



Climate
Transparency

15 October 2021

SA energy sector has the highest carbon intensity of any G20 nation – Climate Transparency Report 2021

Despite an increased contribution from renewables, South Africa's energy sector still has the highest carbon-intensity of any G20 nation due to its heavy reliance on coal, according to the latest assessment by [Climate Transparency International](#).

In 2020, three-quarters (74%) of South Africa's total primary energy supply was derived from burning coal – more than double the G20 average of 31%. As a result, the country's per capita emissions are 1.22 times the G20 average.

Like the G20 as a whole, South Africa's current emissions trajectory is not compatible with the goal of limiting global warming to 1.5 degrees Celsius, the [Climate Transparency Report](#) shows.

"South Africa's reliance on coal highlights the need for a carefully managed, just transition to cleaner energy sources," said Bryce McCall, a lead author of the report and a researcher at the University of Cape Town's Energy Systems Research Group.

"Given the size of South Africa's coal sector, and the country's high unemployment rate, preparing for a just transition is a crucial undertaking."

Ahead of the COP26 climate negotiations, South Africa and other emerging markets are looking to developed nations to step up their support for mitigation and adaptation projects. Wealthy nations previously agreed to deliver \$100 billion (~R1.5 trillion) of climate finance a year, but have so far failed to reach that target.

The Climate Transparency Report shows that South Africa can enhance its climate ambitions by focusing on expanding renewable energy capacity rather than investing in new fossil fuel projects. It could also finalise the Climate Change Bill and implement policies to decarbonise the industrial sector.

The study shows that renewables accounted for 7.6% of South Africa's power generation in 2020, a significant increase from previous years but still well below the G20 average of 28.7%.

"While the share of renewables in the energy mix is set to increase as new projects come online and ageing coal power stations are retired, the country's latest energy plan still makes provision for new coal and gas projects," said McCall.

He shared: "South Africa is particularly vulnerable to the impacts of climate change, with average temperatures rising at twice the global rate.

"This will likely lead to more extreme floods and droughts, with serious implications for food and water security."

To reduce the risk of severe climate events, experts say the share of fossil fuels in the global primary energy mix needs to fall to 67% by 2030 and 33% by 2050.

However, the global Climate Transparency Report found that after a short period of decline due to the COVID-19 pandemic, greenhouse gas emissions are rebounding across the G20, with Argentina, China, India and Indonesia projected to exceed their 2019 emissions levels.

This comes as countries submit their revised nationally determined contributions (NDCs) – or decarbonisation targets – ahead of COP26. The lower end of South Africa's updated target is closer to being compatible with the goals of the Paris Agreement.

According to McCall: "To achieve the NDC, South Africa needs to enable effective implementation of the renewables capacity expansion as outlined in the Integrated Resource Plan 2019".

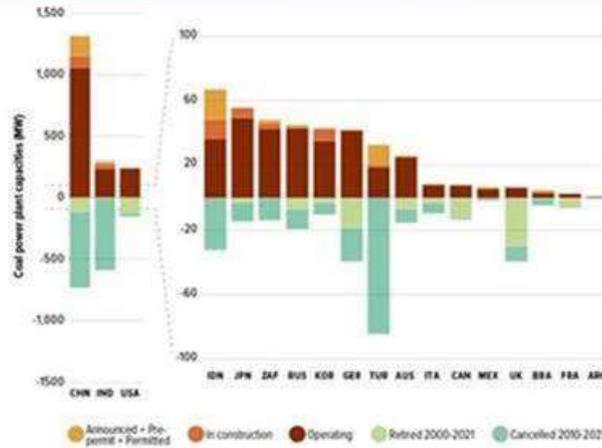
Note to editors

Download the [reports](#).

An online event launching the South African specific report and highlighting the importance of action now is planned for Wednesday, 20 October 2020 from 13:00-14:00. Please email energysystemsgroupuct@gmail.com to register.

A [snapshot of the South Africa country profile](#) (Credit: Climate Transparency).

Current coal power capacities of G20 members (as of July 2021)



Source: Global Energy Monitor, 2021

Credit: Climate Transparency

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