meet stringent targets, and a striking 77 percent reported being highly vulnerable to mental fatigue or burnout due to the relentless pace of their responsibilities. A subsequent exploratory survey confirmed that green transformational leadership, work motivation, and employee engagement were perceived by the staff as the three most critical variables requiring urgent strengthening to resolve this performance sustainability crisis.

A meticulous review of existing literature exposes a significant research gap that this study aims to fill. The vast majority of earlier academic studies have tended to examine green leadership and organizational performance as isolated concepts. When they are studied together, the focus is almost exclusively restricted to manufacturing sectors, hospitality, or supply chain logistics, where physical pollution and carbon footprints are highly visible (Nusraningrum et al., 2024). There is a noticeable scarcity of empirical research integrating green transformational leadership, intrinsic motivation, engagement, and sustainable performance simultaneously within a central banking environment. In a central bank, environmental impacts are subtle yet profoundly influential, stemming from the formulation of macro-policies and the daily cognitive habits of its analysts rather than from factory floors. To address this notable void in the literature, this study constructs a comprehensive structural model. The primary objective is to investigate the direct and indirect effects of green transformational leadership and work motivation on sustainable employee performance, uniquely emphasizing the critical mediating power of employee engagement within the highly analytical bureaucracy of Bank Indonesia.

## **LITERATURE REVIEW**

### **Theoretical Foundations: Social Exchange Theory, Self Determination Theory, and Conservation of Resources**

This comprehensive research is deeply anchored in three robust and interrelated theoretical frameworks that collectively explain the complexities of organizational behavior.

The primary overarching lens is the Social Exchange Theory (SET), which recent scholars affirm as a foundational framework for understanding reciprocal relationships within modern organizations (Hoxha & Ramadani, 2024). SET fundamentally proposes that human relationships within an organizational setting are continuous exchange processes based on the norm of reciprocity. Unlike rigid economic transactions that rely on explicit contractual obligations, social exchanges involve the transfer of intangible socio-emotional resources such as trust, inspiration, respect, and psychological support. When an organization, represented by its leadership, provides a genuinely inspiring vision and tangible support, employees instinctively feel a moral obligation to reciprocate this treatment (Muhammad et al., 2024). This reciprocation typically manifests through heightened loyalty, increased discretionary effort, and a profound commitment to organizational goals.

To understand the internal psychological drives of the employees, this study utilizes the principles of Self-Determination Theory (SDT), which remains a robust framework for intrinsic motivation in contemporary studies (Anshori et al., 2025). SDT shifts the focus from external rewards to intrinsic motivation. It argues that human beings achieve their highest levels of performance and well-being when their three basic psychological needs are fulfilled: the need for autonomy, the need for competence, and the need for relatedness. In a workplace context, when employees are granted the intellectual freedom to approach tasks autonomously and are recognized for their specialized competence, they develop a powerful intrinsic motivation. This internal drive is far more sustainable and resilient than motivation generated by external financial incentives or punitive pressures.

Finally, the Conservation of Resources (COR) Theory provides the essential psychological basis for understanding sustainable employee performance in contemporary research (Hendri, 2025). The COR Theory postulates that individuals are fundamentally motivated to acquire, retain, and protect their personal resources, which include physical energy, emotional stability, and cognitive focus. Stress and burnout occur when these resources are threatened or depleted without adequate replenishment. Therefore, sustainable performance can only be achieved when the work environment, leadership style, and the individual's internal motivation work synergistically to prevent the net depletion of these critical psychological resources over time. Together, SET provides the relational context, SDT acts as the internal catalyst, and COR explains the energy management necessary for enduring performance.

### **Green Transformational Leadership and Sustainable Employee Performance**

Green transformational leadership is an evolution of the classic transformational leadership paradigm, specifically tailored to address environmental sustainability. It refers to the behavior of leaders who actively inspire and motivate their subordinates to look beyond their immediate self-interests and embrace broader organizational sustainability goals (Aulia & Nawangsari, 2023). These leaders exhibit four key behaviors: green idealized influence where they act as moral role models for eco-friendly practices, green inspirational motivation where they articulate a compelling sustainable vision, green intellectual stimulation where they encourage innovative environmental solutions, and green individualized consideration where they provide personalized support for employees to adopt sustainable habits.

