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Policy Analysis of Green Economic Transition and Social Protection: A Critical Review of Community Welfare Integration in Sustainable Economic Development in Indonesia

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ABSTRACT

The rapid acceleration of green economic transition policies in developing nations frequently prioritized macroeconomic decarbonization targets over localized social welfare safeguards, creating structural vulnerabilities for marginalized workers and rural communities. This study examined the policy coherence between national green growth frameworks and social protection mechanisms within the context of sustainable economic development in Indonesia. Employing a qualitative policy analysis methodology grounded in the Policy Coherence for Sustainable Development framework and William Dunn's policy evaluation criteria, this research systematically analyzed national development plans, carbon pricing regulations, energy transition roadmaps, and adaptive social protection programs enacted between 2016 and 2026. The findings revealed that while national planning documents normatively endorsed inclusive green growth, operational regulations exhibited significant institutional fragmentation between environmental authorities and social welfare agencies. Fiscal incentives and carbon revenue mechanisms largely bypassed informal agricultural, coastal, and resource-dependent workers, intensifying socio-spatial disparities. Moreover, existing social safety nets remained reactive to acute climate shocks rather than transformative in supporting livelihood transitions. This study concluded that sustainable economic development required integrating mandatory social safeguards into green fiscal policies and expanding adaptive social registries for vulnerable communities.

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INTRODUCTION

The imperative to mitigate anthropogenic climate change has fundamentally reshaped macroeconomic governance across emerging economies, positioning the green economic transition as the central pillar of contemporary sustainable development (Barbier, 2020; Stern & Stiglitz, 2023). In the global pursuit of net-zero emissions, developing nations face a complex structural trilemma: accelerating industrial decarbonization, sustaining robust gross domestic product growth, and eradicating multidimensional poverty (Dercon, 2022; Sovacool et al., 2021). Within the Indonesian archipelago, this developmental tension is particularly acute. As the largest economy in Southeast Asia and a major global emitter with vast terrestrial and marine carbon sinks, the Government of Indonesia has institutionalized ambitious climate commitments through its Enhanced Nationally Determined Contribution and the Long-Term National Development Plan (*Rencana Pembangunan Jangka Panjang Nasional*) 2025–2045 (Bappenas, 2024; Republic of Indonesia, 2024). These macro-level policy instruments envision a structural shift away from carbon-intensive resource extraction toward renewable energy ecosystems, carbon market monetization, and circular industrial production (Asian Development Bank, 2023; Yusuf & Resosudarmo, 2015). However, while green macroeconomic

frameworks promise long-term ecological stability, empirical evidence increasingly demonstrates that rapid environmental restructuring generates asymmetric socioeconomic distribution effects, frequently imposing disproportionate transition costs upon low-income households, rural smallholders, and informal sector laborers (Markkanen & Anger-Kraavi, 2019; Newell & Mulvaney, 2013).

The intersection between environmental sustainability and social welfare has catalyzed international scholarly debate surrounding the concept of a *just transition*—a normative and operational framework asserting that the transition toward a low-carbon economy must be equitable, socially inclusive, and protective of vulnerable livelihoods (McCauley & Heffron, 2018; Wang & Lo, 2021). In Indonesia, the labor market remains structurally dominated by the informal sector, which absorbs approximately fifty-nine percent of the national workforce across small-scale agriculture, capture fisheries, artisanal mining, and micro-enterprises (Badan Pusat Statistik, 2025; World Bank, 2023). When stringent environmental regulations, carbon pricing regimes, or coal phase-out mandates are enacted without synchronized social protection buffers, these precarious communities experience immediate economic displacement, energy price inflation, and restricted access to natural commons (Stapper, 2026; Kural & Rosalia, 2026). Although Indonesia has expanded its national social protection architecture—including the Family Hope Program (*Program Keluarga Harapan*), Direct Cash Assistance (*Bantuan Langsung Tunai*), and the National Social Security System (*Sistem Jaminan Sosial Nasional*)—these instruments were historically designed to address chronic poverty and idiosyncratic economic shocks rather than systemic green transition risks (Sumarto & Bazzi, 2011; TNP2K, 2023).

