A just coal transition in Indonesia – current debates

Presentation by Stefan Bößner, Research Fellow Stockholm Environment Institute (SEI) Bangkok, Thailand



Stockholm Environment Institute at a glance

Where we work



SEI Headquarters	SEI Oxford
SEI Africa	SEI Tallinn
SEI Asia	SEI US
SEI Latin America	SEI York

Facts and Figures

. Around 300 publications (in 2021), 300+ staff members, 8 centers around the world, 7 internal research initiatives and innumerable (externally financed) research projects

. Regularly ranked as world's top think tank on environmental issues

. Covering almost all issues related to sustainable development (energy, climate change, agriculture, circular economy...)



Content

- The importance of coal
- The cost of coal
- The policy background
- Current debates & barriers
- Some recommendations for a way forward

Coal is important



Source: Jakarta Post

- Indonesia is 3rd largest producer after China and India
- Around 250,000 people work in the mining sector
- Revenues from coal mining present up to 2% of GDP (depending on coal prices)
- Revenues even more important for sub-national government units (estimates vary between 20-40%)



But also harmful to climate, people and environment



Source: IEA Southeast Asia Energy Outlook 2022, STEP: current policies, SDS: pathway needed for 'well below 2C'

- An estimated 10,500 people died in 2022 in Indonesia from pollution caused by coal fired power
- Coal mining threatens biodiversity, destroys ecosystems and releases chemicals and metals into groundwater (sulfur dioxide, arsenic, lead)
- Emissions released from burning coal for power are up to two times higher per unit than for gas
- Coal must be almost completely phased out by 2050 if we want to meet the Paris Agreement's target (-95% in 1.5°C scenarios, -85% in 2°C)

Source; IPCC 6th Assessment Report, Working Group III, Mitigation of Climate Change



The policy background



Source: The Diplomatic Insight

Some positive developments

- Indonesia is committed to becoming a net-zero economy by 2060
- Regulation No. 112/2022: create roadmap for early coal power plant retirement and strengthen renewable energies (purchase priority etc.) >> Regulation No. 103/2023 provides more details on early retirement
- Regulation No. 98/2021 on carbon pricing
- Just Energy Transition Partnership (JETP) programme was launched during the G20



Current debates



- Different Stakeholders have different visions of where to go:
 - coal phase out? phase down? use of coal derivatives?
- How do diversify economically? If coal, disappears, what economic activities can replace coal?
- What is the impact on energy security?



Current barriers

- Markets: not flexible enough for renewable energies, too monopolistic, fossil fuel subsidies
- Policies: some incoherence between policies and between the national and local level (de-, and recentralization of planning); lack of implementation; lack of planning capacity
- Awareness of impacts and alternatives are often lacking; particularly on regional level
- Often, negative impacts (pollution) occur locally, but benefits (money from coal) accrue to stakeholders further away (national companies, workers not from the region)
- Local communities are often not asked and not incorporated in decision making processes
- Coal industry is well connected to policy sphere and vice versa



Some recommendations for a way forward



- **Economic diversification** is key, and solution exist (eco tourism, using mining site for solar installations or as energy storage)
- **Investing in training and capacity building** of coal workers and their communities to strengthen their skills for a post-coal economy
- Make the **market and the grid fit for renewables** (increase market flexibility, do away with harmful fossil fuel subsidies, level the playing field for renewables etc.)
- Strengthen the **policy and planning capacity**; adopt robust policy- and regulatory frameworks to support low carbon technologies and practices as private investment is keen on predictability and stability
- Reassess coal derivatives pathways, since they might lock in high emission pathways; coal derivative are usually not 'cleaner' than conventional coal (products)
- Make sure, the **justice aspect** of transitions is respected



What do we need for a just transition?



Waorani Nation successfully sued the Ecuadorian government to stop oil exploration in the Amazonas

4 types of justice:

- Procedural justice (bring in variety of stakeholders from the beginning)
- Distributional Justice (the many shall benefit, not just the few)
- Recognition justice (accept that there are many visions and incorporate them)
- Restorative justice (restore power, balance and environment)

Source: www.amazonfrontlines.org

Thank you for your attention!