From the perspective of Social Exchange Theory, when leaders consistently model green behaviors and provide inspirational motivation, they invite a positive psychological exchange. Employees are expected to perceive this visionary and ethical leadership as a valuable organizational resource. In response, they should feel a reciprocal obligation to align

their work habits with the leader's vision (Muhammad et al., 2024), thereby producing work that is not only high in quality but also consistent and adaptive over the long term. Previous literature suggests that environmentally conscious leadership can stimulate innovative behaviors that ultimately lead to the maintenance of long-term performance without draining individual resources. Thus, the first hypothesis is formulated to test this direct relationship.

**H1:** Green transformational leadership has a positive effect on sustainable employee performance.

### **Work Motivation and Sustainable Employee Performance**

Operating within a central bank environment inherently demands a remarkable degree of mental endurance, meticulous attention to detail, and analytical precision. According to the principles of Self-Determination Theory, when the basic psychological needs of these highly skilled employees are met, they develop a robust sense of intrinsic work motivation. They work not merely because of institutional mandates, but because they find the work itself inherently interesting, challenging, and deeply meaningful.

This intrinsic motivation acts as a critical psychological defense mechanism. When faced with the inevitable pressures of macroeconomic volatility, sudden policy shifts, and tight deadlines, highly motivated employees possess the internal stamina necessary to persevere. Drawing upon the Conservation of Resources Theory, this motivation functions as an abundant cognitive fuel reserve. It provides the necessary resilience to consistently oversee quality procedures and maintain a stable output of high-level analytical work, even under highly fluctuating and stressful workloads. Empirical evidence from recent studies in public administration and finance sectors corroborates that internal motivation is a dominant determinant in sustaining long-term performance reliability (Afrin et al., 2023).

**H2:** Work motivation has a positive effect on sustainable employee performance.

### **Fostering Employee Engagement Through Leadership and Motivation**

Employee engagement represents a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption. To foster this profound level of emotional and cognitive attachment, the work environment must offer substantial psychological meaning. A transformational leadership approach that seamlessly embeds environmental conservation values into daily operations provides this higher meaning. When leaders proactively demonstrate resource efficiency and communicate how the institution's green policies contribute to the survival of the planet, they elevate the significance of bureaucratic tasks. This elevation naturally ignites passion, enthusiasm, and dedication among the staff, thereby deepening their engagement (Noor et al., 2023).

Similarly, work motivation originating from a deep internal awareness plays a monumental role in shaping engagement. Employees who are intrinsically motivated are naturally inclined to invest their full cognitive and affective energy into their functional roles (Nusraningrum et al., 2024). They experience a state of flow or absorption where time passes quickly, and they feel a strong sense of pride and identification with their work. Consequently, both external visionary stimuli from leaders and internal psychological drives are posited as key antecedents of employee engagement.

**H3:** Green transformational leadership has a positive effect on employee engagement.

**H4:** Work motivation has a positive effect on employee engagement.

### **Employee Engagement and Sustainable Employee Performance**

Engaged workers are fundamentally different from merely satisfied workers. They are characterized by a level of concentration, physical vitality, and emotional dedication that far exceeds standard operational requirements. Because they are deeply absorbed in their roles, engaged employees are more willing to exert discretionary effort and go the extra mile to ensure organizational success.

Crucially, from the viewpoint of the Conservation of Resources theory, this deep emotional attachment acts as a psychological buffer. Engaged employees perceive high job demands not as threats that deplete their energy, but as challenging opportunities that foster self-actualization and professional growth. Because their work generates positive emotional returns, the continuous expenditure of effort does not lead to severe burnout. Therefore, this dynamic culture of engagement functions as a reliable guarantor for the smooth and consistent fulfillment of performance expectations over extended periods (Putra Pertama & Indiyati, 2025).

**H5:** Employee engagement has a positive effect on sustainable employee performance.

### **The Crucial Mediating Role of Employee Engagement**

In complex bureaucratic organizations, instructional influences or visions articulated by leaders rarely produce instant or permanent increases in performance output. The transmission of a green environmental vision from the top level of management to the operational level of staff is not automatic. The values of sustainability must first be absorbed, internalized, and believed by the workforce to build a solid emotional bond before those values can manifest as resilient and adaptive work practices. Employee engagement is hypothesized to act as this necessary psychological filter.

