

The Role of Environmental, Social and Governance (ESG) Practices and Corporate Social Responsibility (CSR) on Employee Behavior in Energy Companies

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Abstract

This research explores the complex role of Environmental, Social and Governance (ESG) and Corporate Social Responsibility (CSR) practices in shaping employee behavior in the energy sector. Through a systematic literature review approach of research spanning 2017-2025, the study identifies the multidimensional dynamics through which sustainability initiatives influence employee motivation, engagement and performance. Key findings show that environmental dimensions are positively correlated with employees' intrinsic motivation, especially in the younger generation who show higher responsiveness to sustainability initiatives. Social aspects of ESG play a significant role in building emotional connectedness between employees and the organization, while transparent governance practices increase trust, encourage innovative behavior, and strengthen organizational citizenship behavior. The research shows significant variations in ESG implementation and impact across different energy subsectors, underscoring the need for an integrated contextual approach. The study concludes that the authentic integration of ESG and CSR practices not only improves financial performance and competitive advantage, but also fundamentally transforms the work ecosystem through the creation of a more meaningful, sustainable and competitive environment. The strategic implications suggest that ESG is increasingly becoming a key determinant in shaping employee behavior in the energy sector, emphasizing the importance of adopting a holistic approach that harmonizes business, employee, and environmental interests to create sustainable shared value.

Keywords

ESG; CSR; ; Employee; Behavior; Energy Sector

INTRODUCTION

In an increasingly complex global context, companies face ongoing challenges that require a holistic approach to organizational management. Fometescu et al. (2024) emphasize the importance of ESG scores as a determinant of financial success in the energy and utilities sector. Yucel & Yucel (2024) identify strategic dynamics in sustainable development, while Ziolo et al. (2023) highlighted variations in ESG risk approaches across different organizations. Shetty & Suraj (2024) further affirmed the positive impact of ESG practices on organizational performance, and Ari et al. (2023) underline the significance of ESG integration in corporate strategy.

The transformation of the contemporary business paradigm requires organizations to go beyond traditional approaches that are solely profit-oriented.

Kamble & Bhople (2024) showed a positive correlation between *Corporate Social Responsibility* (CSR) initiatives and employee engagement. Zhang et al. (2024) revealed that ESG behaviors significantly affect employee satisfaction. Lee & Park (2023) found a relationship between ESG factors and intrinsic motivation across generations. Jin & Kim (2022) explored the influence of ESG activity recognition on job performance. Torres et al. (2023) examined the potential of responsible business in promoting sustainable employment.

The complexity of the modern business environment requires organizations, particularly in the energy sector, to adopt a comprehensive approach to resource management. Wagner & Boyle (2022) developed an employee pro-ESG behavior measurement scale that includes environmental, social, and governance

dimensions. Shetty & Suraj (2024) highlighted the impact of ESG practices on employee loyalty and corporate reputation. Yucel & Yucel (2024) identified significant differences in ESG performance between energy subsectors. Ziolo et al. (2023) examined the incorporation of ESG risks in business models. Lee & Park (2023) analyze the relationship of ESG with intrinsic motivation across generations. Jin & Kim (2022) explored the role of organizational culture in mediating ESG activities.

Global dynamics present ongoing challenges that require a thorough transformation in organizational practices. Fometescu et al. (2024) emphasized the integration of sustainable practices in corporate strategy. Ari et al. (2023) analyzed the impact of ESG on corporate performance in the energy sector. Zhang et al. (2024) investigated the relationship between ESG behaviors and employee satisfaction. Shetty & Suraj (2024) uncovered the intersection of ESG principles with corporate performance. Yucel & Yucel (2024) mapped out sustainable development strategies in the context of the energy industry.

This research aims to explore the complex role of Environmental, Social, and Governance (ESG) and Corporate Social Responsibility (CSR) practices in shaping employee behavior and perceptions in the energy sector. Kamble & Bhople (2024) demonstrated the significance of CSR in increasing employee motivation. Torres et al. (2023) analyzed the potential of responsible business instruments. Wagner & Boyle (2022) identified dimensions of employee pro-ESG behavior. Lee & Park (2023) investigated the influence of ESG on intrinsic motivation. Jin & Kim (2022) examined the impact of ESG activity recognition on job performance. Shetty & Suraj (2024) highlighted the relationship between ESG practices and various aspects of organizational performance.

