The Energy Transition in South Africa:

Status, Challenges, and Opportunities for a Just and Equitable Transition

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Outline

- South Africa at a glance
- Just Energy Transition Partnership (JETP)
- Challenges and opportunities for a just energy transition
- The role of international cooperation: Focus (German government and the Civil Society Community
- Conclusion
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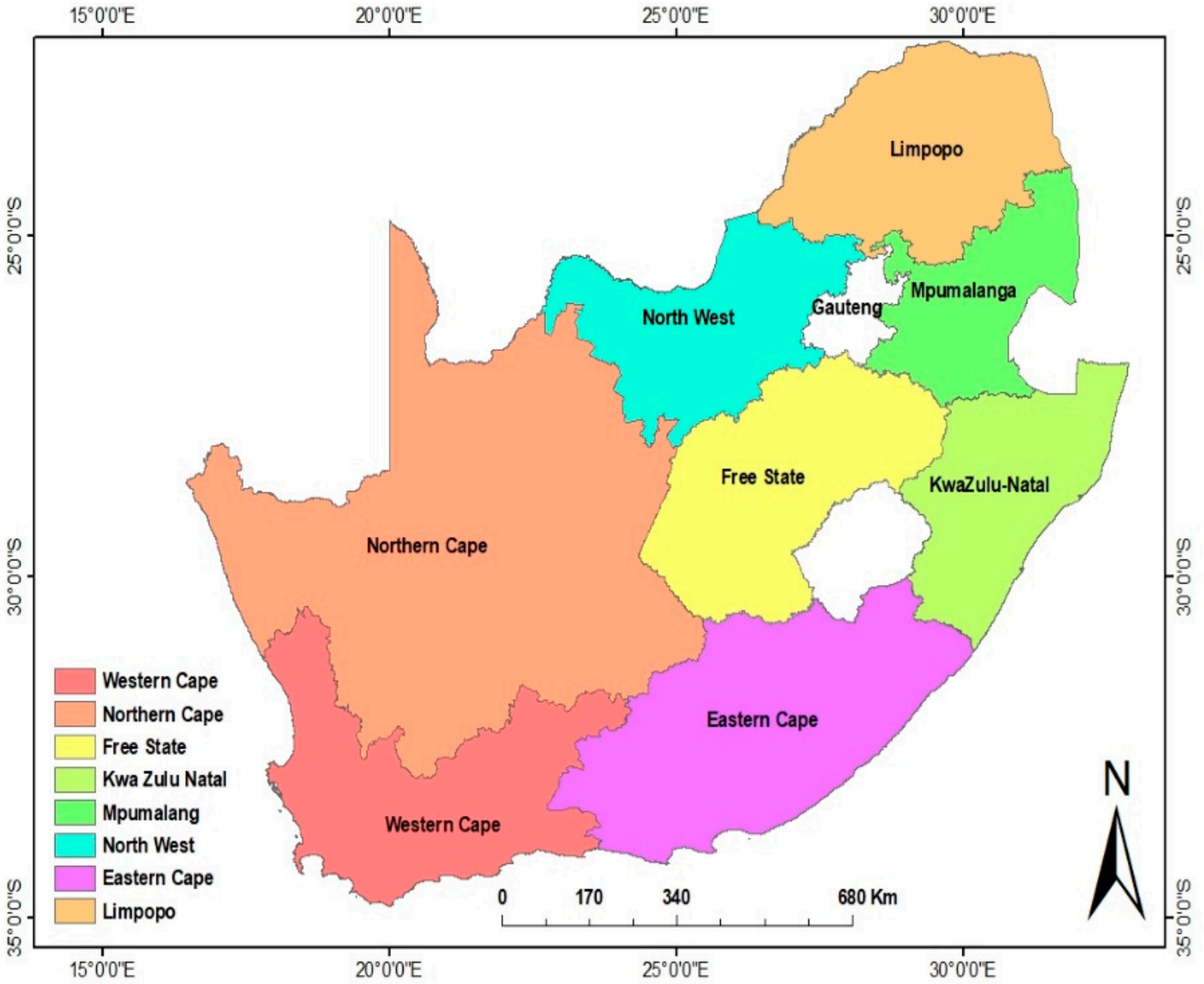
South Africa at a Glance

- **Population**: ≈ 63 million (2024)
- A constitutional democracy with 3 layers of government (National, provincial and local)
- **Economic sectors**: mining, transport, energy, manufacturing, tourism, services, and agriculture.

