

# Just energy transitions and coal in Indonesia

## Policy recommendations to move forward

**SEI brief**  
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### Key messages

- **Indonesia needs to involve a wide range of stakeholders in building a shared vision towards a just energy transition, to move beyond dependencies on coal value chains and to allow a just distribution of costs and benefits for local and national economies, the environment, communities and workers.**
- **Efficient and effective just transition planning requires strengthening multi-level governance mechanisms and improving communication between government units to enable greater support for economic diversification, land remediation, and social support for affected groups.**
- **Awareness and technical capacity-building efforts should be improved among policy stakeholders, including around issues of finance, labour, skills, land planning and economic diversification, among other topics on how to facilitate energy transitions.**
- **Electricity market reforms should be adopted that encourage the increase of renewable forms of energy.**

## 1. Introduction

This policy brief describes some of the barriers to just transitions from coal in Indonesia and provides recommendations to government officials, researchers and practitioners on how to overcome these barriers. The recommendations, while aiming to inform policy and practice on just transition in Indonesia, can also be useful for other countries in the region and beyond that are facing just transition of important fossil fuel-based economies. The brief draws insights from a multi-stakeholder workshop and two reports produced as part of the cross-country project on just transitions from coal in Colombia, Indonesia and South Africa (Bößner et al., 2023; IESR, 2024).

While there is no universally accepted definition of what constitutes a “just” transition, the term is often used to address fundamental issues of fairness in the global shift to a low-carbon economy, especially for people and regions currently dependent on carbon-intensive industries and sectors, such as coal-dependent regions in Indonesia. Here we understand just transition to include: support for affected regions and local communities impacted by the transition, as well as the social and environmental legacies of the carbon-intensive activity being phased out; an opportunity to address



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existing economic and social inequalities, including equitable access to clean energy and economic opportunities of the transition; avoidance of shifting economies to other carbon-intensive sectors (creating more “losers” in the transition further along) in the effort to promote economic diversification; an inclusive and transparent planning process; and remediation and compensation for the social and environmental legacy impacts of the industry; all while not delaying decarbonization efforts (Atteridge & Strambo, 2020; Constantine, 2023).

## 2. The difficulties of a coal phase-out

For Indonesia, the world’s second largest coal producer, coal constituted almost 2% of the country’s GDP and generated around 67% of the country’s electricity in 2022 (Böbner et al., 2023). One barrier to a coal phase-out in Indonesia is its artificially low price and the associated belief that coal, and especially, coal electricity, is cheap. This is mainly due to government-mandated price caps on coal (at around USD 70 per metric ton for use in the power sector) and the effects of related government control of domestic and export markets (e.g. an export ban contingent on companies committing to a domestic market obligation to provide coal to the domestic power sector) (Bridle et al., 2019; Nangoy et al., 2022). As elsewhere, environmental pollution and other negative externalities are rarely incorporated into the prices of fossil fuels, including for the power sector. And these arguments ignore that renewable energies in Indonesia are increasingly competitive, even compared to coal power, a trend that is also global (IEA, 2022).<sup>1</sup>

Revenues from coal value chains are an important part of the Indonesian economy. Nationally, coal is an important contributor to GDP and a source of foreign currency, and revenues from mining are used to finance large-scale infrastructure development. Subnationally, coal contributes even more to revenues, with some regional governments relying on royalties from mining operations for up to 40% of their budgets. A significant number of direct and indirect jobs are linked to coal mining and coal businesses in regions such as South Sumatra or East Kalimantan; in the latter, coal employs about 11% of the labour force (Adiatma & Suryadi, 2022).

Taxes and royalties accrued to the government often “lock in” local, regional and national governments: they protect and support the industry to avoid losing important resources, while companies often employ various tactics to maintain public support while avoiding their responsibilities around mine closure (Seto et al., 2016; Strambo et al., 2020; Toumbourou et al., 2020). Political interest in keeping electricity prices low and relying less on imported fuels has also incentivized support to coal domestically (Atteridge et al., 2018). As in other countries, some evidence shows a “revolving door” between industry and the political establishment, where former coal industry leaders go into politics or finance political parties, or former politicians end up working in the coal industry. This dynamic entrenches coal interests into politics and vice versa, making phase-out especially difficult (Ordonez et al., 2021; Prihandono & Widiati, 2023; Singgih, 2022; Toumbourou et al., 2020).

