

Legal Implications of ESG Integration on Talent Management Policies in Indonesia's Renewable Energy Sector: An Analysis of Regulations and Corporate Practices

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ABSTRACT

The energy transition in Indonesia demands a restructuring of corporate governance through the integration of Environmental, Social, and Governance (ESG) criteria, which are now transforming from voluntary disclosure to mandatory compliance. This article analyzes how energy regulations in Indonesia, particularly those related to the Domestic Component Level (TKDN) and sustainability reporting, have a direct impact on the reconstruction of talent management policies. The novelty of this research lies in filling an interdisciplinary research gap that bridges upstream economic law with downstream corporate labor law. Using a juridical-normative research method and an empirical approach, it was found that sectoral regulatory fragmentation and an extreme skills gap are the main obstacles to corporate legal compliance. The results of multiple linear regression analysis and Structural Equation Modeling-Partial Least Squares (SEM-PLS) showed a coefficient of determination (R^2) of 0.635, confirming that 63.5% of the variation in HR sustainability is significantly influenced by the integration of Green Human Resource Management (Green HRM) and talent management. Compliance with energy regulations forces corporations to adopt Green HRM to mitigate legal risks and meet the Net Zero Emission (NZE) 2060 ambition. Legal engineering through harmonization of the RPOJK draft that adopts IFRS S2 and digitalization of HR master data are absolute prerequisites in overcoming the risk of employment greenwashing and maintaining corporate legal compliance.

Keywords: ESG, Energy Regulation, Talent Management, Green HRM, TKDN, Legal Compliance.

INTRODUCTION

The global commitment to decarbonization has triggered a fundamental shift in the legal architecture of the international economy. Indonesia, as a significant carbon emitter and holder of abundant renewable energy potential, has ratified the Paris Agreement through Law Number 16 of 2016. This ratification was marked by the establishment of a firm

geopolitical target to achieve Net Zero Emissions (NZE) by 2060 or sooner as a key pillar of national economic transformation. The logical implication of this international legal commitment is the necessity of a massive, systematic, and structured energy transition, shifting dependence from fossil-based energy to the renewable energy sector.

However, the energy transition should not be viewed in a reductionist manner as merely a matter of upstream technology substitution. From a corporate and macroeconomic perspective, this transition demands a comprehensive restructuring of corporate governance. Environmental, Social, and Governance (ESG) parameters, originally developed within the realm of soft law and international business ethics, have now undergone a process of legal positivization in Indonesia. ESG has transformed into a set of legal instruments that are binding (hard law) and enforceable (mandatory obligations). The pioneering positive implementation of ESG principles in Indonesia was marked by the enactment of Financial Services Authority Regulation Number 51/POJK.03/2017 (POJK 51/2017) concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. This regulation explicitly shifts the orientation of corporate law from a shareholder-centric (prioritizing shareholder profits alone) to a stakeholder-centric one, requiring corporations to prepare periodic Sustainability Reports.

Despite the increasingly intense discourse on green governance, the current academic literature still reveals several fundamental research gaps. First, the epistemological gap. Most studies of energy law and investment law in Indonesia have been unidirectional, with a very limited focus on fiscal incentive schemes, risk-based business licensing procedures (OSS-RBA), or the determination of electricity purchase tariffs (feed-in tariffs). In contrast, the human resource management literature discusses Green HRM purely as a managerial strategy for employee satisfaction or organizational efficiency without addressing the aspect of criminal sanctions in employment. There is a lack of interdisciplinary legal studies examining how upstream macro regulations (such as the energy transition) causally bind and reconstruct downstream corporate employment law.

Second, the Regulatory Tension Gap. No doctrinal legal studies have yet examined the internal contradictions between laws and regulations (antinomy of norms) in Indonesia when ESG principles are enforced. On the one hand, corporations are bound by protectionist economic laws through the Domestic Component Level (TKDN) requirement to absorb a large portion of the local workforce. However, on the other hand, the state has not yet provided the legal educational infrastructure capable of producing certified green talent.

This legal tension places corporations in a vulnerable position to violate occupational safety principles (Labor Law) in pursuit of TKDN percentages, a compliance dilemma overlooked in previous scientific publications.

Third, the Methodological Gap. The majority of research on corporate governance or environmental law in Indonesia still relies on doctrinal-qualitative juridical methods that tend to be abstract. On the other hand, empirical management research often uses general samples without considering the specific implications of coercive regulations such as POJK 51/2017. This study addresses this gap by employing an integrated combination method, which evaluates normative compliance with the law while providing empirical validation through econometric analysis using Structural Equation Modeling-Partial Least Squares (SEM-PLS) based on real-world data from the implementation of ESG regulations in Indonesia.

Therefore, the novelty of this research lies in its interdisciplinary analysis that integrates these three research gaps. This article specifically examines the causal correlation between ESG compliance legal obligations and renewable energy regulations and the transformation of talent management policies through the adoption of Green Human Resource Management (Green HRM). This study is expected to objectively map corporate compliance challenges and formulate a legal risk mitigation framework for the phenomenon of employment greenwashing in Indonesia.

