

South Africa has G20's dirtiest energy

South Africa's electricity is the dirtiest out of all the G20 countries. This is according to the fourth annual *Brown to Green Report* that was released on Wednesday afternoon. The report found that South Africa has the highest emission intensity in the power sector, with emissions per capita being roughly double the G20 average.

This trend has been increasing in recent years as a result of SA's high dependency on coal, and expansive new coal generation projects, the report said. While renewable energy has been growing rapidly with large investments, the share of electricity is still low.

These findings come on top of recently released satellite data that identified Mpumalanga as a global pollution hotspot, with the Witbank being identified by the Tropomi satellite as having the world's dirtiest air. The province is among the worst in the world for nitrogen dioxide (NO₂) concentrations and has the lowest air quality in South Africa.

The Brown to Green Report is the world's most comprehensive annual review of climate action by G20 countries. The report draws on the latest emissions data from 2017 and covers 80 indicators on decarbonisation, climate policies, finance and vulnerability to the impacts of climate change.

Co-author of the South Africa report, Bryce McCall of the University of Cape Town's Energy Research Centre, expressed concern about domestic industry emissions intensity which remains some of the highest among reporting G20 countries.

"The emissions intensity of the South African power sector has increased by 5% between 2012 and 2017, despite several Renewable Energy Independent Power Producers beginning commercial operation during this period," he says. "SA also has above-G20-average expenditure on fossil fuel subsidies as a proportion of GDP, and is currently rated as fifth behind Saudi Arabia, Italy, Australia and Brazil. Under our current economic conditions, subsidising dirty and expensive power makes no sense."

Despite commitments by both developed and emerging countries to reduce their dependence on fossil fuels, the report found that 82% of the G20's energy supply still comes from fossil fuels and few have adequate policies to phase out coal.

Although SA is a signatory to the Paris Agreement to limit global average temperatures to below 2 °C or 1.5 °C above pre-industrial levels, the government's decision to continue to build additional coal power plants until 2024 means that South Africa may not reach that target.

The report is however not all bad news for South Africa. SA is the only G20 country to explicitly reference the principle of a Just Energy Transition as part of its commitments to the Paris Agreement.

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