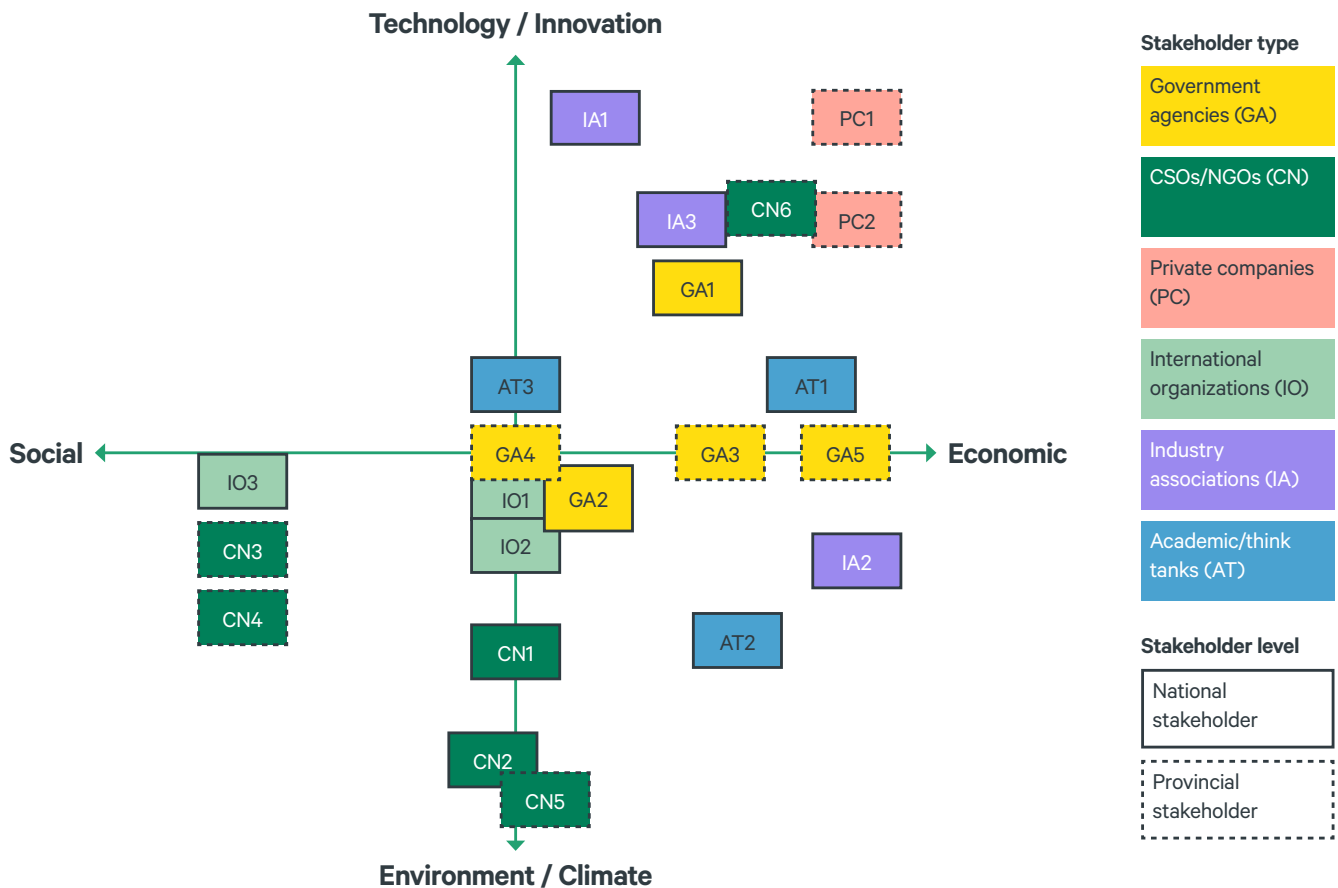
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1 <https://energycost.id/>

## 2.1 Stakeholder views diverge

Our research (for more details, see IESR, 2024; Bößner et al., 2023) shows that different stakeholder groups see coal rather differently in terms of how, when and if it should be phased out. The following figure provides an overview.

Figure 1. Stakeholders and their visions about just energy and coal transitions in Indonesia (based on a workshop conducted in East Kalimantan, October 2022)



Source: Bößner et al. (2023)

Industry players and some government agencies support an approach centred on technology and the economic importance of coal, arguing for a continuation of at least some aspects of the coal value chain, such as coal derivatives or coal-to-liquids pathways. Here, technological fixes such as carbon capture and storage are expected to help reduce the most harmful impacts of coal, despite the relative high cost of such technologies compared to renewable energy solutions (Grant et al., 2021).