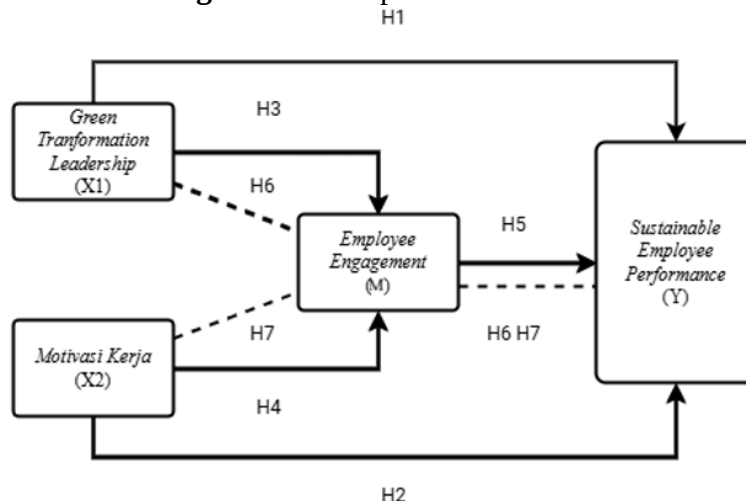
Likewise, internal work motivation is essentially potential energy residing within the individual. Without a precise and structured psychological conduit, this raw internal drive can easily lose direction or dissipate when confronted with institutional obstacles. It requires the state of engagement to consolidate this motivation into a laser-focused concentration that can be directed toward measurable and sustainable performance outcomes (Hoxha & Ramadani, 2024; Nusraningrum et al., 2024). By acting as the bridge, engagement converts leadership vision and individual drive into tangible resilience.

**H6:** Employee engagement mediates the effect of green transformational leadership on sustainable employee performance.

**H7:** Employee engagement mediates the effect of work motivation on sustainable employee performance.

Based on the theoretical foundations and the developed hypotheses, this study proposes a comprehensive structural model. The conceptual framework illustrates the hypothesized direct and indirect relationships between green transformational leadership, work motivation, employee engagement, and sustainable employee performance, as visually presented in Figure 1.

**Figure 1.** Conceptual Framework



## METHOD

To empirically investigate these hypothesized relationships and uncover the underlying psychological mechanisms at play, this study utilized a quantitative explanatory research design. This approach was chosen because it allows for the rigorous statistical testing of causal relationships and mediation effects between latent constructs. A cross-sectional survey method was employed, which involves collecting data from a sample population at a single specific point in time to capture the current attitudes, perceptions, and behaviors of the workforce regarding sustainability and performance.

The target population for this comprehensive study comprised 259 permanent employees stationed across four highly strategic departments at Bank Indonesia. These departments included the Digital Innovation and Development Department, the Data Innovation and Digitalization Department, the Risk Management Department, and the Regional Department. These specific units were selected because their core business processes are heavily reliant on high-level data analytics, continuous digital adaptation, and the formulation of strategic macroeconomic policies, making them ideal subjects for studying cognitive resilience and sustainable performance under pressure.

To ensure the representativeness of the sample, a probability sampling technique utilizing a stratified random sampling approach was applied. This stratification was necessary to ensure objective representation across the four distinct departments, despite them sharing the same human resource governance. The minimum required sample size was meticulously calculated using the Slovin formula. By applying a standard 5 percent margin of error to the total population of 259 employees, the formula determined a minimum sample size requirement of approximately 158 respondents. To mitigate common method variance, a known risk in cross-sectional self-reported surveys, respondent anonymity was strictly guaranteed, allowing participants to provide honest reflections without fear of administrative reprisal.

Primary data were collected directly from the selected respondents using a structured electronic questionnaire distributed via internal communication channels. To quantify the

subjective perceptions of the employees, the questionnaire utilized a 5-point Likert scale, ranging from 1 representing strongly disagree to 5 representing strongly agree. The latent variables in the structural model were carefully operationalized based on established academic literature. Green transformational leadership was measured using 10 indicators adapted to reflect eco-friendly role modeling and vision articulation (Aulia & Nawangsari, 2023). Work motivation was measured using 10 indicators focusing on intrinsic drives such as the need for achievement, autonomy, and competence (Anshori et al., 2025). Employee engagement was captured through 10 indicators reflecting the dimensions of vigor, dedication, and absorption (Putra Pertama & Indiyati, 2025). Finally, sustainable employee performance was assessed using 10 indicators evaluating consistency in quality, adaptability to digital changes, and the ability to mitigate mental fatigue over time (Afrin et al., 2023).

