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POLICY BRIEF

Navigating Inclusive Just Transitions in Indonesia

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Summary

As Indonesia shifts toward a low-carbon future, phasing out coal—while environmentally necessary—carries economic, social, and political challenges. For the transition to be successful, inclusive planning with communities is key. In many parts of the country, coal is more than an energy source; it is an economic driver, deeply embedded in the livelihoods, infrastructure, and fiscal health of local communities.

Indonesia's dependence on coal poses a critical barrier to its 2030 emissions reduction targets under the Paris Agreement. Provinces like East Kalimantan, South Kalimantan, and South Sumatra rely heavily on coal revenues, with hundreds of thousands of workers directly or indirectly dependent on the industry. Coal regions remain economically and socially tied to coal, with up to 80% of gross domestic product in some regencies sourced from mining.

The transitions away from coal need to be managed properly to avoid exacerbating existing economic and social challenges that are currently due to a dependence on the coal-based economy. Vulnerable groups—especially women, informal workers, youth, and the elderly—bear the brunt of these inequalities, often without any targeted support or meaningful involvement in transition planning.

This policy brief synthesizes key findings from research conducted in Indonesia, focusing on five regencies in five provinces. It identifies challenges to date in planning for a just transition in Indonesia and emphasizes the need to strengthen participatory governance, integrate informal economies into planning, and embed gender and social inclusion into all aspects of transition policy. Drawing on both quantitative and qualitative analysis, the brief presents evidence-based recommendations to guide policy-makers in crafting more inclusive, responsive, and effective just transition strategies.[1]

[1] This brief is a condensed version of *Coal Transition Impacts and the Approach to Inclusive Just Transition Policies in Indonesia*.

Introduction

The coal sector in Indonesia contributed approximately 3.6% of the country's gross domestic product in 2022 (Beutel et al., 2025). Indonesia produces coal in 13 provinces, and the coal value chain across provinces includes lignite mining, mining services, transport, and business services. East Kalimantan has the highest share of coal production (62%), followed by South Kalimantan (17%) and South Sumatera (11%). Coal-based energy represents the main contributor to the country's carbon dioxide emissions.

Indonesia's enhanced nationally determined contribution commits to reducing emissions from the energy sector by 358 million tonnes of carbon dioxide equivalent by 2030, or around 12.5% of the country's emissions reduction goal (Just Energy Transition Partnership, 2022). The energy transition will provide access to clean energy, encourage growth in the green economy, and reduce emissions. However, to ensure the process benefits vulnerable groups, planning and policies must embed an inclusive approach to a just transition in coal mining communities.

This study presents an economic analysis of the impact of coal mine closures on sectors linked to coal mining. It uses a scenario-based approach to look at potential shocks to economic output and employment. These potential losses are then compensated for by new industries within the green economy, and the situation is assessed for potential economic, employment, and other improvements.

Alongside this quantitative analysis, a qualitative study assesses the socio-economic impacts on those employed in the coal mining sector and on communities in coal mining towns. This part of the study draws on interviews and focus group discussions that captured the real-life experiences of coal mine workers, coal mining communities, and vulnerable groups, with a particular focus on gender equality, disability, and social inclusion (GEDSI) considerations.

The quantitative analysis focuses on five provinces in Indonesia, in one regency in each province. The provinces are East Kalimantan, Jambi, Central Kalimantan, South Kalimantan, and South Sumatera. The fieldwork in the qualitative data collection was undertaken in East Kutai Regency (East Kalimantan Province).