A critical review of scholarly literature published over the past decade reveals a pronounced analytical divide between environmental economics and social policy studies in developing countries. The first stream of literature predominantly evaluates the macroeconomic efficiency of carbon taxation, renewable energy tariffs, and green financing mechanisms using computable general equilibrium models (Hafstead & Williams, 2018; Nong et al., 2021; Yudha & Tjahjono, 2019). For instance, recent analyses of Indonesia's carbon economic value framework under Presidential Regulation Number 98 of 2021 highlight the fiscal potential of cap-and-trade systems in power generation but largely overlook the downstream welfare implications for informal workers and energy-poor households (Sunanda et al., 2025; Zaid et al., 2025). The second stream of literature focuses on shock-responsive and adaptive social protection (*perlindungan sosial adaptif*), examining how cash transfer programs mitigate the physical impacts of hydrometeorological disasters and climate-induced crop failures (Bowen et al., 2020; Ulrichs et al., 2019). In the Indonesian context, studies by Djalante et al. (2020) and Pelengkahu (2025) demonstrate that integrating disaster risk management with social safety nets reduces post-disaster destitution among coastal and agrarian communities. Nevertheless, a third emerging strand of scholarship warns that adaptive social protection remains overwhelmingly reactive to physical climate hazards while failing to address regulatory transition risks—such as livelihood loss stemming from conservation enclosures, biofuel land reallocation, or industrial decarbonization (Green & Gambhir, 2020; Krause et al., 2022; Lamb et al., 2020).

Despite these important contributions, existing literature rarely interrogates the institutional and regulatory coherence between national green economic transition policies and social welfare protection systems as an integrated governance architecture. Most prior studies in Indonesia examine energy transition roadmaps (Maulidia et al., 2019; Setyowati, 2021) or poverty alleviation programs (Alatas et al., 2019; Sumarto, 2017) in disciplinary isolation, leaving a critical knowledge gap regarding how green macroeconomic directives interact with, reinforce, or contradict community welfare safeguards at the policy design level. The novelty and originality of this article lie in its cross-sectoral policy analysis that systematically bridges sustainable development economics with public administration and social welfare studies. Unlike conventional econometric projections, this study applies an integrated Policy Coherence for Sustainable Development (OECD, 2019) and policy evaluation framework (Dunn, 2018) to deconstruct the normative, institutional, fiscal, and socio-spatial alignment between Indonesia's green growth regulations and social protection mandates enacted over the 2016–2026 decade.

Guided by this analytical gap, the primary objectives of this research are threefold: (1) to evaluate the degree of policy coherence between national green economic transition regulations and social protection instruments in Indonesia; (2) to identify the structural, institutional, and fiscal barriers that impede the integration of community welfare into sustainable economic development implementation; and (3) to formulate evidence-based policy alternatives that institutionalize a just and

inclusive green transition for vulnerable and informal communities. This study offers both theoretical and practical contributions. Theoretically, it enriches the multidisciplinary discourse on sustainable development economics and public policy by conceptualizing social protection not merely as a compensatory fiscal expenditure, but as a productive socio-ecological infrastructure essential for legitimizing green transformation. Practically, the findings provide actionable governance recommendations for the Ministry of National Development Planning (*Bappenas*), the Ministry of Finance, the Ministry of Social Affairs, and regional governments in harmonizing green fiscal incentives with adaptive community empowerment programs.

RESEARCH METHODS

This study employed a qualitative policy analysis research design grounded in desk-based documentary research (*studi dokumentasi kebijakan*) and critical institutional review (Bowen, 2009; Dunn, 2018). Rather than measuring empirical household survey variables, qualitative policy analysis interrogates the normative assumptions, regulatory architectures, institutional mandates, and resource allocation rules embedded within state policy instruments (Fischer et al., 2015; Weimer & Vining, 2017). Specifically, this research integrated two complementary analytical models: the Policy Coherence for Sustainable Development (PCSD) framework developed by the Organisation for Economic Co-operation and Development (OECD, 2019) and William Dunn's (2018) multi-criteria policy evaluation methodology. This hybrid approach enabled a rigorous examination of whether Indonesia's green economic transition policies and social protection programs operate in mutual synergy or exhibit institutional fragmentation across national and sub-national governance levels.