METHODS

This study addresses the methodological gap between abstract doctrinal legal research and mainstream management studies by applying an integrated combination method that fuses a juridical-normative approach with empirical validation. The normative compliance evaluation focuses on analyzing the renewable energy regulatory framework and corporate governance compliance standards. To precisely measure the actual impact of these legal instruments on talent governance, the study draws on explanatory quantitative data from 180 corporate respondents in Indonesia using a 5-point Likert-scale questionnaire. The validity of these empirical arguments is then rigorously tested using the Structural Equation Modeling-Partial Least Squares (SEM-PLS) method, supported by SmartPLS 4 software, along with multiple linear regression analysis, ensuring that the normative analysis of the law is directly calibrated to the operational realities of the industry.

RESULTS AND DISCUSSION

The integration of the energy and ESG regulatory frameworks, as outlined above, creates compliance pressure that forces top management to restructure their HR management strategies. The author divides the analysis of these legal implications into three crucial dimensions: the restrictive impact of TKDN regulations, the urgency of structural transformation toward Green HRM, and mitigating the risk of litigation resulting from employment greenwashing.

The Impact of TKDN Regulations on Recruitment and Skills Gap Dynamics

The Domestic Component Level (TKDN) policy is an economic legal instrument aimed at boosting national industrial independence and preventing a trade deficit. In the renewable energy sector, this provision is rigidly regulated through Minister of Energy and Mineral Resources Regulation No. 11 of 2024 concerning Guidelines for the Use of Domestic Products for Electricity Infrastructure Development (ESDM Regulation 11/2024). This regulation establishes the minimum percentage of domestic components that must be met in every electricity generation project, including solar power plants (PLTS), wind power plants (PLTB), and hydro power plants (PLTA).

Legally, the calculation of the TKDN weighting is assessed not only from the physical material (hardware) aspect, but also from the utilization of services and labor. Based on the provisions of ESDM Ministerial Regulation 11/2024, the use of local labor in the assembly process, project management, and construction contributes significantly, reaching 20% of the total TKDN weighting. Failure by a corporation to meet this minimum TKDN percentage limit can have serious legal consequences, ranging from administrative sanctions, cancellation of project tender wins, to financial sanctions in the form of heavy fines.

However, this is where the legal and operational anomaly facing corporations (the regulatory tension gap) lies. There is an extreme skills gap in the Indonesian labor market. The national vocational and higher education systems are unable to produce the quantity and quality of green talent with internationally certified competencies specifically in the renewable energy sector, such as Certified Energy Managers, advanced photovoltaic installation technicians, or national grid-scale energy audit experts.

When corporations are legally compelled to employ local workers to meet the local content (TKDN) quota, but the market does not provide competent workers, the risk of operational

failure and workplace accidents increases significantly. This contradicts the principles of Occupational Safety and Health (K3) stipulated in Law Number 13 of 2003 concerning Manpower (Labor Law).

To mitigate this dilemma of legal risk, corporate HR management is required to draft strict and compliance-oriented contractual clauses for the assignment of Foreign Workers (TKA). Based on Articles 42 to 49 of the Manpower Law in conjunction with Government Regulation No. 34 of 2021 concerning the Use of Foreign Workers, corporations are required to appoint Indonesian citizens as companions to the TKA they employ.

Talent management must transform this mentoring program from a mere licensing formality (ex-ante compliance) into a measurable technology and knowledge transfer program. Companies must establish key performance indicators (KPIs) for skilled foreign workers, where the success of their contract period is measured by how quickly and effectively the local workers they mentor can master these competencies and obtain national and international certification. This way, legal compliance with the TKDN can be met without compromising the safety standards and operational efficiency of renewable energy plants.

Explanatory Quantitative Analysis of Green HRM Transformation and HR Sustainability

The comprehensive application of ESG criteria encourages organizations to shift their paradigm from conventional HR management to Green Human Resource Management (Green HRM). This practice encompasses the entire employee lifecycle, including green recruitment, green training, green performance evaluation, and green compensation, which are directly linked to the company's environmental performance indicators.

To empirically and scientifically prove this correlation in Indonesia, reference is placed on explanatory quantitative research data conducted by Suciante et al. (2025). The study collected primary data using a 5-point Likert scale questionnaire from 180 respondents spread across various industrial and service sector corporations that have implemented the ESG framework in Indonesia. Data analysis was conducted rigorously using the Structural Equation Modeling-Partial Least Squares (SEM-PLS) method with the assistance of SmartPLS 4 software.

The measurement model demonstrated very high reliability, with the Cronbach's Alpha index for the Talent Management variable reaching 0.86 and for the Human Resource Sustainability variable reaching 0.91. These indicators demonstrate that the research

instrument has robust internal consistency and is free from measurement bias. Furthermore, through multiple linear regression analysis, highly significant empirical results were found, as presented in the path coefficient structural equation matrix in Table 2.

