

# SOUTH AFRICA'S ESKOM ENERGY TRANSITION PROJECT

## BACKGROUND

Since 2007, South Africa has been experiencing ongoing periods of widespread national electricity blackouts due to Eskom's – the nation's main supplier of energy – inability to supply it. Consequently, this has had profound negative impacts on citizens' well-being and confidence of the economy. To tackle this, Eskom launched its Just Energy Transition Project (JETP) - a \$497million project mostly financed by the World Bank - in 2020, with the main objectives:

- Achieve net zero carbon emissions by 2050
- Provide reliable, clean electricity supply
- Stimulate economic development, protecting and increasing jobs



## OBJECTIVE

Analyse the effectiveness of the Eskom Just Energy Transition Project (JETP) with regards to having a positive socio-economic impact on South Africa, helping to solve its long-lasting energy crisis and build a more sustainable economy.

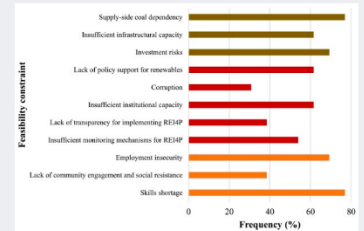
## KEY FINDINGS



- Impact on Energy
  - Renewable solutions, which need < 2 years of build time, to help ensure South Africa has competitive exports following growing carbon tariffs.
  - Decommissioning of the Komati coal plant, replacing it with renewable energy solutions and batteries, improving power supply and grid stability.
  - Technical solutions tested at Komati to demonstrate how renewables and batteries can be integrated in the national grid.
- Impact on Jobs
  - Workers affected by the closure of the Komati plant transferred to other Eskom projects or supported through reskilling and upskilling.
  - Build in-house technical capacity for future projects, creating new jobs.
  - \$47.5 million will be devoted to creating economic opportunities for local communities and workers, working in coordination with local government, civil organisations and the private sector.
- Impact on Wellbeing
  - Decommissioning of the Komati plant will improve the ambient air quality in its vicinity.
  - Improving water quality by removing buildings and dams and cleaning up contaminated areas.

## ANALYSIS

- Governance constraints: South Africa's embedded corruptive practices and the dominance of Eskom on its energy system hinders stakeholder participation in energy projects and bottom-up initiatives.
- Structural constraints: Securing energy justice will be complemented by structural change across other sectors of the economy, such as manufacturing, transport, agriculture, and tourism.
- Techno-economic constraints: Heavy economic dependence on coal, lack of energy infrastructure, and high market risks for investing in renewable energy projects.
- Infrastructural constraints: With the existing grid infrastructure, most renewable energy-generated power will be lost during the transition and distribution process.



## DISCUSSION

A lack of both implementation and monitoring mechanisms to target and track welfare benefits is the main shortcoming of the project. More intervention is required in sectors such as infrastructure, skilled labour and monitoring mechanisms to enhance the effectiveness of the policies in the long-run.

## CONCLUSION

Despite a clear vision and \$497 million funding approved by the World Bank group of the scheme, inefficient institutions and inadequate infrastructure hinder the JET's effectiveness. These findings offer insights into the broader landscape of global energy transition that is significant to navigating the complexities associated with achieving a more sustainable and resilient energy future. Recommendations could be applicable to other coal-dependant countries such as Colombia, China and India, aiding them in achieving their decarbonisation objectives.

## RECOMMENDATIONS

- Decisive measures need to be taken to increase environmental awareness throughout the country by means of educational programs and media campaigns.
- Extend the current scheme to a regional basis, which would better support conditions for a socially just transition and tackle inequalities.