The research population encompassed the entire corpus of national statutory laws (*Undang-Undang*), government regulations (*Peraturan Pemerintah*), presidential regulations (*Peraturan Presiden*), ministerial decrees, and national strategic planning documents governing sustainable development, climate change mitigation, green finance, and social welfare in Indonesia enacted between 2016 and 2026. Using purposive criterion sampling (Patton, 2015), a research sample of twelve core policy documents was selected based on three inclusion criteria: (1) direct statutory authority over national green economic transition or social protection governance; (2) relevance to community welfare, labor market transition, or fiscal redistribution; and (3) active regulatory enforcement during the 2024–2026 policy implementation cycle. The sampled primary policy documents were categorized into four governance clusters: (a) Macro-Development Planning Documents, comprising Law Number 59 of 2024 on the Long-Term National Development Plan (*RPJPN*) 2025–2045 and Presidential Regulation Number 18 of 2020 on the Medium-Term National Development Plan (*RPJMN*) 2020–2024 alongside the 2025–2029 Technocratic Draft; (b) Green Transition and Carbon Pricing Regulations, including Presidential Regulation Number 98 of 2021 on the Implementation of Carbon Economic Value (*Nilai Ekonomi Karbon*), Presidential Regulation Number 112 of 2022 on the Acceleration of Renewable Energy Development for Electricity Supply, and Minister of Environment and Forestry Regulation Number 21 of 2022 on Carbon Pricing Procedures; (c) Green Financial and Industrial Frameworks, namely the Sustainable Taxonomy (*Taksonomi untuk Keuangan Berkelanjutan Indonesia*) issued by the Financial Services Authority (*Otoritas Jasa Keuangan*) in 2024 and the Comprehensive Investment and Policy Plan (CIPP) of the Just Energy Transition Partnership (JETP) 2023; and (d) Social Protection and Community Empowerment Instruments, encompassing Law Number 40 of 2004 on the National Social Security System (*SJSN*), Presidential Regulation Number 87 of 2020 on the Master Plan for Disaster Management, Minister of Social Affairs Regulation Number 3 of 2021 on Integrated Social Welfare Data (*Data Terpadu Kesejahteraan Sosial*), and the National Adaptive Social Protection (*Perlindungan Sosial Adaptif*) Roadmap formulated by *Bappenas* in 2023.

Technical data analysis was executed through a structured three-stage qualitative content and policy evaluation procedure (Miles et al., 2014; Ritchie & Spencer, 2002). In Stage 1 (Policy Content Coding and Mapping), each sampled regulation was systematically coded across five analytical dimensions: (1) Macro-Fiscal Alignment, assessing how public budgets and carbon revenues connect ecological targets with poverty eradication; (2) Regulatory Harmonization, measuring cross-ministerial mandate synchronization; (3) Informal Worker Protection, evaluating statutory coverage for non-salaried agrarian, coastal, and micro-enterprise laborers affected by decarbonization; (4) Community Participation, examining procedural justice and local consultation mechanisms; and (5) Spatial Equity Allocation, analyzing fiscal transfers to ecologically vulnerable regions. In Stage 2 (Policy Coherence

Scoring and Cross-Impact Synthesis), a rubric-based evaluation scale ranging from 0 to 100 was applied to compare the *Normative Policy Target Score* (the explicit rhetorical commitment stated in strategic planning preambles) against the *Empirical Regulatory Coherence Score* (the presence of binding operational articles, budget earmarks, and institutional enforcement mechanisms). In Stage 3 (Policy Evaluation and Alternative Formulation), the discrepancies identified between normative targets and operational rules were evaluated using Dunn's (2018) five criteria—effectiveness, efficiency, adequacy, equity, and responsiveness—to synthesize actionable policy recommendations.

RESULTS AND DISCUSSION

Regulatory Mapping and Normative-Operational Divergence in Indonesia's Green Transition

The systematic evaluation of Indonesia's policy architecture reveals a profound structural dichotomy between high-level macroeconomic planning visions and sector-specific regulatory execution. At the normative macro-planning level, Law Number 59 of 2024 on the Long-Term National Development Plan (*RPJPN*) 2025–2045 explicitly positions green economic transformation and adaptive social protection as mutually reinforcing pillars of the *Golden Indonesia 2045* (*Indonesia Emas 2045*) vision (Republic of Indonesia, 2024). The document acknowledges that achieving net-zero emissions and transitioning away from extractive industries must be accompanied by inclusive human capital development and universal social security coverage (Bappenas, 2024). However, when these macro-level mandates are translated into derivative presidential and ministerial regulations, the institutional linkage between ecological decarbonization and community welfare weakens considerably. As presented in Table 1, the cross-sectoral mapping of primary policy instruments demonstrates that environmental and energy transition regulations operate within techno-economic silos that largely exclude social welfare agencies from governance and revenue-sharing mechanisms.