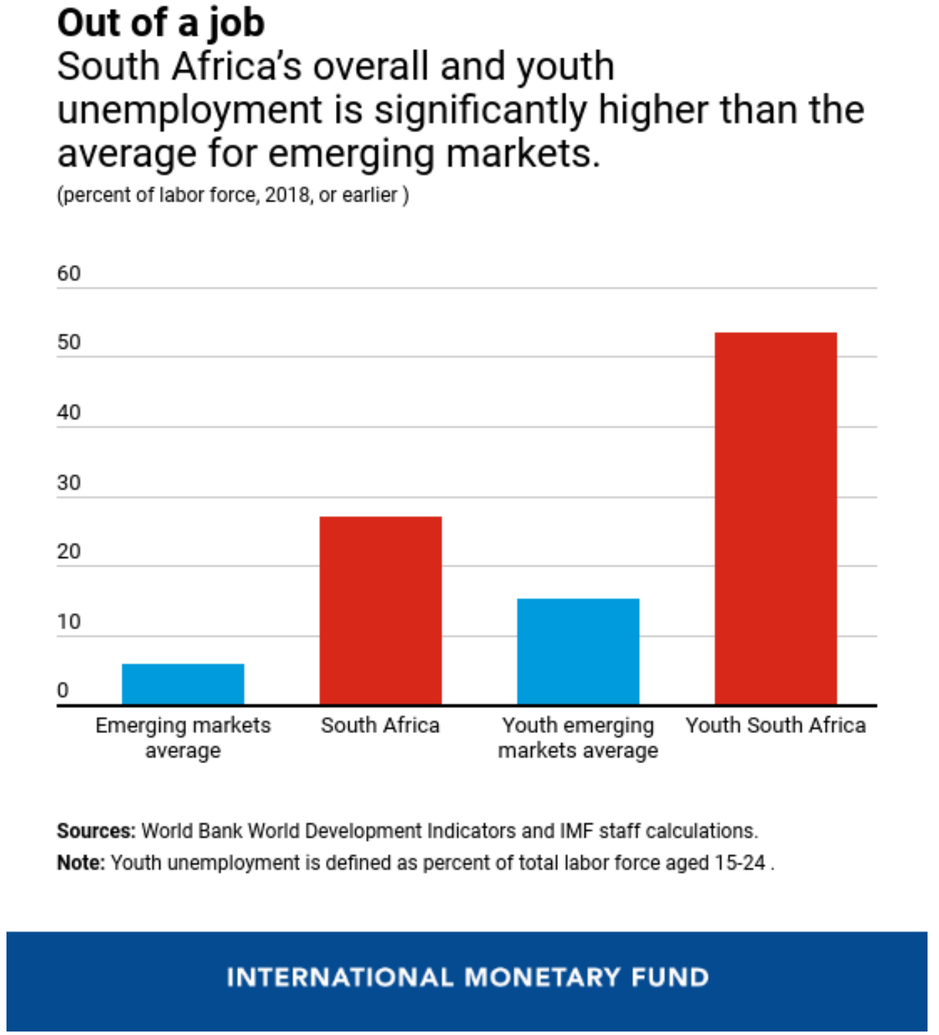
South Africa's 9 provinces



Source: [Omotayo et al., 2020](#)

Job market

- Unemployment rate: 31,9% (End of 2025)
- The labour market is highly racialised and gender-biased
- High level of youth unemployment
- Women earn 30% less than their male counterparts

