



E3G

This note is part of a full report providing detailed analysis of the collapse of the global coal pipeline, available at www.e3g.org/NoNewCoal

SUB-SAHARAN AFRICA

Headlines

- > Sub-Saharan Africa has a pipeline of 15GW (5% of the global total), down **47%** since 2015.
- > Over this period seven countries have fully scrapped their pipeline.
- > This leaves 13 countries still considering coal, but with only South Africa and Zimbabwe currently constructing new plants.
- > Chinese financial institutions are involved in 13 projects in eight countries, totalling 11.4GW of planned capacity (76% of the total pipeline in the region).

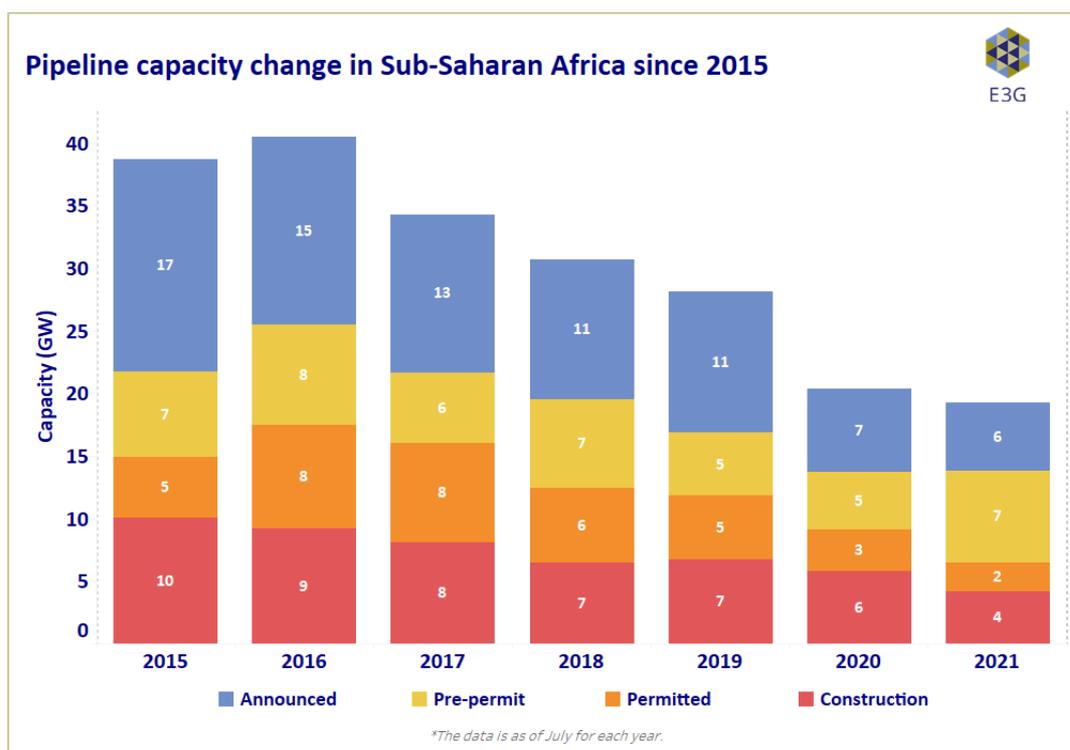


Figure 1: Pipeline capacity change in Sub-Saharan Africa since 2015



E3G

The Sub-Saharan African coal project pipeline of 15.1GW accounts for 5% of the global total (13% of the non-OECD pipeline). This is a fall of 13.5GW (47%) since 2015, a period which has also seen seven countries scrapping their pipelines entirely (Figure 2). The region sees a broad distribution of capacity across a relatively large number of countries, compared to South-East and South Asia. Sub-Saharan Africa's pre-construction pipeline is spread thinly across 13 countries, giving an average pipeline size of 1.1GW (compared to 7GW in South-East Asia, and 9.4GW in South Asia).

Many of these countries are facing multiple hurdles to bringing these projects to fruition, with international coal finance increasingly scarce. As in other regions, Chinese public investment in new coal remains, with Chinese financial institutions involved in 13 projects in eight countries, totalling 11.4GW of planned capacity, or 76% of the total pipeline in the region.

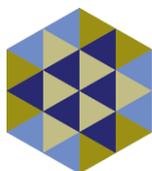
Cancelling such projects would help countries avoid locking themselves into an expensive and polluting energy source, and the risk of costly asset stranding. Targeted international support could accelerate their cancellation, including through support on the renegotiation of Power Purchase Agreements and the accelerated delivery of renewable alternatives.



E3G



Figure 2: Coal capacity pipeline change in Sub-Saharan Africa since 2015, by country, not including South Africa.



E3G

Leaders

Since 2015, seven African countries which had been considering new coal projects have cancelled their pipeline. **Senegal** committed to no new coal when it joined the PPCA in 2018, the same year **Zambia** cancelled its Maamba project, leaving it with no coal pipeline. **Democratic Republic of Congo, Guinea, Ghana** and **Namibia** are also all now in a position where they have no further coal projects under consideration.

Movers

Kenya is home to the proposed **Lamu project** which has been the focus of **sustained civil society opposition** over recent years. The proposed project is located in a **World Heritage Site** and has become an iconic example of coal power in conflict with the wishes of the local community and broader civil society. Positively, legal cases resulted in permits being cancelled, while two major financial backers have pulled out of the project, including the **Industrial and Commercial Bank of China** that is itself moving away from new coal. The project is increasingly unlikely to proceed, which would assist Kenya in pursuing its goal of 100% renewables.