Key Results

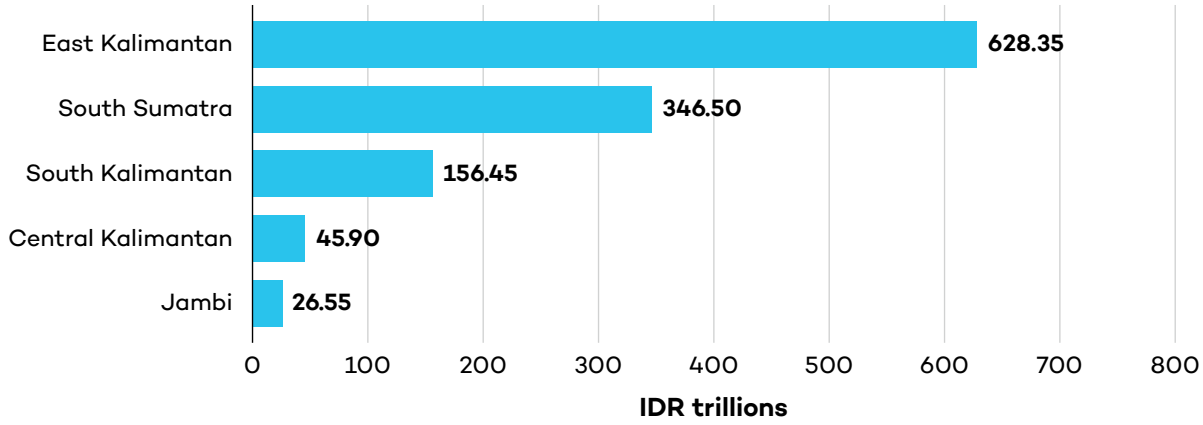
Economic Impacts of Closures and Potential Responses

The quantitative study shows projected economic losses from a coal transition on all three indicators used (output, sectoral income, and employment), with the most severe of these in East Kalimantan Province. These can be mitigated through proper transition planning.

The quantitative study shows projected results if adequate mitigation planning is adhered to, by allocating fiscal stimulus to high-potential sectors outside of coal mining, based on input data from Statistik batubara Indonesia (2023). Overall, the findings suggest that targeting top output-multiplier sectors and green sector development can help restore economic output, secure broad-based employment, and sustainable growth in coal-dependent regions following

coal phaseouts. Tailored approaches are necessary: intensive stimulus is vital for the areas most affected by mine closures, while diversified economies can benefit from either green sector or food sector strategies to restore welfare and employment.

Figure 1. Output loss from coal mine closure by study province (IDR trillion)



Source: Authors' diagram.

A Focus on the Informal Economy

More than half of the surveyed respondents were informal workers in sectors closely linked to the mining industry, such as food service and logistics. These actors face distinct economic and social challenges and are likely to be disproportionately affected by the closure of coal mines. Recognition of the contributions of the informal economy—especially those of women and youth—strengthens the country's ability to design policy interventions that do not overlook large segments of the population. Translating this recognition into policy should be a key focus of the just transition, particularly in terms of expanding access to reskilling and social protection programs.

Inclusion and Representation of Women and Youth

The study highlights the economic role of women in coal communities, especially those involved in small-scale food production and retail. However, women's earnings remain lower than men's, and social protections are limited. The study captures this disparity, generating an evidence base that can be used for gender-targeted interventions. Indonesia currently lacks institutional mechanisms to ensure that gender-inclusive insights shape national and subnational energy policies. Young people also face difficulties, with formal job opportunities hard to find. Most women and youth respondents lack the resources to draw on the potential of the digital economy to contribute to their livelihoods.

Worried about the collapse of the local economy, communities want an assurance of livelihoods beyond coal. Villagers feel excluded from decisions and uncertain about their future. Women report lower access to reemployment, youth worry about lost schooling and jobs, and the elderly fear reduced welfare support.

Role of Local Governments

Indonesia's local governments are often excluded from national-level energy planning and have little influence over the design or implementation of transition policies. At the same time, they are responsible for managing local economies, social protection, and workforce development. The lack of vertical coordination between ministries and provincial governments impairs the capacity of the governments to develop and implement a comprehensive transition strategy and risks leaving provincial actors overwhelmed or disengaged. Strengthening intergovernmental collaboration and providing clearer mandates to local authorities is essential.