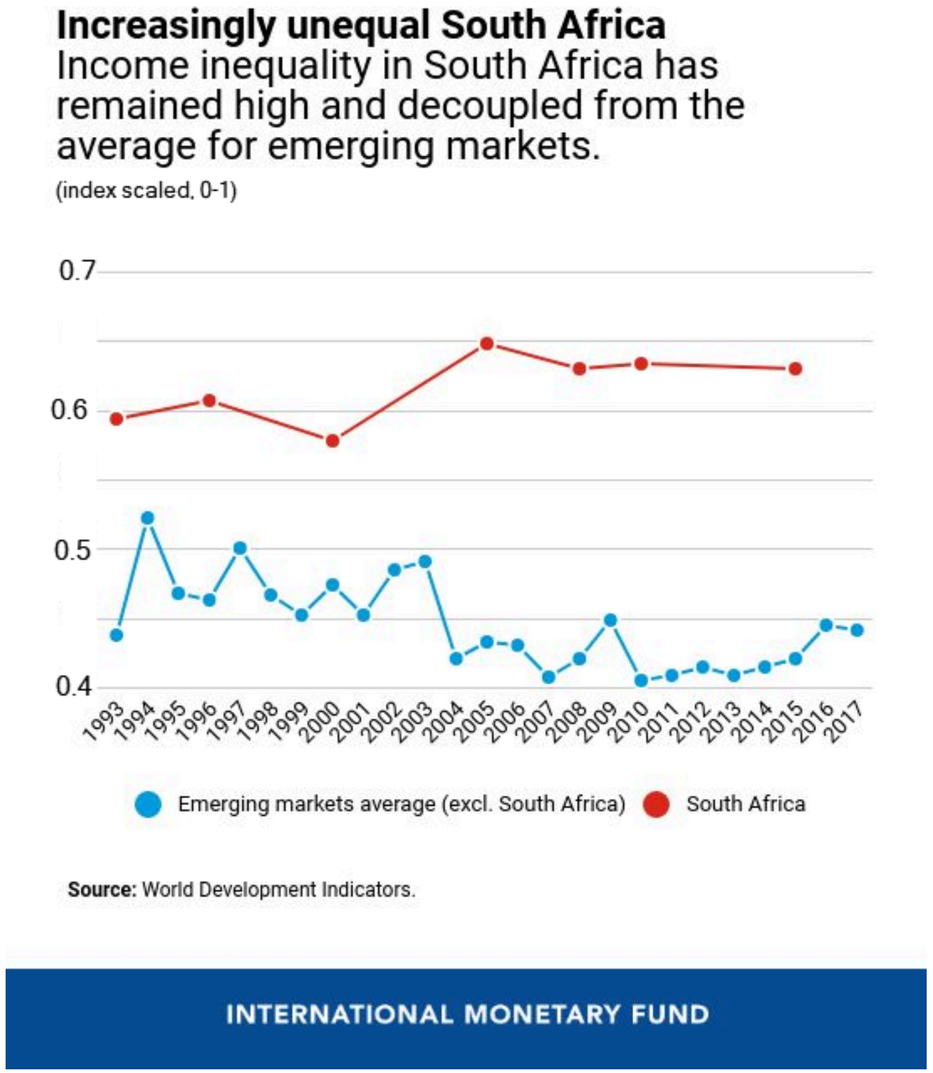


Inequality in South

According to the World Bank data, South Africa is the most unequal country in the world.

The bottom 60% of households depend more on social grants and less on income from the labour market.

The top 10% of the population spent 8,6 times more than the bottom 40% in 2006



The Energy Status in South Africa

- Heavy reliance on coal, with ≈ 83% of electricity from fossil fuels
- Low levels of RE uptake: 13%, for solar 8%, and wind (5 %)
- Access to electricity: Energy access was at 87:7% in 2023
- Unprecedented power outages/ load shedding in 2023, with significant improvement reported in 2024 and 2025, due to increased production of coal.

Climate,Envilomen Health and Well-being

South Africa is the highest emitter of CO2 on the continent and the 14th highest emitter globally.

Carbon Dioxide (CO2) emissions 6.9 tCO2e/capita (2024)

The processing of coal is water-intensive, epecially for cooling coal powered power plants

Environmental and health risks to workers and host communities, particularly due to high levels of airborne toxins and pollutants.

Source: Union of Concerned Scientists

In Summary

- Fossil fuel dependence
- Climate, environmental, and health and well-being risks
- Poverty and social and economic inequality
- High levels of unemployment and injustices in the labour market
- Energy insecurity and affordability

In this context, the Just Energy Transition Partnership can be viewed as an opportunity to advance both social and economic development and climate goals

South African Just Energy Transition Partnership (JETP) at a glance

- Was established and formalised in Glasgow in 2021 at Cop 26
- Is a partnership established by the International Partners Group (IPG)
- Initial partners included the government of South Africa and the governments of France, Germany, the United Kingdom (UK), the United States (US), and the European Union (EU).
- Denmark and the Netherlands joined in 2023, while Canada, Sweden, Norway, and Japan have also contributed to the JETP in South Africa and elsewhere
- An initial USD 8.5 billion was pledged, later increasing to USD 9.3 billion, with additional contributions from Denmark and the Netherlands- Current Investment Plan for 2023–2027

What exactly is the JETP?