Integration of ESG and CSR in Driving Sustainable Performance of Energy Companies: Strategic Perspectives and Engagement

The Environmental, Social, and Governance (ESG) concept has evolved into a comprehensive evaluation framework for assessing the sustainable performance of modern organizations. ESG encompasses three main dimensions-environmental, social, and governance-that together serve as a reference in crafting responsible and future-

oriented business strategies (Fometescu et al., 2024; Yucel & Yucel, 2024). In the view of Shetty & Suraj (2024), ESG serves as a set of principles that steer business practices towards social responsibility and sustainability. Ziolo et al. (2023) even position ESG as a strategic risk management tool, while Ari et al. (2023) call it a performance evaluation instrument that goes beyond conventional financial metrics.

Alongside ESG, the concept of *Corporate Social Responsibility* (CSR) also plays an important role in promoting sustainable development. CSR reflects an organization's commitment to positively impact society and the environment through ethical business practices (Kamble & Bhople, 2024). More than just philanthropy, CSR is now interpreted as a strategic mechanism that creates shared value, strengthens reputation, and reinforces corporate social legitimacy (Torres et al., 2023; Lee & Park, 2023; Jin & Kim, 2022).

In practice, the environmental dimension of ESG highlights a company's responsibility to the ecosystem. Sustainability practices such as carbon emission reduction, resource conservation and environmental risk mitigation are the main focus, especially in the energy sector which has a significant ecological footprint (Yucel & Yucel, 2024; Ari et al., 2023; Fometescu et al., 2024). Meanwhile, the social dimension evaluates a company's relationships with stakeholders, such as employees, customers and communities. Inclusive social practices have been shown to drive engagement and job satisfaction, especially through the creation of a fair and supportive work environment (Zhang et al., 2024; Kamble & Bhople, 2024). The governance dimension emphasizes integrity, ethical leadership, and transparent decision-making structures. Good governance strengthens accountability and increases stakeholder trust (Shetty & Suraj, 2024; Wagner & Boyle, 2022).

Employee engagement is an important aspect that shows direct resonance between ESG and internal organizational dynamics. Research shows that effective CSR and ESG initiatives increase employees' intrinsic motivation, loyalty, as well as pro-organizational behavior (Jin & Kim, 2022; Lee & Park, 2023). Wagner & Boyle (2022) even formulated a pro-ESG behavior framework as an indicator of active and strategic employee engagement.

Strategically, ESG has a significant impact on an organization's long-term performance. Fometescu et al. (2024) confirmed that ESG scores are positively correlated with financial success, while Yucel & Yucel (2024) identified that ESG strategies tailored to sector characteristics, such as energy, generate competitive benefits. Ziolo et al. (2023) and Ari et al. (2023) also reinforce the position of ESG as a risk mitigation approach integrated in modern business models.

The energy sector faces distinctive ESG challenges, including high environmental risks and the pressures of transitioning to clean energy. Research shows that a contextual, responsive and cross-dimensional ESG approach is urgently needed in this subsector (Yucel & Yucel, 2024; Ziolo et al., 2023). On the other hand, CSR provides a complementary approach that focuses on strengthening social relations and moral values of organizations.

CSR itself is divided into several strategic dimensions. The economic dimension encourages business practices that are not only financially profitable but also socially sustainable (Lloyd, 2017; Ari et al., 2023). The ethical and legal dimension emphasizes compliance with regulations and ethical norms, creating a sense of fairness within the organization (Torres et al., 2023). The philanthropic dimension fosters employees' emotional attachment through voluntary social activities (Kamble & Bhople, 2024; Kim et al., 2024). The strategic dimension encourages the integration of CSR into long-term business goals (Shetty & Suraj, 2024), and the stakeholder dimension emphasizes dialogue and engagement across social actors (Zhang et al., 2024; Huh & Lee, 2023).