For the inferential data analysis, this study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) assisted by the SmartPLS 4 software application. The PLS-SEM approach was deliberately chosen because it is considered highly ideal and robust for organizational behavior research that deals with perceptual data, non-normal data distributions, and complex structural models that involve multiple mediating pathways (Hair et al., 2022). The analytical procedure was executed in two main sequential phases. The first phase involved evaluating the measurement model, also known as the outer model, to verify the convergent validity, discriminant validity, and overall construct reliability of the questionnaire instruments. The second phase focused on evaluating the structural model, or the inner model, by assessing the R-square values for explanatory power, the Q-square predict values for predictive relevance, and the f-square values for effect sizes. Finally, to determine the statistical significance of the proposed direct and indirect hypotheses, a rigorous one-tailed bootstrapping procedure was executed utilizing 5,000 random subsamples. A strict significance level of 5 percent was applied, meaning a hypothesis would be accepted if the resulting t-statistic was greater than 1.96 and the p-value was less than 0.05.

## **RESULTS AND DISCUSSION**

### **Results**

The demographic profile of the 158 valid respondents provides critical insights into the workforce composition of the strategic departments at Bank Indonesia. The sample indicated a majority of male employees, constituting 67.72 percent, while female employees accounted for 32.28 percent. Regarding age distribution, the workforce is dominated by experienced professionals. The largest age group was employees over 40 years old at 39.24 percent, closely followed by those in the 31 to 40 years category at 38.61 percent. Employees under 30 years old made up the remaining 22.15 percent. Education levels within the sample are notably exceptional, reflecting the high intellectual demands of a central bank. All respondents possessed higher education qualifications, with a significant 69.62 percent holding a Bachelor's degree and 30.38 percent having successfully completed a Master's degree program. Furthermore, an overwhelming 91.14 percent of the respondents had a working tenure of more than two years at the institution. This extensive tenure indicates a deep familiarity with the bank's rigid operational culture, ensuring that their perceptions regarding leadership styles and performance sustainability are based on mature and highly valid observational experiences.

### Measurement Model Evaluation

The evaluation of the measurement model is a prerequisite to ensure that the survey instruments accurately and reliably measure the intended latent constructs before any structural hypotheses are tested. Convergent validity was rigorously assessed by examining the outer loadings of each indicator and the Average Variance Extracted (AVE) values for each construct. As visually presented in Figure 2, the statistical output confirmed that the outer loadings for the vast majority of indicators exceeded the recommended 0.70 threshold, demonstrating strong indicator reliability. A few indicators with loadings slightly below 0.70 were retained because their removal did not significantly improve the overall model fit, and their respective constructs already met the validity criteria.

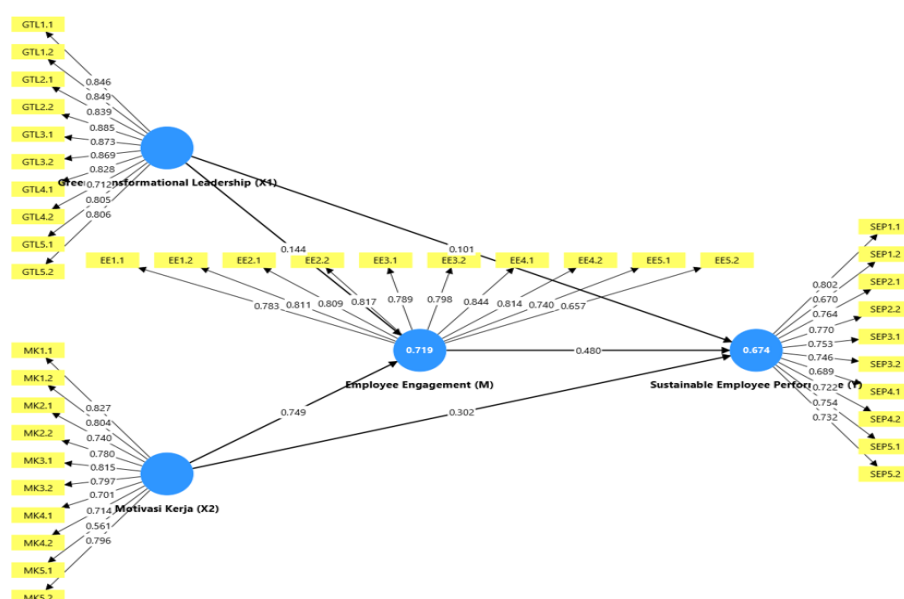
More importantly, all four latent variables recorded an AVE well above the strict 0.50 threshold, thereby confirming valid construct representation. Specifically, Green Transformational Leadership achieved an AVE of 0.693, Work Motivation reached 0.574, Employee Engagement scored 0.621, and Sustainable Employee Performance obtained 0.549. Construct reliability was subsequently confirmed to be excellent. Both the Cronbach's alpha and composite reliability scores for all variables far exceeded the 0.70 minimum requirement, with all scores impressively sitting above the 0.90 mark. This indicates that the questionnaire instruments possess outstanding internal consistency and are free from random measurement errors. Discriminant validity, which ensures that each variable is empirically distinct from the others, was successfully established. The Heterotrait-Monotrait Ratio (HTMT) values across all construct pairings were safely below the conservative 0.90 threshold, and the traditional cross-loading criteria were fully met without any overlapping issues.