- The JETP can be understood as a transnational policy process where domestic stakeholders and international partners co-produce policy agendas, ideas, and financing mechanisms, with the national government taking primary responsibility for implementation.

- The JETP framework provides South Africa with a focused platform to shift from coal to a renewable energy–based economy, taking into account social and economic development

The implementation of the South African JETP is divided into six Portfolios

- Electricity
- Mpumalanga Just Transition (JT)
- New Energy Vehicle (NEV) Sector
- Green Hydrogen (GH_2)
- Skills and capacity development
- Municipal level transition.

What does it aim to achieve?

- Transform the economy by reducing carbon emissions while ensuring a just structural, social, and economic transition.
- Disrupt dependence on fossil fuels by transitioning from coal-fired power plants to a renewable energy–based economy.
- Promote New Energy Vehicles (NEVs), including electrification of public transport and expansion of electric vehicle infrastructure.
- Explore the potential of green hydrogen.

Key Stakeholders Include:

- The International Partners Group (IPG)
- The South African national Government
- Civil Society Organizations
- The Climate Justice Charter Movement (CJCM)
- Trade Unions
- Environmental Organizations
- Bilateral and Multilateral Partners
- Domestic Private Sector
- Local and provincial government

As the name suggests, Justice and partnerships are central to the JETP

Justice

- Justice means that the costs and benefits of the transition are shared equitably.

- To not leave anyone behind, energy transition and climate processes and actions must be assessed and implemented through the justice and equity lenses.

- Balancing the transition with social and economic equity considerations is therefore paramount, especially for coal-dependent communities.

Partnership

- Partnership emphasizes collaboration at the national, regional, and global levels.
- JETPs are an important model for collaboration and are currently being implemented in South Africa, Indonesia, Vietnam, and Senegal.
- For South Africa, the JETP is also implemented in partnership with local and provincial governments

What has been achieved so far?

Based on Quarterly Progress Report Data (Q4 2025)

- A total of **$13.93B** has been pledged
- **42%** of these funds have been allocated
- **248** total projects
- **17** active financial partners, including multilateral development banks
- **78 projects (31%)** have been completed
- **127 projects (51%)** are under implementation
- **93%** of the total available grant funding has been allocated
- **100%** of policy loans have been allocated

Despite progress, South Africa faces persistent challenges on several fronts.

In the design and implementation

The social dimension has not received the same level of attention as the technical and economic aspects.

There is limited focus and funding for addressing social and economic transition risks

Prioritizes supply (the production and distribution of RE energy) over demand, resulting in less focus on people and community needs and priorities—such as energy access and affordability.

Finance

- South Africa will need to secure USD 98 billion in investments from public and private sources over the initial five years (2023–2027).
- USD 9.3 billion offers a starting point, but falls short of the vast investment needs.
- Nature of financing: Of the pledged funds, approximately 8% is in the form of grants, with the remaining funds allocated by way of concessional loans and commercial investments
- A recent Open Secrets investigation revealed that 65 percent of the grant funding for the South Africa JETP so far has been allocated to private corporations or agencies based outside South Africa, and less than a quarter of funds have gone to local agencies and organisations.

Narratives

Much of the mainstream energy transition discourse focuses on two issues:

- Economic industrialization
- Climate mitigation

Both matter, but an equally fundamental dimension remains mainly absent

- Whether the energy transition enables long-term development and improved livelihoods and wellbeing

Without addressing this dimension:

- The transition risks reinforcing inequalities and injustices,dependencies, and new forms of colonialism and exploitation

Infrastructure

Upgrading aging and building new energy and service infrastructure

Establishment of renewable power and green hydrogen plants: The shift towards renewable energy demands the establishment of solar farms, wind turbines, etc

The integration of digital and AI innovation into the energy infrastructure

Governance and Institutional Capacity

Governance and institutional capacity play a role in shaping outcomes for workers and communities.