In contrast, other stakeholders such as NGOs and international organizations privilege a more environmentally and socially conscious vision and want to see an accelerated coal phase-out. These stakeholders argue that economic benefits often fail to trickle down to local communities living in coal mining regions and that negative impacts to the environment, from contaminated mining sites and biodiversity loss, and to human

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health, from air pollution and respiratory diseases, far outweigh the benefits of coal, such as revenues for local governments. At the same time, NGOs and international organizations recognize that coal is an important source of employment, and in our workshops and interviews, participants highlighted the importance of reskilling the labour force and for economic diversification of coal regions to drive the transition (Bößner et al., 2023).

### **3. Government capacity in planning for a just energy transition**

In addition to the barriers mentioned above, a main obstacle to a just energy transition and coal phase-out in Indonesia is a lack of government planning capacity. The roles of governmental institutions at national and regional (provincial and municipal) levels are key for guiding these transition processes (Engelbert et al., 2019; Homsy et al., 2019). This section summarizes the current state of these capacities among Indonesian government institutions, drawing on our research (IESR, 2024).

National public officials that participated in our surveys and focus groups, especially from the Ministry of Energy and Mineral Resources and the Ministry of Finance, showed awareness that transitioning from fossil energy sources to renewable energy is very important for Indonesia. This, along with a changing policy landscape, suggests that the energy transition agenda is beginning to take root within national institutions. Manifestations of this shifting energy transition agenda have emerged with several key policies and commitments, such as the introduction of the National Energy General Plan (RUEN) in 2017, followed by the release of the Long-Term Strategy for Low Carbon and Climate Resilience (LTS-LCCR) 2050, important international cooperation agreements such as the Just Energy Transition Partnership (JETP) and Energy Transition Mechanism (ETM), the commitment to early phase-out of coal power plants (PR 112/2022), and the launching of a carbon market in Indonesia.

However, participants from the national government also showed limited commitment to a rapid transition from coal, evident in the conflicting views on the role of coal in energy planning already highlighted in the previous section. While participants agreed with the objective of reducing fossil fuel consumption, they also expressed a reluctance to cut back coal production. Under pressure to boost economic growth, many policymakers still perceive coal as the cheapest and most reliable energy source, without seeing renewable energy as a viable alternative, thus further explaining the persistent commitment to coal.

Currently, decision-making authority relevant for navigating a just energy transition is concentrated in the national government, for instance, the authority to issue coal mining permits and to decide the quota of coal production. However, an energy transition should not be solely a national-level agenda; the involvement of district and municipal governments is important because they are closer to affected communities, have a better understanding of local needs, and are responsible for ensuring policy implementation. Despite this, local governments have little opportunity to take initiative in energy transition actions around coal, as their authority is restricted to issuing

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permits related to locational and spatial aspects in renewable energy development. The divided responsibilities among different government levels hampers plans for a just energy transition and potentially results in less cohesive strategies.

Communication between national and regional agencies is weak, according to our assessment. The top-down knowledge transfer process is slow; on average, national government ministries engage with a relatively limited number of regional governments per year, typically one to two regional agencies per year, primarily at the subnational level. Furthermore, regional agencies often have a high turnover rate of personnel without adequate knowledge transfer within the agencies, which forces national ministries to repeat the knowledge transfer process (i.e. technical training or seminars), thus creating inefficiencies.

From a subnational (including provincial, city or regency, and village) perspective, the existing national-level regulations concerning renewable energy lack detailed provisions regarding the roles of regional agencies. Further, national government agencies often provide limited budget or technical assistance support to subnational governments. Given that subnational governments are mandated to follow national regulations as guidelines, this lack of regional involvement restricts their role and limits budget allocation for energy transition measures. Additionally, when regions collaborate with external actors such as international organizations or ministries on energy transition projects such as renewable energy installations, regions often encounter funding shortages for project maintenance after project implementation.