The integration between CSR and ESG shows that corporate sustainability is no longer just a trend, but an essential part of modern business strategy. Alves et al. (2025) state that positive perceptions of ESG and CSR significantly increase employee retention and pride in the organization. In the energy sector, companies with structured CSR programs show better financial performance and higher resilience in the face of market disruption (Fometescu et al., 2024; Yucel & Yucel, 2024). This emphasizes the importance of combining these two approaches in one adaptive and value-based policy framework. Thus, ESG and CSR are not just complementary instruments, but rather key

pillars in building resilient, ethical, and competitive organizations in the era of global sustainability.

Model 1. The Influence of ESG and CSR on Employee Behavior through the Mediation of Intrinsic Motivation & Trust

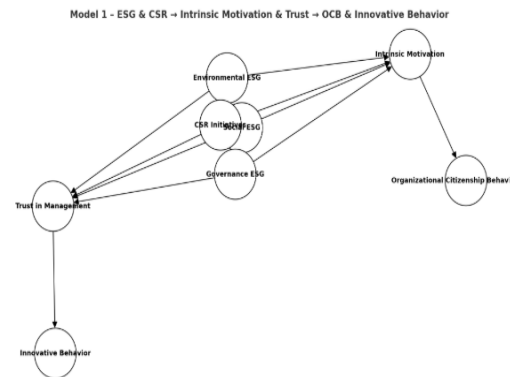


Figure 1. Model 1

Model 1 illustrates the direct relationship between *Environmental, Social, and Governance* (ESG) practices—comprising environmental, social, and governance dimensions—and *Corporate Social Responsibility* (CSR) initiatives on employee behavior in the energy sector. In this model, ESG and CSR influence two main mediating variables: intrinsic motivation and trust in management. Intrinsic motivation subsequently drives *Organizational Citizenship Behavior* (OCB), while trust fosters innovative behavior. This model emphasizes that the success of ESG and CSR not only has a direct impact on organizational outcomes but also operates through enhancing employees' motivation and trust as key psychological factors.

In other words, a sustainable work environment, inclusive social practices, transparent governance, and authentic CSR programs can create a strong sense of belonging, purpose, and emotional engagement among employees. These psychological effects are then manifested in voluntary behaviors that support the organization (OCB) and openness to innovation, ultimately improving the competitiveness and sustainability of companies in the energy sector.

Model 2. Moderating Role of Generation and Energy Subsector Type in the ESG–Job Satisfaction & Retention Relationship.

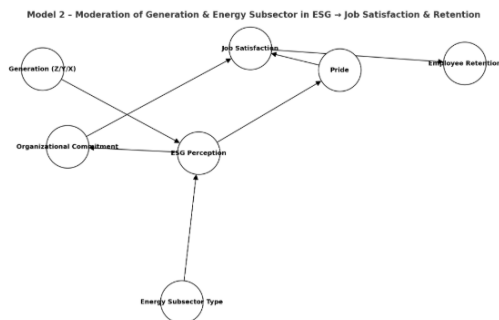


Figure 2. Model 2

Model 2 explains the influence of employees' perceptions of ESG (*ESG Perception*) on pride and organizational commitment, which in turn affect job satisfaction and ultimately impact employee retention. The relationship between ESG and these outcomes is moderated by generational factors (Gen Z, Gen Y, Gen X) and energy subsector types (e.g., renewable energy, oil & gas). This model highlights that the effectiveness of ESG in enhancing job satisfaction and employee retention is significantly influenced by demographic characteristics and industry context. Therefore, ESG strategies should be tailored to align with employee profiles and the specific subsector in which the company operates.

RESEARCH METHODS

This research uses a qualitative approach with a *systematic literature review* method based on references with a time span of 2017 - 2025. This method was chosen to comprehensively and critically explore various studies related to the role of Environmental, Social and Governance (ESG) practices and Corporate Social Responsibility (CSR) on employee behavior in the energy sector.