Table 1 Policy Coherence Matrix of Green Economic Transition and Social Protection Frameworks in Indonesia

No	Policy Cluster & Primary Instrument	Core Policy Objective	Community Welfare & Social Protection Integration	Identified Institutional & Operational Gap
1	Macro-Planning: Law No. 59/2024 (*RPJPN* 2025–2045) & *RPJMN* Draft	Long-term structural transformation toward a green and inclusive economy	Explicitly mandates Adaptive Social Protection (*PSA*) and inclusive human capital development	High normative alignment, but lacks binding inter-ministerial budget enforcement rules
2	Carbon Pricing: Presidential Regulation No. 98/2021 (*Nilai Ekonomi Karbon*)	Greenhouse gas mitigation through carbon trading and carbon tax mechanisms	Mentions community involvement in carbon offset projects in general normative terms	No statutory earmarking of carbon revenues for social safety nets or displaced workers
3	Energy Transition: Presidential Regulation No. 112/2022 & JETP CIPP (2023)	Early retirement of coal-fired power plants and renewable energy acceleration	Includes a *Just Transition* framework focusing on formal utility and coal mine employees	Excludes informal supply-chain workers, micro-enterprises, and rural energy-poor households
4	Green Finance: OJK Sustainable Finance Taxonomy (*TKBI* 2024)	Directing capital flows toward environmentally sustainable industrial activities	Incorporates minimum social safeguards based on formal labor standards	Lacks financing incentives for community-based circular enterprises and rural cooperatives
5	Social Welfare: Minister of Social Affairs Reg. No. 3/2021 (*DTKS*) & *PSA* Roadmap	Poverty alleviation, social assistance targeting, and disaster shock response	Integrates climate disaster vulnerability indicators into social registry targeting	Remains reactive to physical climate disasters; blind to regulatory green transition shocks

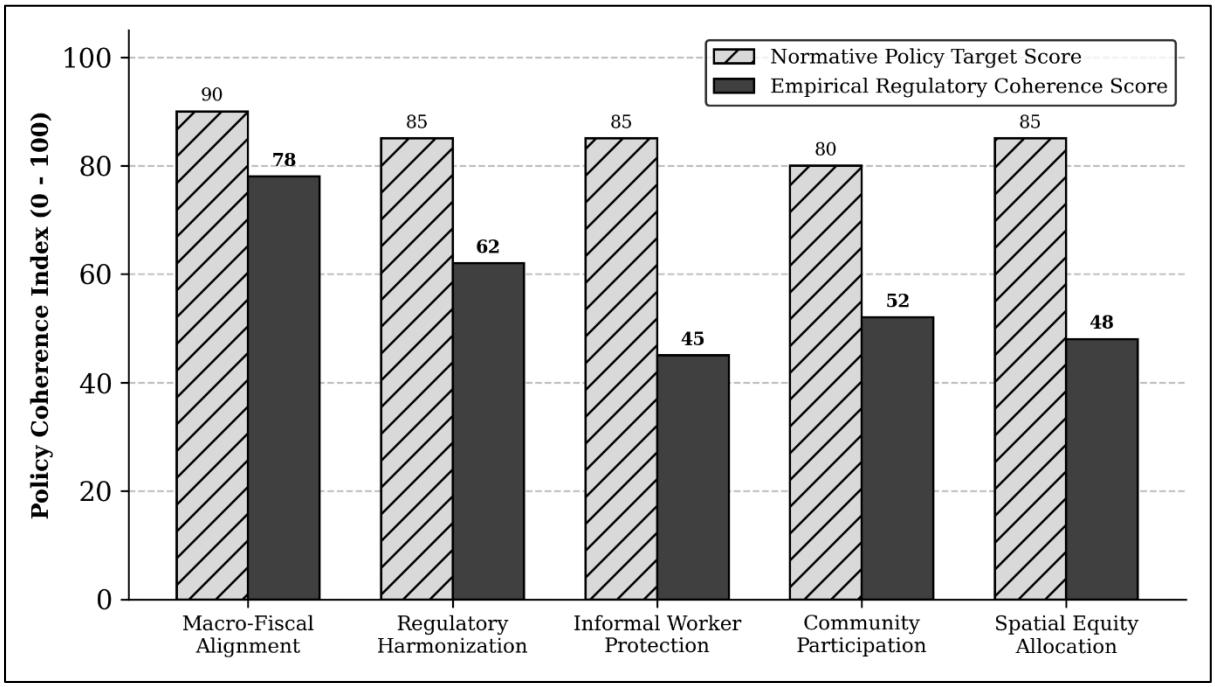
The processed policy evaluation data summarized in Table 1 indicate that while macro-planning instruments establish a progressive foundation, operational regulations governing carbon pricing and