## 4. Recommendations

In light of these barriers and capacity gaps, our research has identified several enablers to speed the transition away from coal and to facilitate a just energy transition that plans for and addresses the distribution of costs and benefits of a transition from coal. Our recommendations include:

### **A new coordinating facility to improve governance, training and finance**

Create a stronger governance framework to facilitate quicker and more streamlined implementation of energy transition policies and practices across multiple levels of government through a governing body that is capable of both understanding the technical knowledge of what constitutes a just energy transition as well as coordinating all actors needed. We suggest the Ministry of National Development Planning (Bappenas) to manage a Just Energy Transition Support Facility, as they would be well placed to align just transition efforts with national development planning. It could support Indonesia's newly established Energy Transition Implementation Joint Office (Rumah PATEN), by issuing formal recommendations to all ministries. This facility should consist of three pillars:

- **knowledge and information**, via training courses targeted to specific regions, officials and local workers;
- **a talent pool**, with a networking hub for energy transition professionals and former coal workers, and job matching in appropriate regions and fields;

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- **finance mobilization**, to coordinate finance from national public funds and international organization funds, to identify and prioritize which specific projects require external funding, and serve as a contingency fund (i.e. for disasters) allocated to regions that will lose revenues because of the transition (IESR, 2023), as well as fund social protection programs for loss of employment, healthcare support and temporary income support for transition-impacted workers.

### **Support for economic diversification**

Facilitate a socio-economic transition in coal mining regions, for instance, by providing training for former coal workers and enhancing their skill sets so that they can find work in sectors other than coal. The above-mentioned talent pool facility could either train coal workers directly or be established in collaboration with local universities or other technical-vocational entities to facilitate capacity building in coal-intensive regions.

Social cushioning measures (cash transfer, targeted payments etc.) should be put in place to provide short-term relief for people losing their jobs or livelihoods during a shift away from coal. In addition, Bappenas, Bappeda, and regional policymakers should support the identification of economic diversification strategies and coordinate with other sectors and industries with potential for absorbing the displaced coal- and fossil fuel-related labour force, enhancing successful economic diversification via eco-tourism pathways, agribusiness and manufacturing development plans, investing in renewable energy capacities on former mining land (including using empty mine shafts as energy storage capacity), or by establishing local innovation hubs (often biomass-based).

### **Develop a vision that works for the many, not the selected few.**

Establish a platform for multi-stakeholder dialogue and analysis (e.g. managed by the Just Energy Transition Support Facility), to bring different stakeholders together (including spaces for both cross-stakeholder and within-stakeholder dialogues in separate settings), including local government and communities from impacted coal regions. These dialogues should facilitate the development of a shared and common vision of what a future without coal could look like in the affected regions, and give voice to people impacted by transitions so that they have a say in how to manage them (Atteridge & Strambo, 2020).

These discussions should be framed with the latest science-based evidence to avoid repeating mistakes made in the past. For instance, the government's latest push for nickel mining (a mineral critical for the energy transition) should be carried out in a manner that limits impacts on the environment and channels benefits to local people instead of large industries and conglomerates or selected well-connected individuals.

### **Improving awareness of just energy transitions and elevating the bridging role of local activists**

Raise awareness of the issues laid out in this brief and to build the capacity of stakeholders to better understand just energy transitions, their impacts and opportunities, and the needed actions to facilitate a transition. An extensive campaign

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should go beyond policymakers and local community leaders, including younger generations to encourage and prepare them to seek job opportunities beyond coal and to sensitize them to the negative impacts of coal value chains on their health and their environment. Local activists already lead campaigns for a just movement away from coal, and those activists could take on a bridging role to help enable a dialogue between policymakers and local communities.

### **Market and policy reforms to eliminate subsidies to coal and support renewable energy rollout**

Eliminate harmful subsidies and a market price cap (Karyza, 2023) that keep the price of coal artificially low; electricity pricing should reflect the negative externalities of coal power, with monitoring of any negative impacts on low-income consumers. This could be achieved by strengthening Government Regulation (GR) 46/2017, allowing the Central Agency of Statistics (BPS) to factor in environmental degradation into the national Economic and Environmental Balance Sheets, recognizing often-overlooked externalities such as the environmental and health costs of coal.

Adopt policies that facilitate the building (and market integration) of renewable energy, by allowing PLN – the sole distributor of electricity in Indonesia – to take up more renewable generated electricity via a revision of inflexible power purchasing contracts and less stringent take or pay clauses (for fossil fuel generated power).

Lower bureaucratic hurdles and remove red-tape regulations for renewable energy companies, to boost investment in renewables. The national government should adopt policies that empower subnational and district or municipal government entities to plan for renewable energy capacity. Regional governments can integrate energy planning into overall regional development planning, and they can simplify the process for issuing renewable energy locational permits, providing clear requirements and a digitalized verification system.

These measures and concrete steps, including provisions for better governance, capacity building and economic diversification, will help Indonesia on to a more sustainable development pathway and will ensure that an energy transition away from coal is not only economically feasible but also socially just.

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