RESULTS AND DISCUSSION

The Influence of ESG on Employee Behavior in the Energy Sector

Research shows that Environmental, Social, and Governance (ESG) and Corporate Social Responsibility (CSR) have a transformative role in shaping employee behavior in the energy sector. The environmental dimension influences employees' intrinsic motivation, especially in Generation Z and Y, who tend to be more

active in pro-environmental practices such as energy saving and recycling. In addition, social engagement through CSR programs increases job satisfaction, loyalty, and emotional connection, while transparent governance strengthens trust and organizational innovation.

Effect of Environmental Practices on Employee Behavior

Environmental practices in ESG, such as energy saving, recycling and sustainability programs, significantly influence employee motivation and engagement in energy companies. Younger generations (Gen Z and Millennials) tend to be more responsive to green initiatives, which increases intrinsic motivation and sense of purpose. Engagement in pro-environmental activities also strengthens organizational commitment and employee identification with company values, thereby driving more positive and sustainable work behaviors.

Impact of Social and CSR Initiatives on Employee Engagement

The social dimension of ESG and CSR programs, such as volunteering, community development, and diversity and inclusion policies, strengthens employees' emotional ties with the company. Employees who feel the company cares about social issues tend to be more satisfied, loyal and motivated to contribute more. Research shows that authentic and meaningful social practices-especially for younger generations-can increase job satisfaction, reduce turnover intentions, and create a collaborative work environment.

The Role of Governance in Building Trust and Innovation

Good corporate governance, which includes transparency, accountability and employee participation in decision-making, contributes to increased trust in management. Strong governance practices encourage innovative and organizational citizenship behavior, where employees are more active in providing ideas and supporting company goals. In the energy sector, the application of ethical and inclusive governance principles also helps to reduce reputational risk and strengthen the long-term competitiveness of the business.

Strategic Implications and Challenges in the Energy Sector

Strong ESG implementation has a positive impact on employee retention,

financial performance and competitive advantage. However, a key challenge lies in the variation of ESG performance across energy subsectors, which requires context-specific tailored strategies and deep integration with business models. The study emphasizes the importance of a holistic ESG approach to maximize its impact on employee behavior and organizational sustainability.

CONCLUSION

Environmental, Social and Governance (ESG) and Corporate Social Responsibility (CSR) practices have been shown to have a complex transformative role in shaping employee behavior in the energy sector. Comprehensive research shows that ESG is not just a compliance framework, but a strategic mechanism capable of driving fundamental changes in organizational dynamics. Through the integration of environmental, social and governance dimensions, energy companies can create a more meaningful, sustainable and competitive work ecosystem.

The environmental dimension plays a key role in transforming employees' intrinsic motivation, especially in younger generations who are increasingly concerned about sustainability issues. Studies show that involvement in pro-environmental initiatives not only increases organizational commitment, but also creates a deeper sense of purpose. Employees who feel they are contributing to a sustainable cause tend to display more positive, innovative and loyal work behaviors.

The social aspect of ESG contributes significantly to building emotional connections between employees and the organization. Initiatives such as volunteering programs, community development, and diversity support have been shown to consistently increase job satisfaction, loyalty, and emotional connection. Differences in intergenerational responses point to the need for a sensitive and customized approach in implementing CSR social practices.

Governance dimensions provide an important foundation for transforming organizational culture. Transparency, strong internal control systems, and the creation of a culture of openness are proven to encourage innovative behavior, increase employee trust, and strengthen organizational citizenship behavior. This shows that good governance is not just about control mechanisms, but also

about creating an environment that supports employee participation and development.

For the energy sector, which inherently faces complex sustainability challenges, ESG and CSR implementation is becoming more than just a strategic choice. Research shows that organizations that successfully integrate ESG authentically are able to attract top talent, increase organizational resilience, and create positive sustainable impact. Variations in ESG performance between energy subsectors emphasize the need for a contextualized and integrated approach.

Future projections suggest that ESG will increasingly become a key determinant in shaping employee behavior, motivation and performance. Organizations in the energy sector need to develop ESG strategies that do not simply meet minimum standards, but are truly integrated into the core of their business models. This requires an overall commitment from leadership, active employee engagement, and a sustainable approach to transforming organizational culture.