Eskom, the state-owned power utility company and a critical player in South Africa's energy transition, has experienced many financial and management challenges -inefficiency, corruption, financial instability, debt, undermining the just transition, and public trust

Need for institutional capacity building to manage the multifaceted dimensions of the transition and complex energy projects.

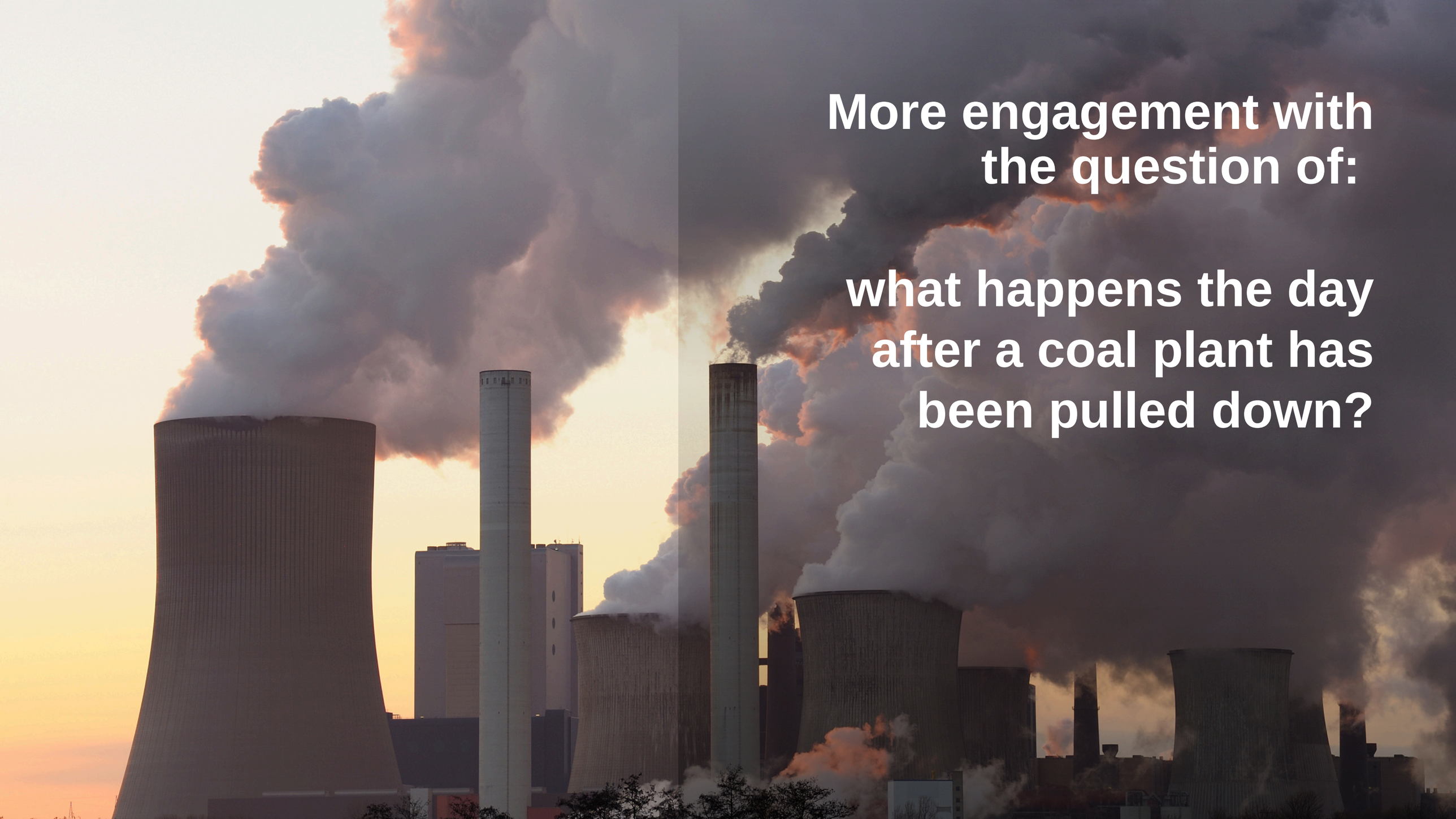
External vulnarabilities

- Dependence on international partnerships and funding makes JETPs highly vulnerable to external politics and geopolitical dynamics.