Ethiopia joined the PPCA at its inception in 2017, committing to no new coal. In 2019 the previously delayed **Yayu coal plant** was revisited. The 90MW unit would form part of a fertiliser plant.

Nigeria hasn't had any coal projects in the development pipeline since 2019, despite previous energy policy **proposals** to develop coal power generation. Vice President Osinbajo recently **commented** that Nigeria "*cannot ignore issues of climate change anymore*" at a forum on coal and other mining. Nigeria would risk locking in expensive, polluting energy were it to consider building new coal. The absence of a pipeline of projects would help it to align with West-African neighbour Senegal in publicly embracing a coal-free future.

Laggards

Some of Sub-Saharan Africa's countries are currently at an energy crossroads. **Botswana**, for example, has nearly 3GW of pipeline projects in active development, but has in parallel also been exploring collaborating on a **major 5GW solar project** with neighbouring Namibia.

Zimbabwe, with its 4.5GW pipeline, is also bucking the global trend. The **Zimbabwean Government** has been vocal in its continued pursuit of new coal, even as **Chinese financiers pull out** of new coal plants in the country. Many of the reasons Zimbabwe is using to justify new coal, including **growing electricity**



E3G

demand, are unfounded, with Zimbabwe’s significant renewable energy resources a considerably **better investment** than new coal power projects which would run a high risk of becoming stranded assets.

Although **Mozambique** reflected the global trend for shrinking pipelines between 2015 and 2018, when its pipeline contracted by nearly half (leaving just 790MW of early-stage capacity), this has since changed. Mozambique now has a pipeline of 2.3GW, although some of these plants have faced considerable difficulties in meeting financial close. Mozambique has low levels of energy access but considerable renewable resources, and can best meet electricity needs through a mix of off-grid **decentralised systems** and on-grid supply.

The international community has an important role to play in ensuring that the 13 countries that still have a coal pipeline are provided with sufficient financial and technical assistance to feel confident in moving away from coal, and towards renewable energy.

Box 4: South Africa pursues coal retirement finance

South Africa’s recent pursuit of new coal plants has added to the debt burden of the already crisis-ridden state utility Eskom. Scrapping the remaining pipeline and plants under construction would put South Africa on a pathway to accessing international finance for accelerated retirement of its creaking coal fleet and help the country pivot to a cheaper renewable-led system.



Figure 3: Pipeline capacity change in South Africa since 2015.

South Africa is home to 95% of Africa’s operating coal yet is facing chronic economic challenges and power shortages. State-owned power utility Eskom is in a financial and operational crisis resulting in many years of load-shedding (planned power restrictions) due to its struggling and aged existing coal fleet and delays in bringing new capacity onto the system.



E3G

New coal plants have been economically disastrous: The two mega power projects at Medupi and Kusile are a prime example of coal power generation being a bad strategic choice, and of the failures of past International Financial Institution (IFI) support for coal. Eskom has recently completed the Medupi project six years late (only for it to subsequently suffer a **crippling explosion**). But it has pushed out the commissioning of the final Kusile units to May 2024, despite being originally expected to be fully online in **2018**. The two 4.8 GW plants are a central driver in Eskom's financial crisis, with massive time and cost overruns and corruption associated with the plants. Major design and construction defects are also causing operational challenges.

Eskom on the edge of collapse: It is increasingly difficult for Eskom to maintain its existing fleet of coal power plants, which led to 2020 seeing the highest ever levels of load shedding (**~10% of the year**), despite low electricity demand due to a covid-related economic collapse (-8% GDP). Eskom now has around \$28bn in debt and depends on annual state bail outs to cover debt servicing costs, posting a **>\$1bn loss** in March 2021.

New coal is still in the outdated national electricity plan: Despite the experience of Medupi and Kusile, the Integrated Resource Plan 2019 (South Africa's key electricity policy document) signals a potential for **1.5GW of new coal plants** to come online in 2024 and 2027. There is also a proposed Chinese-backed plant which will provide power to a proposed Energy-Metallurgical Special Economic Zone in Limpopo. In total there are 2.9 GW of projects at announced and pre-permit stage. Analysis shows that new coal is **uncompetitive against alternatives** and would raise costs for electricity users by billions of Rand. However, the Department of Mineral Resources and Energy has justified the proposed new coal plants on the basis that no Just Transition plan is yet in place.

Funding a Just Energy Transition away from coal: In contrast to the proposed new private coal capacity that is receiving support from the government, state utility Eskom has announced that it **will not build new coal plants**. Instead, the utility is pursuing "net zero carbon emissions by 2050 with an increase in sustainable jobs". Eskom has proposed a Just Energy Transition Financing Facility, which will channel international support for the accelerated retirement of its existing fleet. The detailed deal designs are not yet finalised, but such an arrangement could offer a model for how to support coal-exposed utilities to become financially sustainable while



E3G

repowering, repurposing and retiring coal assets in line with the Paris Agreement temperature goal.

South Africa in the spotlight ahead of G20 and COP26

Eskom's dire financial straits and the growing international interest in supporting a Just Energy Transition in South Africa provide impetus to align re-financing to decarbonisation and socio-economic goals. Recent political signals, including from the recently-launched Presidential Climate Commission, Eskom, and the ruling **African National Congress**, all place just transition high on the political agenda. Developed countries and IFIs now need to step up and deliver finance at an appropriate scale and level of concessionality to enable an ambitious and just coal transition in South Africa, thereby helping to right the wrongs of the Medupi and Kusile experience.