To conclude, Environmental, Social and Governance (ESG) and Corporate Social Responsibility (CSR) practices have proven to have profound transformative potential in shaping the working ecosystem in the energy sector. Not just a strategy, but a comprehensive organizational philosophy, ESG offers a blueprint for organizations to create sustainable shared value, where the interests of business, employees and the environment can synergize harmoniously.

REFERENCE

- Alves, I., Mesquita, E., Caneppele, N. R., & Martins, F. S. (2025). Beyond practicing: understanding the influence of ESG perceptions on employee retention. *Management Research*. <https://doi.org/10.1108/mrijam-06-2024-1562>
- Arı, G., Karan, M. B., & Sarioğlu, S. E. (2023). The impact of environmental, social and governance (ESG) and corporate social responsibility (CSR) ratings on corporate performance in the energy sector: A literature review.
- Fometescu, A., Hațegan, C.-D., & Curea-Pitorac, R.-I. (2024). How Responsible Are Energy and Utilities Companies in Terms of Sustainability and Economic Development? *Energies*, 17(23), 6209. <https://doi.org/10.3390/en17236209>

- Huh, B. M., & Lee, H.-Y. (2023). Impact of ESG Activities on Employee Behavior: Through Organizational Trust and Organizational Identification. *Korean Management Review*, 52(2), 415-442. <https://doi.org/10.17287/kmr.2023.52.2.415>
- Jin, M., & Kim, B. (2022). The effects of ESG activity recognition of corporate employees on job performance: The case of South Korea. *Journal of Risk and Financial Management*, 15(7), 316.
- Lloyd, Robert, "The Impact of CSR Efforts on Firm Performance in the Energy Sector" (2017). Doctor of Business Administration (DBA). 15.
- Kamble, P. H., & Bhople, M. (2024). CSR and Employee Engagement: How Social Responsibility Initiatives Affect Workforce Motivation. *International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)*, 4(24). DOI: 10.48175/IJARSCT-19785
- Kim, J. (Sunny), Park, Y., Kim, B.-H., & Lee, C. K. (2024). *Impact of perceptions of ESG on organization-based self-esteem, commitment, and intention to stay*. <https://doi.org/10.1080/10548408.2023.2293026>
- Lee, C., & Park, S. (2023). Impact of ESG on employees' intrinsic motivation across generations. *Korea Rev. Int. Stud*, 16, 97-119.
- Shetty, A.R., & Suraj, N. (2024). THE INTERSECTION OF ESG PRINCIPLES AND CORPORATE PERFORMANCE: INSIGHTS FROM EXISTING RESEARCH. *EPRA International Journal of Economics, Business and Management Studies (EBMS)*, 11(24). <https://doi.org/10.36713/epra17714>
- Tsourvakas, G., & Yfantidou, I. (2018). Corporate social responsibility influences employee engagement. *Social Responsibility Journal*, 14(1), 123-137.
- Wagner, M., & Boyle, M. (2022). Defining employee pro-environmental, social and governance behaviors. *The Business & Management Review*, 13(2), 230-236.
- Yucel, M., & Yucel, S. (2024). Environmental, Social, and Governance (ESG) Dynamics in the Energy Sector: Strategic Approaches for Sustainable Development. *Energies*, 17(24), 6291.
- Zhang, T., Zhang, J., & Tu, S. (2024). An Empirical Study on Corporate ESG Behavior and Employee Satisfaction: A Moderating Mediation Model. *Behavioral Sciences*, 14(4), 274.
- Ziolo, M., Bąk, I., & Spoz, A. (2023). Incorporating ESG risk in companies' business models: State of research and energy sector case studies. *Energies*, 16(4), 1809.