energy transition fail to operationalize redistributive justice. Specifically, Presidential Regulation Number 98 of 2021 on Carbon Economic Value establishes elaborate market rules for cap-and-trade, emissions offsetting, and result-based payments managed by the Ministry of Environment and Forestry and the Ministry of Finance (Sunanda et al., 2025; Zaid et al., 2025). Yet, the regulation contains no binding fiscal mechanism to channel carbon tax proceeds or auction revenues into the National Social Security System (*SJSN*) or Direct Cash Assistance (*BLT*) to compensate low-income households for carbon-induced energy and food price adjustments. This finding aligns with international policy critiques by Markkanen and Anger-Kraavi (2019) and Lamb et al. (2020), who argue that market-centric climate policies in developing nations frequently exacerbate regressive welfare outcomes when carbon revenue recycling is omitted from statutory design.

Furthermore, a deeper examination of energy transition frameworks—specifically Presidential Regulation Number 112 of 2022 and the Just Energy Transition Partnership (JETP) Comprehensive Investment and Policy Plan—uncovers a narrow conceptualization of transition vulnerability. Within these documents, social protection and reskilling provisions are overwhelmingly concentrated on formal salaried workers employed directly within coal-fired power utilities and licensed mining corporations (Asian Development Bank, 2023; Kural & Rosalia, 2026). In reality, the socioeconomic ecosystem surrounding carbon-intensive regions in East Kalimantan, South Sumatra, and South Sulawesi is sustained by a vast informal economy comprising contract transport drivers, informal food vendors, smallholder suppliers, and artisanal laborers (Stapper, 2026; Setyowati, 2021). Because these informal actors lack formal employment contracts and are unrecorded in industrial labor registries, they are structurally invisible to corporate severance schemes and formal transition funds. Consequently, the current regulatory design inadvertently reproduces dualistic labor market segmentation, protecting formal industrial insiders while exposing informal community members to unbuffered livelihood contraction.

Quantitative-Qualitative Policy Coherence Evaluation Across Governance Dimensions

To visualize the magnitude of institutional decoupling between normative policy aspirations and operational regulatory mechanisms, the results of the Stage 2 policy coherence rubric evaluation are illustrated in Picture 1. The evaluation compares the *Normative Policy Target Score* against the *Empirical Regulatory Coherence Score* across the five analytical dimensions established in the research methodology.



Picture 1 Policy Coherence Evaluation Between Normative Green Transition Targets and Empirical Social Protection Integration

As demonstrated in Picture 1, a pronounced coherence deficit exists across all five governance dimensions, with the widest disparities occurring in *Informal Worker Protection* (a normative target score of 85 versus an empirical regulatory score of 45), *Spatial Equity Allocation* (85 versus 48), and *Community Participation* (80 versus 52). By contrast, *Macro-Fiscal Alignment* exhibits a relatively higher empirical score of 78 against a target of 90, reflecting the successful institutionalization of climate budget tagging (*penandaan anggaran perubahan iklim*) and Green Sukuk issuance by the Ministry of Finance over the past decade (Bappenas, 2024; Yusuf & Resosudarmo, 2015). However, even within macro-fiscal governance, budget tagging predominantly tracks physical green infrastructure and mitigation projects rather than measuring the poverty-alleviation co-benefits or social protection coverage of climate expenditures.