Tools and Methods for Transition Planning

Our quantitative modelling was able to pull out significant, useful information related to the economic impacts that may be felt during a coal transition, but was less able to generate information on gender and social inclusion impacts, providing an incomplete picture. Models could be adapted for a GEDSI-specific assessment of the coal transition in Indonesia; however, the approaches currently used in the coal sector in Indonesia do not provide the full picture needed for a just transition, including a GEDSI analysis.

Our qualitative analysis largely filled this gap. Qualitative research was essential in capturing the lived realities of communities, workers, and local institutions, providing nuanced evidence to strengthen macroeconomic policy design at the regency and province levels. Specific impacts on women and vulnerable groups in the mining sector were well covered. This information can be combined with data on broader economic impacts, identified by the modelling exercise, to provide a fuller picture for a just transition.

We therefore recommend mixed-method approaches in just transition analysis as part of policy design and implementation.

Policy Recommendations

1. **Prioritize sectoral transitions**. Strategic investment in high-employment sectors—like food processing, green construction, and sustainable agriculture—can help offset coal job losses and support social stability. Modelling from Indonesia shows that prioritizing labour-intensive, regionally relevant industries is essential for a successful energy transition. Economic diversification strategies should be put in place well in advance of coal mine closure to prevent economic shocks and associated social disruptions.

2. **Tailor social protection to minimize income loss during coal mine closure**. Adapt and extend social protection programs—such as the Sector Job Resilience Plans and Indonesia's Pre-Employment Card and Family Hope Program—to specifically include informal workers, care providers, and vulnerable groups in coal-dependent communities going through a transition.
3. **Empower local governments**. As custodians of local policy implementation, local governments in Indonesia are central to managing energy transitions. As the direct impacts are felt by communities, local governance should be the first point of call for tangible results on the ground. Managing these changes directly at the local level improves integration into national planning, strengthens fiscal independence and capacities, and enables more context-specific and effective transition strategies.
4. **Combine quantitative economic models with qualitative, community-based methods such as ethnography, participatory mapping, and focus groups**. While quantitative studies are important data collection tools, additional research methods are needed to capture social factors, which are often more nuanced. This is especially the case in research contributing to just transition policy planning, to provide a more holistic view of what is required and improve procedural justice.
5. **Assign GEDSI focal points and mandate inter-ministerial coordination to help embed inclusion into governance**. Indonesia has expressed a commitment to equity in energy transitions, but actual integration of GEDSI concerns remains limited. Women and informal workers need to be deliberately included as a priority in just transition planning and policy processes.

Conclusions

Indonesia's energy transition presents an opportunity to drive decarbonization, create new green jobs, and stimulate economic diversification. But without deliberate inclusion of informal workers, women, youth, and other marginalized populations, the transition risks deepening poverty and exclusion. The challenge now is to move from high-level commitments to actionable, inclusive policies that centre community needs and local realities in every stage of the transition process.

A strategically coordinated, state-led energy transition will enable Indonesia to sustain growth while phasing out coal. By integrating provincial policies, reallocating budgets, and advancing green industrialization, the government can cushion the socio-economic impacts of mine closures. Shifts in final demand will redistribute growth across sectors: while fossil fuel-linked industries may contract, cleaner and more labour-intensive sectors benefit, balancing the economy and preserving stability.

Indonesia offers a powerful case study of the complexities of operationalizing a just energy transition. This innovative modelling and integrated research approach offers a more inclusive diagnosis of transition impacts. Coupling economic modelling with social inclusion research yields a fuller picture for policy design.

However, national-to-local coordination gaps and underdeveloped gender mainstreaming mechanisms present serious limitations. For policy-makers, the lesson is clear: to succeed, just transition policies must be locally informed, gender-responsive, and rooted in inclusive, multi-level governance. By prioritizing green sector development, gender equity, and institutional coordination, Indonesia can transition from a coal-dependent economy to a resilient, low-carbon, and inclusive future.

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