List of Tables

Table 1. Previous Researchers

Researcher	Variables	Results
Lloyd (2017)	Independent Variable: 1. ESG Dependent Variable: 1) EBITDA, 2) ROA, 3) ROE	This study investigated the relationship between Corporate Social Responsibility (CSR) and financial performance in the energy sector, using ESG disclosure scores as an independent variable. It was found that between 18% and 39% of the variance in financial performance can be explained by CSR efforts. The study highlights significant relationships in long-term oriented countries and specific subsectors, suggesting that energy companies should engage in CSR to meet stakeholder demands and improve competitiveness amid increasing scrutiny
Jin & Kim (2022)	Independent Variable: 1. ESG Activity Recognition Dependent Variable: 1) Job Performance Mediating Variables: 1. Change Support Behavior 2. Innovative Organization Culture 3. Job Crafting	The results show that the recognition of ESG activities by employees of manufacturing companies in South Korea does not directly affect job crafting, but affects job crafting through the mediation of innovative organizational culture and change support behavior. Other results show that ESG activity recognition also positively affects job crafting and job performance through the mediation of change support behavior and innovative organizational culture.
Wagner & Boyle (2022)	Variable Identification: 1. Volunteer support 2. Employee abandonment campaign 3. Diversity and inclusion 4. Environmental initiatives 5. Data governance 6. Scale development	This research resulted in a comprehensive measurement scale for employee pro-ESG behaviors that includes three main dimensions: pro-environmental, pro-social, and pro-governance behaviors. The researchers identified that employees can influence an organization's ESG performance through voluntary actions such as supporting environmental initiatives (energy saving, recycling), participating in social activities (volunteering, donations, supporting diversity and inclusion), and governance (good data management, safeguarding customer interests, reporting policy violations).
Ari et al. (2023)	Dependent Variable: 1. Corporate financial performance (CFP) Independent Variable: 1. ESG, 2. CSR	This study shows that there is a significant relationship between ESG/CSR management and the financial performance of companies in the energy sector. The completion of ESG/CSR is considered important because the energy sector is one of the biggest threats to environmental disruption and sustainability.
Huh & Lee (2023)	Independent Variable: 1. Employee perception of ESG Dependent Variable: 1. Innovative behavior, 2. organizational citizenship behavior Mediating variable: 1. organizational trust, 2. organization identification	The study reveals that employees' perceptions of ESG activities significantly influence their organizational trust and identification. This, in turn, affects their innovative behavior and organizational citizenship behavior. The study confirms that higher perceptions of ESG activities lead to increased trust and identification with the company, highlighting the importance of strengthening ESG initiatives. As such, effective ESG activities can positively enhance employee behavior, encouraging a more engaged and innovative workforce.
Lee & Park (2023)	Dependent Variable: 1. Intrinsic Motivation (Employee Intrinsic Motivation) Independent Variable: 1. Environmental-related ESG 2. Society-related ESG 3. Governance-related ESG Moderating Variables: 1. Generation - Gen Z, Gen Y, Gen X	The results show that ESG factors related to environment and social have a positive significant relationship with employees' intrinsic motivation across all generations studied, while governance factors show no significant relationship.
Torres et al. (2023)	Dependent Variable: 1. Sustainable work Independent Variable: 1. Corporate Social Responsibility (CSR)/Environmental, Social, and Governance (ESG) instruments (standards and frameworks)	The research findings highlight the level of inclusiveness of these instruments and support global efforts for harmonization by identifying common topics related to employment and working conditions.
Ziolo et al. (2023)	Dependent Variable 1. Company business sustainability	The results show that large companies and SMEs tend to consider ESG risks in their risk management (ERM) systems, while small companies and startups tend to ignore them.

