

FINANCING A JUST, ORDERLY AND EQUITABLE TRANSITION



CASE STUDY

Advancing energy equity
through Global North-South
partnership

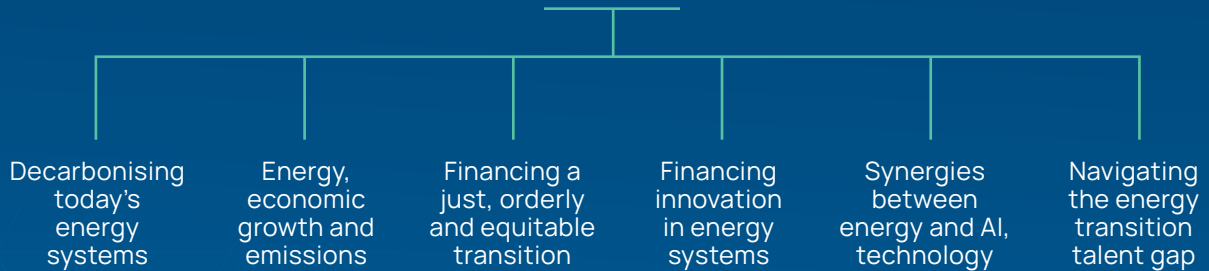
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Advancing energy equity through Global North-South partnership

CONTEXT

One of the highlights of COP26 in Glasgow in 2021 was the establishment of Just Energy Transition Partnerships (JETPs) – an innovative plurilateral framework designed to expedite the phase-out of fossil fuels. This initiative aims to align financial and technical support from countries in the Global North with recipient nations in the Global South.

France, Germany, the United Kingdom, the United States, and the European Union at that time had committed to mobilising US\$8.5 billion to support South Africa's transition plans. Since then, the Netherlands and Denmark have joined the partnership, increasing the commitment to US\$9.3 billion.

To date, JETPs have focused on emerging economies with significant coal production and consumption. South Africa, the first country to sign up for this partnership, generates approximately 80% of its electricity from coal, despite having some of the world's best conditions for solar and wind energy, as well as the technological capability to produce green hydrogen.

KEEPING THE END OF COAL IN SIGHT

In November 2022, the World Bank approved the Eskom Just Energy Transition Project (JETP), a landmark initiative valued at US\$497 million¹. This project is set to support Eskom, South Africa's primary public energy utility, in transforming the decommissioned coal power plant at Komati into a renewable energy site.

36%

Percentage share of coal in global power generation in 2023²

US\$9.3bn

Amount pledged in 2023 by some countries to finance climate action in South Africa⁵

55%

Percentage of CO₂ emissions generated by South Africa's power sector⁷

90,000

Number of people employed in South Africa's coal mining industry⁶

Organisations involved

- World Bank
- Eskom
- Energy Sector Management Assistance Programme
- Canadian Clean Energy and Forest Climate Facility

Industry

Utilities

Location

South Africa

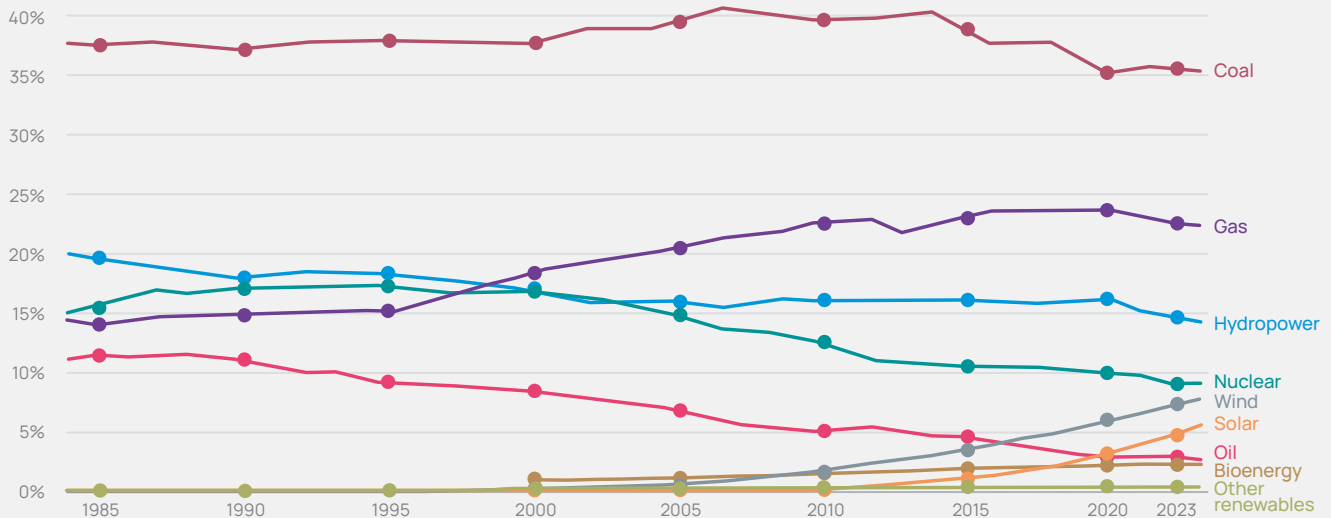
Cost

US\$497_{mn}

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Coal continues to dominate the global power mix