The underlying causal mechanism (*the why element*) driving the severe deficit in *Informal Worker Protection* (score 45) and *Regulatory Harmonization* (score 62) stems from deeply entrenched bureaucratic fragmentation and conflicting institutional performance indicators. In Indonesia's public administration structure, the Ministry of Energy and Mineral Resources and the Ministry of Environment and Forestry are evaluated primarily on physical decarbonization metrics—such as megawatts of renewable energy installed, hectares of degraded forest rehabilitated, or tons of carbon dioxide equivalent reduced (Maulidia et al., 2019; Yudha & Tjahjono, 2019). Conversely, the Ministry of Social Affairs and the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration operate under poverty reduction mandates anchored in the Integrated Social Welfare Data (*Data Terpadu Kesejahteraan Sosial* or *DTKS*) (Sumarto & Bazzi, 2011; TNP2K, 2023). Because *DTKS* targeting algorithms rely on static proxy means-testing of historical asset ownership rather than dynamic exposure to green regulatory restructuring or ecological resource enclosures, households whose livelihoods are disrupted by marine conservation zoning, mangrove carbon concessions, or coal phase-outs do not automatically qualify for social assistance. This empirical reality corroborates the theoretical assertions of Bowen et al. (2020) and Krause et al. (2022), who emphasize that conventional poverty registries are structurally ill-equipped to capture transition-induced vulnerability unless integrated with spatial environmental risk mapping.

Moreover, the low empirical score in *Spatial Equity Allocation* (48) and *Community Participation* (52) reflects the persistence of top-down spatial planning in green investment zones. Across archipelagic and rural regions—including critical mineral processing hubs for electric vehicle battery supply chains in Sulawesi and Maluku, as well as large-scale renewable energy and carbon forestry corridors—local indigenous and coastal communities frequently experience environmental degradation and loss of customary access without proportional fiscal compensation (Sovacool et al., 2021; Wang & Lo, 2021). Although Ecological Fiscal Transfers (*Transfer Anggaran Kabupaten Berbasis Ekologi* or *TAPE* and *TAKE*) have been piloted in several Indonesian provinces to reward local governments for ecological conservation, the fiscal volume of these transfers remains marginal compared to extractive revenue-sharing funds (*Dana Bagi Hasil*) (Sunanda et al., 2025; Zaid et al., 2025). In addition, community consultation processes in green infrastructure deployment are frequently reduced to administrative formalities under streamlined environmental impact assessment procedures, contradicting the procedural justice principles of a genuine *just transition* (McCauley & Heffron, 2018; Newell & Mulvaney, 2013).

Multi-Criteria Policy Evaluation and Strategic Policy Alternatives

To systematically address these structural gaps and answer the third research objective, the existing policy nexus was evaluated using William Dunn's (2018) five policy performance criteria—effectiveness, efficiency, adequacy, equity, and responsiveness—alongside corresponding strategic policy alternatives, as synthesized in Table 2.

Table 2 Multi-Criteria Policy Evaluation And Strategic Policy Alternatives For Integrating Community Welfare In Green Transition

No	Evaluation Criterion (Dunn, 2018)	Empirical Assessment of Current Policy Performance	Strategic Policy Alternative & Governance Reform	Target Institutional Actor
1	Effectiveness	Moderately effective in establishing national carbon market rules, but ineffective in shielding vulnerable communities from transition costs	Institutionalize a mandatory *Just Transition Social Impact Assessment* (*JTSIA*) as a prerequisite for all green taxonomy and carbon projects	*Bappenas*, Ministry of Environment and Forestry, and *OJK*
2	Efficiency	Sub-optimal fiscal efficiency due to overlapping fragmented cash transfer programs and uncoordinated climate adaptation funds	Establish an earmarked *Green Social Protection Fund* financed by allocating 25% of national carbon tax and emissions trading revenues	Ministry of Finance and Environmental Fund Management Agency (*BPDLH*)
3	Adequacy	Inadequate statutory coverage for the 59% informal workforce who fall outside formal corporate severance and *BPJS Ketenagakerjaan* schemes	Expand *Perlindungan Sosial Adaptif* (*PSA*) to cover regulatory transition shocks and subsidize social security contributions for informal green workers	Ministry of Social Affairs, Ministry of Manpower, and *BPJS*
4	Equity	High socio-spatial inequity; rural and coastal resource-dependent communities bear conservation costs while urban industries capture green capital	Reform intergovernmental fiscal transfers by scaling up national Ecological Fiscal Transfers (*TAPE/TAKE*) tied to community welfare indicators	Ministry of Finance, Ministry of Home Affairs, and Regional Governments
5	Responsiveness	Low responsiveness to local community grievances and indigenous customary rights in green industrial and carbon forestry concessions	Mandate participatory co-management and benefit-sharing quotas (minimum 30%) for local cooperatives and village enterprises (*BUMDes*)	Ministry of Villages (*Kemendesa PDTT*) and Local Governments