	Independent Variable 1. ESG (Environmental, Social, and Governance) Risk	Geographically, companies in Europe, Asia and Australia are more likely to include ESG risks in their ERM, while this is less common in Latin America.
Fometescu et al. (2024)	Independent variable: 1. ESG (environmental, social, governance) score. Dependent variable: 1. Key financial metrics (ROA and ROE)	This research highlights the importance of ESG scores as a determinant of financial success in the energy and utilities sector advocating the integration of sustainable practices into corporate strategy.
Kamble & Bhople (2024)	Independent Variable 1. Corporate Social Responsibility (CSR) initiatives, including: a) Environmental sustainability program b) Community engagement c) Ethical labor practices Dependent Variable 1. Employee engagement, including: a) Workforce motivation b) Job satisfaction c) Organizational loyalty Mediating Variable 1. Trust between employees and management 2. A sense of purpose and fulfillment at work	Research shows a significant positive correlation between CSR initiatives and employee engagement levels. Organizations that actively pursue CSR are more likely to have employees with higher levels of motivation and commitment. Employees who view their organization as a socially responsible entity report increased job satisfaction and a deeper emotional connection to their work.
Kim et al. (2024)	Independent variable: 1. perception of ESG practices Dependent variable: 1. organization-based self-esteem, 2. commitment, 3. intention to stay, 4. the importance of ESG practices	This study shows that employees' perceptions of ESG practices significantly influence their work attitudes and behaviors. In particular, the study highlights that ESG practices, which include environmental, social, and governance dimensions, play an important role in fostering self-esteem and organization-based commitment among employees. This, in turn, increases their intention to remain with the company, suggesting that effective ESG initiatives can lead to improved employee retention and overall workplace satisfaction within integrated resorts.
Shetty & Suraj (2024)	Variables in Research Dependent Variable: 1. Organizational Performance 2. Employee Engagement 3. Company Reputation 4. Financial Performance Independent Variable: 1. ESG (Environmental, Social and Governance) Principles/Practices 2. Company Sustainability Initiatives Mediating Variables: 1. Work Environment 2. Employee Psychological Wellbeing 3. Workplace Behavior Moderating Variables: 1. Workplace Type (hybrid/remote work environment) 2. Industry Type 3. Geographical Situation	The research findings show that strong ESG (Environmental, Social, and Governance) practices have a positive impact on organizational performance, employee loyalty, and corporate reputation.
Yucel & Yucel (2024)	Dependent Variable 1. Environmental Score (Environmental/E) 2. Social Score (Social/S) 3. Governance Score (G) 4. Overall ESG score Independent Variable 1. Energy industry sub-sectors (9 categories): Coal Integrated Oil and Services Oil and Gas Drilling Oil and Gas Exploration and Production	Yucel and Yucel's (2024) study revealed significant differences in ESG performance across energy sub-sectors, with the key finding of a strong reciprocal relationship between environmental (E) and social (S) components, while the governance (G) component showed minimal influence on both. The study concludes that energy companies need to develop ESG strategies specific to their sub-sectors, capitalizing on the positive E-S relationships, while improving the integration of governance practices to create sustainable shared value.

	Oil and Gas Refining and Marketing Oil and Gas Transportation Services Oil-related Services and Equipment Renewable Energy Equipment and Services Uranium	
Zhang et al. (2024)	<p>Dependent Variable: Employee satisfaction</p> <p>Independent Variable: ESG behavior - measured using the Sino-Securities Index ESG Ratings.</p> <p>Mediating Variables:</p> <ol style="list-style-type: none">1. Corporate information transparency2. Internal control mechanisms <p>Moderating Variables:</p> <ol style="list-style-type: none">1. Executive environmental awareness2. Employee educational attainment	The results show that corporate ESG behavior significantly increases employee satisfaction. Transparency of corporate environmental information and internal control mechanisms are the main mediators in the relationship between ESG behavior and employee satisfaction.
Alves et al. (2025)	<p>Dependent Variable:</p> <ol style="list-style-type: none">1. Employee Retention <p>Independent Variable:</p> <ol style="list-style-type: none">1. ESG Perception <p>Mediating Variable:</p> <ol style="list-style-type: none">1. Satisfaction,2. Pride <p>Moderating Variables:</p> <ol style="list-style-type: none">1. pro-environmental behavior	This study highlights that perceptions of environmental, social, and governance (ESG) factors significantly influence employee behavior, especially in improving retention through increased satisfaction and pride. In addition, employees' pro-environmental behaviors further strengthen the positive relationship between ESG perceptions and retention. This suggests that cultivating a strong ESG culture can lead to more engaged and committed employees, especially in emerging markets such as Brazil, where socio-economic and environmental challenges are prevalent.