Table 2. Regression Coefficient and Significance of the Influence of Green HRM and Talent Management

Independent Variables	Unstandardized Coefficients	Standardized Coefficients (β)	t-value	Significance (p-value)
Constant	0.512	—	2.14	0.033
Green HRM (\$X_1\$)	0.456	0.482	5.89	0,000
Talent Management (\$X_2\$)	0.388	0.412	4.78	0,000

The data comes from the results of primary data processing using SmartPLS 4 (Sucianti et al., 2025).

The results of the statistical tests above produce a Determinant Coefficient value (R^2 or R Square) of 0.635. Academically, this value provides a theoretical and practical conclusion that 63.5% of the variation in the HR Sustainability variable can be explained simultaneously by the Green HRM and Talent Management variables. The remaining 36.5% is explained by other factors outside this research model. The significance value ($p = 0.000 < 0.05$) on both variables empirically proves that the Green HRM implementation policy provides a relatively greater contribution ($\beta = 0.482$) compared to conventional talent management ($\beta = 0.412$), although both are proven to complement each other significantly in supporting organizational sustainability and compliance with social pillars and ESG governance.

This positive correlation aligns with secondary research conducted by financial services industry players in the adoption of POJK 51/2017. For example, a case study at Bank Sumsel Babel showed that internalizing the eight sustainable finance principles mandated by the OJK forced the Human Capital division to design a structured green taxonomy education program to develop the competencies of new talent (Financial Services Authority, 2018).

The implementation of the Social (S) dimension in talent management is clearly reflected in several State-Owned Enterprises (SOEs), such as PT Wijaya Karya (Persero) Tbk (WIKA), which has implemented a policy of providing 14 full weeks of maternity leave with a guaranteed 100% return-to-work rate. This measure directly meets the gender equality and workers' rights indicators within the global ESG framework.

However, there is a significant disparity in the disclosure alignment rate of ESG indicators in Indonesia. State-owned enterprises generally demonstrate a much higher level of disclosure alignment, averaging 46%, compared to purely private sector corporations, which average only 24% (Sucianti et al., 2025). This legal phenomenon arises from a dual institutional push. SOEs are not only subject to capital market supervision by the Financial Services Authority (OJK), but are also strictly controlled by the institutional mandate of the Ministry of SOEs, which regularly integrates ESG criteria compliance into the Board of Directors' Key Performance Indicators (KPI).

Mitigating the Legal Risks of Employment Greenwashing

The intense global competition for scarce renewable energy talent (the war for green talent) has given rise to a new corporate pathology: employment greenwashing. This phenomenon is defined as the act of disseminating information or engaging in employer branding activities that rhetorically claim a strong commitment to ecological values and social justice, but in reality, these claims are unsubstantiated, misleading, or even cover up labor exploitation and environmental pollution.

In Indonesia, employment greenwashing carries serious legal implications. If false or misleading claims are included in a company's stock prospectus or sustainability report to attract ESG-focused investors, the corporation may face administrative and criminal sanctions under Law Number 8 of 1995 concerning the Capital Market.

Furthermore, if the misleading "green" branding is used as a recruitment tool that harms workers' rights as consumers of information, corporations can be prosecuted under Law Number 8 of 1999 concerning Consumer Protection (Consumer Protection Law). Based on Articles 9 and 10 of the Consumer Protection Law, business actors are strictly prohibited from offering, promoting, or advertising a service falsely, or as if offering certain qualities, characteristics, or compensation that in fact do not exist. Based on the penal provisions in Article 62 of the Consumer Protection Law, violations of this prohibition are subject to a

maximum prison sentence of 5 years or a maximum fine of Rp2,000,000,000 (two billion rupiah).

Therefore, to mitigate the risk of litigation and criminal sanctions, talent management is required to align all claims of their green work culture with real operational data that can be scientifically verified using recognized international carbon accounting methodologies, such as:

1. ISO 14067: International standard for the quantification and reporting of the carbon footprint of corporate products and activities.
2. Greenhouse Gas (GHG) Protocol: A global accounting standard for measuring and managing GHG emissions that covers Scope 1 direct emissions, Scope 2 indirect emissions from energy, and Scope 3 value chain emissions (including employment mobility and employee travel).

By integrating ISO 14067-based carbon audits and the GHG Protocol into talent management master data, corporations can present legally valid Sustainability Reports, while eliminating the risk of lawsuits from regulators and labor organizations.

CONCLUSION AND SUGGESTIONS

The integration of ESG parameters into Indonesia's renewable energy industry has triggered a radical overhaul of corporate law and labor management. Compliance with upstream energy regulations, such as the energy transition scheme in Presidential Regulation 112/2022 and the TKDN requirement in ESDM Regulation 11/2024, has direct implications for downstream talent management policies.

This research successfully bridges the research gap in sustainability reporting, which has been isolated from labor law analysis. The results of empirical evidence based on SEM-PLS analysis with a value of $R^2 = 0.635$ confirm that the transformation towards Green HRM is an absolute prerequisite for achieving HR sustainability and legal compliance. Without the synchronization of operational data verified based on international standards such as ISO 14067 and the GHG Protocol, a green employer branding-based recruitment strategy is at high risk of being caught in the crime of employment greenwashing which is threatened with a fine of IDR 2 billion under the Consumer Protection Law.

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