

# Coal in South Africa



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South Africa has a coal addiction, and 93% of the country's electricity comes from coal.

Eskom is building two of the biggest coal-fired power stations in the world: Medupi and Kusile.

Safe, affordable and accessible water is regarded as one of the planet's scarcest natural resources.

Coal and water are deeply interconnected. Water is crucial for the production of coal, but coal production pollutes and uses up huge amounts of water.

Eskom already uses a significant amount of water: 327 billion litres in 2011. Just over 10 000 litres of water per second, while over a million households don't have access to water.

SA is a water scarce country. A **third** mega coal-fired power station was approved by cabinet in August this year. Probably in the Waterberg. Where will the water come from in future?





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Every step in the chain of using coal to produce electricity pollutes and consumes vast amounts of water (the extraction and preparation of coal from mines, its incineration at a coal-fired power station, the measures taken to control dust and pollution at both mines and power stations and the disposal of by-products).

At the same time, coal has major health impacts, particularly for those working in coal mines or living in areas with lots of coal-fired power stations.

Coal has the most waste problems of all energy sources. Waste includes sulphur and nitrogen oxides, organic compounds, heavy metals, radioactive elements, greenhouse gases and a lot of ash.

In 2011, Eskom contributed 62.3% of South Africa's emissions. In fact, Eskom emitted more carbon dioxide in 2011 than Sweden, Norway, Finland, Switzerland and Denmark, combined.

Job creation numbers for Medupi and Kusile = exaggerated. Govt: 40 000 jobs. In reality: just over a thousand permanent jobs for BOTH Medupi

# New developments



Both Medupi and Kusile are heavily delayed, with huge cost overruns. It is estimated that Medupi could cost as much as R165 billion.

Both Medupi and Kusile have failed to deliver electricity either on time, or on budget at a huge cost to all South Africans.

Government has not officially decided whether Eskom or a private producer will build 'coal 3'.

Building new coal-fired power stations pushes the price of electricity up as coal prices rise, locks the country into a coal-addiction for the foreseeable future and pushes the country much closer to a water and climate crisis

At least three new private coal-fired power stations in the planning stages: Anglo American, Exxaro and KiPower.

# New developments



National Treasury getting closer to implementing a carbon tax – this will try to make polluters pay for the carbon dioxide that they put into the atmosphere, and puts a price on carbon.

Likely to be implemented by 2015. Carbon tax = R120/tCO<sub>2</sub>eq but because of exemptions, the real rate is actually closer to R48/tCO<sub>2</sub>eq

Eskom has said that it will simply pass this cost on to consumers: should absolutely not be allowed.

Carbon tax is one of the most necessary and important measures that must be taken to change South Africa's behaviour and reliance on fossil fuels (particularly coal)

Treasury must commit to using the money from the tax for grants, free basic electricity allocations and the development of renewable energy sources.

# New developments



New coal-fired power stations = massive new coal mines to supply them. Kusile alone will need 17 million tons of coal per year that it operates.

Eskom is applying for exemptions and postponements from complying with Air Quality legislation for two thirds of its 13 coal-fired power stations. (public participation process is ongoing, public meetings from 4-12 November around the country)

This will save Eskom R210 billion, but what about people's health who live in polluted areas because of coal mines and power stations? And what about climate change?

Despite saying that it takes climate change seriously, and promising to reduce emissions, the SA government is showing no signs of shifting away from coal.

There is a lot of work needed to oppose new coal-fired power stations, and make sure that Eskom is transparent and accountable.