- For example, in 2025, the United States withdrew from South Africa's Just Energy Transition Partnership (JETP)and cancelled its funding commitments, amounting to $56m in grant funds and $1bn in commercial debt/equity.

Pathways forward

JETP pathways must reflect fiscal realities, political dynamics, national and community needs and priorities, as well as institutional capacity.

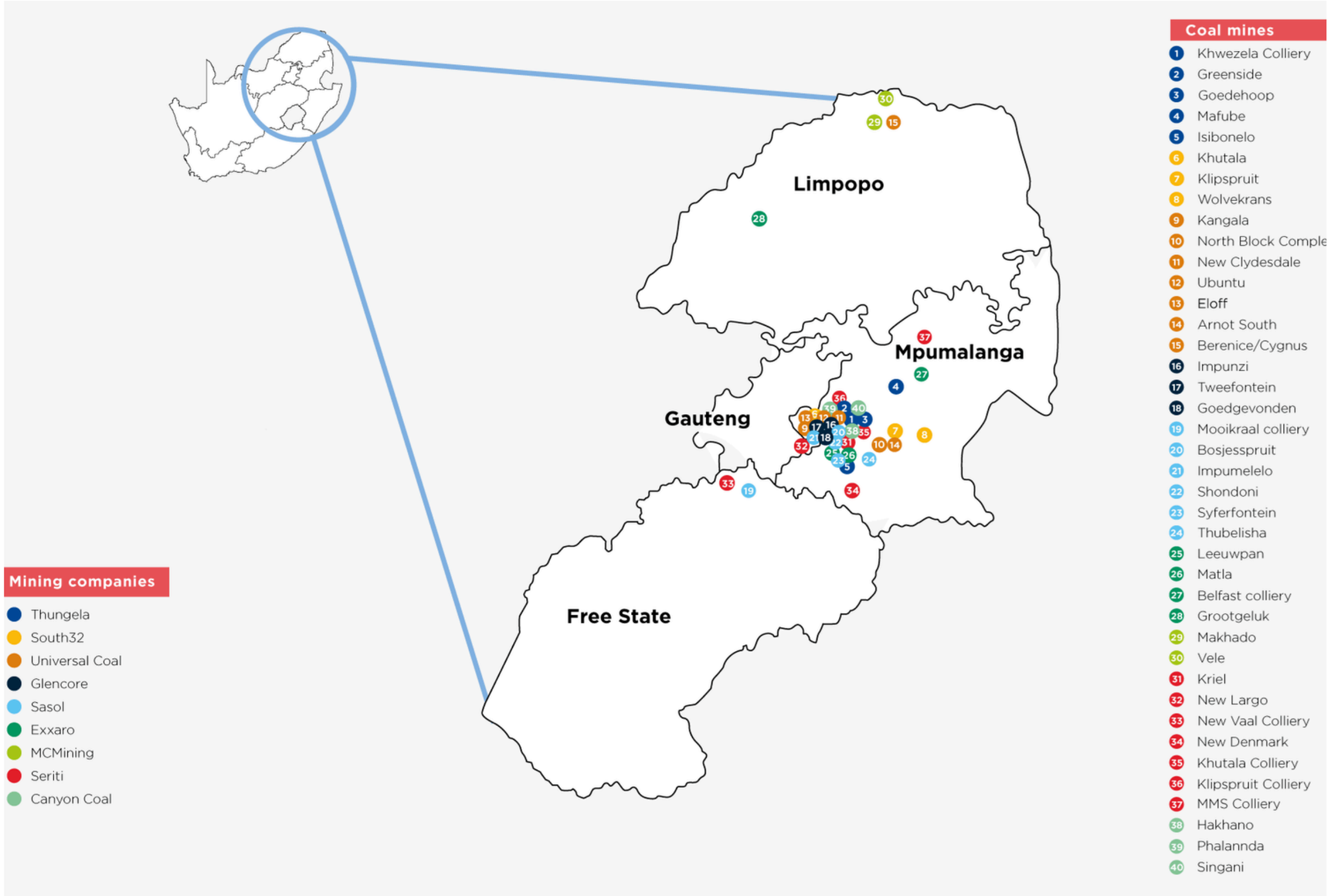


More engagement with the question of:

what happens the day after a coal plant has been pulled down?