The data shows the percentage share of sources of energy used to generate global electricity over the years



Source: Ember (2024); Energy Institute - Statistical Review of World Energy (2024)

The choice of Komati was strategic. At its peak, the power station was twice the size of any other in the country, with a capacity of 1,000 megawatts (MW). The repowering and repurposing project is now being heralded as one of the largest global initiatives for decommissioning, repowering, and repurposing of coal-fired power plants and could serve as a reference for transitioning fossil fuel assets in other geographies. The new facility will feature 150 MW of solar power, 70 MW of wind power, and 150 MW of storage batteries¹.

The EJETP is a key component of South Africa's JETP, which emerged from the COP26 summit. The partnership is central to South Africa's strategy to reduce its reliance on coal. The initiative includes a US\$439.5 million loan from the World Bank, US\$47.5 million provided as a concessional loan from the Canadian Clean Energy and Forest Climate Facility (CCEFCF), and a US\$10 million grant from the Energy Sector Management Assistance Programme (ESMAP).

South Africa ranks 14th in the world for carbon dioxide emissions and depends heavily on coal. This dependence not only contributes to global warming but also poses severe risks to public health.

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Additionally, the country's coal plants are ageing and increasingly unreliable, exacerbating a power supply deficit of four to six gigawatts (GW). The shortage has led to frequent load shedding, with outages lasting up to 10 hours daily, impacting daily life and economic prospects. About 10% of South Africans lack access, and 47% are classified as 'energy poor.'¹

Globally, coal remains the largest source of electricity, accounting for 36% of global generation in 2023². Environmentalists advocate for a drastic reduction, calling for coal to constitute no more than 4% of global electricity generation by 2030, with a complete phase-out by 2040.

Transitioning away from coal is crucial not only for reducing greenhouse gas emissions but also for enabling the broader decarbonisation of other sectors, such as transport and heating. According to Ember, an independent energy think tank, fossil fuels accounted for 61% of global per capita electricity generation in 2023, whereas in South Africa, this figure is at 80%, among the highest globally.

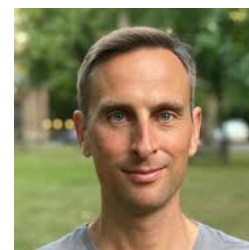
Dave Jones, Global Programme Lead, Ember, said: "Coal power needs to collapse by 80% by 2030 to avoid dangerous levels of warming above 1.5°C. We

need to build enough clean electricity to simultaneously replace coal and electrify the global economy. World leaders have yet to wake up to the enormity of the challenge.”

Although the number of new coal plants under construction or in planning globally has halved since 2017 and is less than a quarter of what it was a decade ago³, the journey ahead demands urgent and coordinated efforts. A slowdown in closures of coal plants in the US and Europe and rapid economic expansion in China have led to an increase in the world’s coal power capacity by 2% in 2023⁴.

The global transition away from coal requires substantial international support. Developed countries must enhance their financial and technical assistance to developing nations to facilitate a successful energy transition.

The EJETP is notable in this regard and is helping South Africa in advancing climate action. Expanding JETPs to more countries in Global South could significantly help meet global climate goals, and ensure affordable, secure, and sustainable energy access for all.



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Dave Jones
Global Programme Lead, Ember

REFERENCES

- 1 • <https://www.worldbank.org/en/news/factsheet/2023/06/05/factsheet-eskom-just-energy-transition-project-in-afe-south-africa#:~:text=What%20is%20the%20Eskom%20Just,the%20Government%20of%20South%20Africa.>
- 2 • <https://www.theguardian.com/environment/2024/apr/11/worlds-coal-power-capacity-rises-despite-climate-warnings>
- 3 • <https://www.wri.org/insights/countries-phasing-out-coal-power-fastest>
- 4 • <https://www.carbonbrief.org/china-responsible-for-95-of-new-coal-power-construction-in-2023-report-says/#:~:text=In%20total%20during%202023%2C%20the,from%202%25%20a%20year%20earlier.>
- 5 • <https://www.bloomberg.com/news/articles/2024-07-15/south-africa-to-raise-2-4-billion-from-climate-pact-this-year>
- 6 • <https://www.statista.com/statistics/1311307/south-africa-coal-mining-employment/#:~:text=South%20Africa's%20coal%20mining%20industry,of%20the%20South%20African%20economy.>
- 7 • <https://www.climate-transparency.org/wp-content/uploads/2021/10/CT2021SouthAfrica.pdf>

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