**Table 1.** Measurement Model Assessment (Convergent Validity & Reliability)

| Construct                         | Indicator Outer Loadings (Range) | Cronbach's alpha | Composite reliability | Average Variance Extracted (AVE) |
|-----------------------------------|----------------------------------|------------------|-----------------------|----------------------------------|
| Green Transformational Leadership | 0.712 – 0.885                    | 0.950            | 0.957                 | 0.693                            |
| Work Motivation                   | 0.561 – 0.827                    | 0.916            | 0.930                 | 0.574                            |
| Employee Engagement               | 0.657 – 0.844                    | 0.932            | 0.942                 | 0.621                            |
| Sustainable Employee Performance  | 0.670 – 0.802                    | 0.908            | 0.924                 | 0.549                            |

Source: Primary data processed by the researcher (2026)

**Figure 2.** Outer model assessment



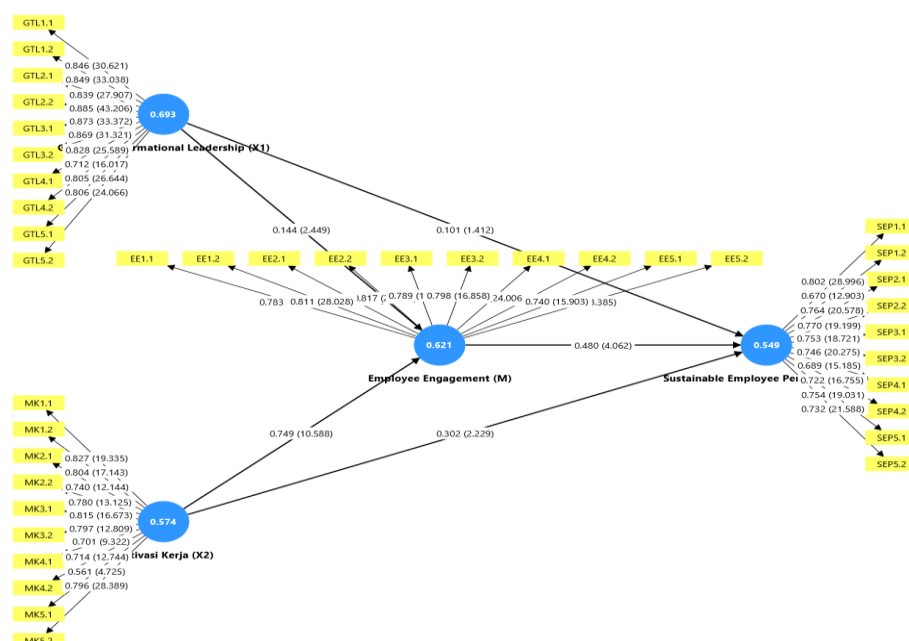
Source: SmartPLS 4 output, processed by the researcher (2026)

## Structural Model and Hypothesis Testing

Following the successful validation of the measurement model, the structural model was evaluated to assess its explanatory and predictive capabilities. The analysis revealed a robust R-square value of 0.719 for employee engagement. This substantial figure indicates that 71.9 percent of the variance in employee engagement among Bank Indonesia staff can be effectively explained by the combined influence of green transformational leadership and work motivation. Furthermore, the R-square value for sustainable employee performance stood at a strong 0.674, meaning that 67.4 percent of the variance in performance sustainability is explained by the model.