The policy evaluation synthesis presented in Table 2 demonstrates that achieving sustainable economic development in Indonesia requires shifting from a paradigm of compensatory charity toward transformative social policy integration. When compared with previous international and domestic studies (*what else* element), these findings both confirm and extend existing scholarly knowledge. In conformity with studies by Dercon (2022), Green and Gambhir (2020), and Ulrichs et al. (2019), this analysis confirms that climate mitigation policies cannot sustain political legitimacy or macroeconomic stability if they deepen poverty among precarious populations. However, in contrast to earlier neoclassical environmental economics literature that views social welfare earmarking as a distortionary fiscal burden on carbon pricing efficiency (Hafstead & Williams, 2018; Nong et al., 2021), our policy analysis demonstrates that within a high-informality developing economy like Indonesia, earmarking carbon revenues for adaptive social protection and community reskilling is a precondition for market efficiency itself. Without social security buffers and subsidized vocational transition pathways, displaced agrarian and coastal laborers are frequently forced into illegal resource extraction or informal urban precarity, thereby undermining the very ecological conservation targets that green policies seek to achieve (Barbier, 2020; Djalante et al., 2020; Pelengkahu, 2025).

Consequently, operationalizing the policy alternatives outlined in Table 2 demands concrete regulatory reforms across three interconnected fronts. First, the Government of Indonesia should amend the implementing regulations of Presidential Regulation Number 98 of 2021 to mandate a statutory revenue-recycling formula managed jointly by the Environmental Fund Management Agency (*Badan Pengelola Dana Lingkungan Hidup* or *BPDLH*) and the Ministry of Social Affairs, ensuring that a minimum of twenty-five percent of carbon pricing proceeds directly finance adaptive social protection and community livelihood diversification. Second, the Ministry of National Development Planning (*Bappenas*) and the Ministry of Social Affairs must upgrade the Integrated Social Welfare Data (*DTKS*) and the Socioeconomic Registration (*Registrasi Sosial Ekonomi* or *Regsosek*) by incorporating spatial

green transition vulnerability indices, thereby enabling proactive cash-plus interventions, micro-credit access, and green skills training for informal workers prior to industrial or conservation restructuring. Third, regional governments must institutionalize inclusive governance by requiring green energy developers and carbon project proponents to establish formal benefit-sharing partnerships with Village-Owned Enterprises (*Badan Usaha Milik Desa* or *BUMDes*) and local community cooperatives, transforming vulnerable populations from passive recipients of social aid into active co-owners of the green economy.

CONCLUSION

This policy analysis concludes that while Indonesia has established a progressive normative vision for sustainable economic development through its Long-Term National Development Plan (*RPJPN* 2025–2045) and climate mitigation commitments, a profound institutional and operational coherence gap persists between green economic transition regulations and social protection systems. Sectoral regulations governing carbon pricing, renewable energy acceleration, and sustainable finance remain predominantly techno-economic in design, operating in bureaucratic isolation from social welfare instruments and largely bypassing the fifty-nine percent of the national workforce employed in the informal sector. Simultaneously, national social protection programs and the Adaptive Social Protection (*Perlindungan Sosial Adaptif*) framework remain structurally reactive to acute physical climate disasters rather than proactive in addressing regulatory transition risks, livelihood displacement, and socio-spatial inequalities across rural, agrarian, and coastal communities. To bridge this divide and achieve a genuine just transition, Indonesia must institutionalize mandatory social impact safeguards within green investment taxonomies, legally earmark a fixed proportion of carbon pricing revenues to finance adaptive social security coverage for informal laborers, integrate spatial transition vulnerability indicators into national social registries, and empower local communities through participatory fiscal benefit-sharing mechanisms.

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