- In the context of high unemployment, more attention should be paid to the management of potential job losses from JETP implementation.
- According to the Minerals Council South Africa, the South African coal mining industry directly employed approximately 98,425 people in 2024, up from 90,977 in 2022.
- These numbers only account for direct employment; additional indirect jobs in the value chain and service sector could also be lost.
- Mpumalanga will and is experiencing the most severe impacts of the energy transition, highlighting uneven risks

Mpumalanga at higher risk



***Source**: Minerals Council South Africa*

Key Elements for a Just Energy Transition in South Africa

- **National Ownership & Governance**
  Align with national priorities & institutions
  State & domestic stakeholders as a focal point

- **Justice, Inclusion & Social Impact**
  Engage stakeholders: unions, communities, local gov
  Prioritise social justice & inclusive development
  Provide social safety nets for affected communities

- **Funding, Partnerships & Context**
  Ensure sufficient, sustainable funding
  Reliable partnerships: EU $5.1B package, Cape Town (May 2025)
  Consider and be prepared for potential national, regional & global dynamics

  Institutional and human capacity - to plan and implement the transtion

Why should Germany care about the JETP in South Africa?

- Germany and South Africa have mutual and strategic interests in the success of South Africa’s JETPs.
- Climate action and sustainable development are of shared interest to both countries.
- South Africa can benefit from the technical expertise and financial support of the German government(So far, Germany has already provided close to € 300 Million in grants)
- Germany can benefit from green hydrogen production in South Africa to support its and global climate goals

The role of the German government

- **Double Down on Policy Support:** Continue to work with the South African government to develop clear, enabling policies and regulatory frameworks that incentivize renewable energy investments, good economic analysis, investment assessments, foster local ownership, and accelerate decentralized energy deployment.

- I**nvest in R&D & Capacity Building:** Support local technical education, innovation, and skills development. Finance regional centres of excellence and knowledge hubs.

Cont´

- **Ensure Long-Term, Predictable Financing**: Champion sustained, high-volume financing through grants and partnerships with multilateral institutions, governments, and private sector actors to create foundational and accelerator conditions for renewable energy aligned with South Africa's priorities.

- **Reliable partner**: Champion the South African energy transition and development needs and priorities at the national and global levels, particularly where they are not yet present.

- **Support for CSOs:** in Germany, South Africa, and other Global South Countries

Role of CSOs

- **Support Civic Engagement & Advocacy:**
  By amplifying South African-led narratives, priorities supporting advocacy efforts, and strengthening the capacity of local CSOs to influence policy and public perception.

- **Facilitate Cross-Continental CSO Alliances:**
  By harmonizing strategies, sharing knowledge, and building collective power for a people-centered transition.

- **Leverage Trusted Institutions:**
  By leveraging trusted, established institutions such as places of worship to make energy and development projects more scalable, durable, and impactful.

Key Lessons from South Africa

- Significant technological innovation is enabling countries like South Africa to transition away from fossil fuels.
- However, there is a critical gap between technological success and meaningful social and economic transformation.
- As a result, even with continued innovation, achieving a just and equitable transition remains a challenge
- Those who bear the greatest burden are the poor, vulnerable, and marginalized.

Conclusion

- A just energy transition cannot be measured by emissions reductions alone; it must also create meaningful development opportunities.
- This requires a people-centred approach that prioritizes the needs of people and communities, creates new economic opportunities through renewable energy, and ensures justice and equity.
- These dimensions and principles must be centered in JETP with explicit and measurable targets.
- This will not emerge automatically from markets or technology diffusion. It requires deliberate policy choices, strong institutions, and sustained international cooperation and support, as well as strong advocacy from the CSO community.

Take aways

- The transition is technologically possible.
- Whether it becomes a just transition or a path to new inequalities and injustices in South Africa will depend on how it is designed, implemented, and governed.
- The focus must remain on ensuring that the JETP is a structural driver of social, economic, and ecological transformation, supporting long-term development and sustainability goals.

Vielen Dank für Ihre Aufmerksamkeit!

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