To ensure the integrity of the regression results, a Variance Inflation Factor (VIF) test was conducted to check for multicollinearity among the independent variables. The results showed that all VIF values were safely below the critical threshold of 5, ranging only from 1.682 to 3.681. This confirms the complete absence of any critical collinearity issues that could distort the findings. Finally, the predictive relevance of the model was verified using the blindfolding procedure. The Q-square predict values for both endogenous constructs were positive, with employee engagement at 0.714 and sustainable employee performance at 0.573. Because these values are significantly greater than zero, it conclusively demonstrates that the structural model possesses a highly accurate out-of-sample predictive relevance.

**Figure 3.** Bootstrapping t-values of the structural model



Source: SmartPLS 4 output, processed by the researcher (2026)

As illustrated in Figure 3, with the structural model confirmed as sound, hypothesis testing was conducted via the bootstrapping procedure utilizing 5,000 subsamples to generate stable standard errors and precise significance values. The comprehensive results, detailed in Table 2, demonstrate that empirical data provided robust statistical support for six out of the seven proposed hypotheses.

**Table 2.** Direct and indirect hypothesis testing

| Hypothesis and path                                                                              | Beta  | t-statistic | p-value | Decision      |
|--------------------------------------------------------------------------------------------------|-------|-------------|---------|---------------|
| H1: Green Transformational Leadership -> Sustainable Employee Performance                        | 0.101 | 1.412       | 0.158   | Not supported |
| H2: Work Motivation -> Sustainable Employee Performance                                          | 0.302 | 2.229       | 0.026   | Supported     |
| H3: Green Transformational Leadership -> Employee Engagement                                     | 0.144 | 2.449       | 0.014   | Supported     |
| H4: Work Motivation -> Employee Engagement                                                       | 0.749 | 10.588      | < 0.001 | Supported     |
| H5: Employee Engagement -> Sustainable Employee Performance                                      | 0.480 | 4.062       | < 0.001 | Supported     |
| H6: Green Transformational Leadership -> Employee Engagement -> Sustainable Employee Performance | 0.069 | 2.799       | 0.005   | Supported     |
| H7: Work Motivation -> Employee Engagement -> Sustainable Employee Performance                   | 0.359 | 3.288       | 0.001   | Supported     |

Source: SmartPLS 4 bootstrapping output, processed by the researcher (2026)

## Discussion

The empirical hypothesis testing uncovers a highly fascinating and crucial theoretical anomaly where the first hypothesis is firmly rejected. The statistical data explicitly show that

green transformational leadership does not directly influence the sustainable performance of employees at Bank Indonesia. When viewed through the analytical lens of Social Exchange Theory, this rejection makes perfect logical sense within a highly regulated bureaucratic environment. First, there is a phenomenon of cognitive load priority; employees burdened with high-level macroeconomic analysis perceive eco-friendly directives (e.g., paperless operations) as secondary, non-essential tasks. Second, in a central bank, when leaders issue environmentally friendly directives, such as mandating paperless operations or enforcing energy efficiency protocols, these initiatives are often perceived by the staff purely as top-down administrative compliance rules. Because these directives are seen as routine bureaucratic chores rather than inspiring organizational visions, they fail to trigger an intimate socio-emotional exchange. Without this deep psychological connection and reciprocal trust, the moral obligation required to push employees toward long-term resilient performance simply does not form. Therefore, leadership alone, without a connecting mechanism, is insufficient to drive sustainability in daily tasks. This stands in stark contrast to agile private sector firms where direct leadership impacts are often more pronounced.

Conversely, the data provide compelling evidence that intrinsic work motivation has a positive, significant, and direct effect on sustainable employee performance, thereby confirming the second hypothesis. This finding serves as a powerful affirmation of both Self-Determination Theory and the Conservation of Resources Theory. When highly educated professionals in the central bank are granted intellectual autonomy and their analytical competence is recognized, it generates a profound level of pure intrinsic motivation. This internal drive acts as an abundant and renewable cognitive fuel reserve. It empowers the employees to navigate the intense analytical demands, tight deadlines, and complex macroeconomic problem-solving required by the central bank without succumbing to emotional exhaustion or burnout. Because they find the work inherently meaningful, they can sustain high-quality output consistently over time.

While green transformational leadership fails to boost performance directly, the study reveals that it is highly effective in engineering the psychological state of the workforce, significantly increasing employee engagement and supporting the third hypothesis. Leaders who can convincingly articulate the broader vision of planetary preservation and align it with the institution's monetary policies bestow a profound sense of psychological meaningfulness upon otherwise repetitive bureaucratic routines. This visionary communication ignites a deep sense of institutional pride among the staff. Furthermore, the analysis shows that work motivation serves as the most dominant and massive engine in forming employee engagement, massively supporting the fourth hypothesis. The intrinsic satisfaction derived from autonomous analytical work compels employees to willingly and wholly absorb their cognition and physical energy into their functional roles without requiring any form of external coercion or micromanagement.

Consequently, employee engagement emerges as the ultimate resilience dynamo that positively and significantly boosts sustainable employee performance, firmly supporting the fifth hypothesis. Highly engaged employees possess remarkable mental recovery mechanisms. Because they are deeply dedicated to and absorbed in their roles, they perceive fluctuating workloads, sudden technological disruptions, and immense macroeconomic pressures not as resource-depleting threats, but as meaningful avenues for self-actualization and devoted service to the nation. This emotional buffer prevents the rapid depletion of cognitive resources, ensuring that performance remains stable and sustainable regardless of external stressors.

Critically, this comprehensive study discovers that employee engagement acts as a full mediator between green transformational leadership and sustainable employee performance, providing robust support for the sixth hypothesis. Synthesizing the principles of Social Exchange Theory, a leader's green environmental vision must be fully absorbed and internalized by the workforce to build a solid emotional bond (Muhammad et al., 2024) before it can alter tangible work habits. Without this essential psychological bridge, noble sustainability goals and green visions remain nothing more than passive, ineffective operational policies gathering dust on a desk. Additionally, the results demonstrate that employee engagement partially mediates the effect of work motivation on sustainable employee performance, supporting the final hypothesis. While motivation alone is helpful, its positive impact is drastically and significantly amplified when it is funneled through the highly focused and dedicated lens of engagement. Engagement consolidates latent internal motivation into a sharp, resilient, and highly productive analytical focus that guarantees long-term performance sustainability.

## **CONCLUSION AND SUGGESTIONS**

### **Conclusion**

This comprehensive research provides a deep, nuanced, and empirically validated understanding of the causal mechanisms that govern sustainable human resource management within the high-pressure context of a central bank. The findings conclusively confirm that the implementation of green transformational leadership, on its own, cannot directly guarantee sustainable employee performance. This occurs because structural environmental directives are frequently misinterpreted by staff merely as rigid administrative compliance rules rather than inspiring visions. Instead, the true direct driver of performance resilience is deep-seated, intrinsic work motivation. Cultivating an environment of intellectual autonomy equips employees with the renewable cognitive stamina necessary to consistently produce high-quality analytical work and ward off severe burnout.

The absolute crux of the matter, however, lies in the role of employee engagement, which serves as the indispensable psychological bridge within this bureaucratic ecosystem. Engagement acts as a full mediator for green leadership, providing empirical proof that an environmental vision must be emotionally embraced and internalized by the workforce before it can successfully translate into adaptable and sustainable daily work practices. Furthermore, engagement partially mediates work motivation, serving as a powerful magnifying glass that transforms latent intrinsic drives into a laser-focused, highly resilient analytical output that benefits the institution immensely.

For practical application, these critical insights strongly suggest that the human resource management at Bank Indonesia needs to initiate a fundamental shift in its leadership approach. Leaders must purposefully move away from merely dictating green regulations through top-down memos. Instead, they must focus on building authentic, individualized connections with their teams to foster genuine emotional buy-in for sustainability goals. Moreover, management must actively protect, recognize, and nurture intrinsic motivation by deeply respecting the analytical independence of their highly skilled professionals. Finally, to lock in this immense potential for the nation's strategic tasks, it is vital for the institution to design workspaces and operational workflows that actively minimize bureaucratic noise and redundant administrative burdens. Creating such an environment will allow employees to reach that critical psychological state of deep absorption and engagement.

## Suggestions

While this study provides significant insights, it is not without limitations. First, the sample was confined to 158 employees across four specific strategic departments at the head office, which may limit the generalizability of the findings across all regional branches. Second, the cross-sectional nature of the survey prevents the establishment of absolute causal timelines between leadership interventions and long-term performance changes. To further build on these groundbreaking findings, future researchers are highly encouraged to expand the population scope to regional representative offices across the archipelago. Doing so would test the geographical consistency of this model. Additionally, employing mixed-method approaches and integrating external variables such as Green Human Resource Management practices or psychological safety climates would undoubtedly yield even deeper, more holistic insights into the psychology of sustainable performance in public institutions.

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