

Update: Coal's Future in Africa is (Still) Dim

This memo uses updated project information since our [December 2020 analysis](#).

Coal-to-power today is exceedingly modest outside South Africa

Using the latest data, 36 coal-fired power plants totaling ~54 GW of installed capacity provide [about a third](#) of all electricity produced on the African continent (Table 1). Yet, 86% of this capacity is in one country, South Africa.

TABLE 1: COAL POWER		
	Power Stations (#)	Capacity (MW)
Africa	36	54,266*
<i>Of which:</i>		
South Africa	19	46,672*
Morocco	4	4,257
Zimbabwe	3	1,810*
Botswana	2	732
Zambia	2	330
Mauritius	3	195
Madagascar	1	120
Namibia	1	120
Senegal	1	30
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China	1,082	1,042,947
United States	252	233,621
India	281	229,247

Source: [Global Energy Monitor](#) (2021). *Includes existing projects where additional units are under refurbishment or construction.

What about new coal?

Africa's current coal capacity is a fraction of the global total, but many fear a potential boom on the continent, especially in countries with domestic coal resources. As of 2021, the [Global Coal Plant Tracker](#) lists 22 potential new coal plants (excluding refurbishments and existing complexes) across Africa with a total capacity of 13 GW. To assess how many of these projects will actually happen, we analyzed publicly-available information for each project and rated the likelihood of completion (see Table 2). Here's what we found:

- Only one coal plant with just 0.3 GW appears likely to commission anytime soon.
- Eight plants are already shelved or very unlikely. A further 13 projects of 9.7 GW are unclear; progress is possible, but they are all in a very early phase.
- Zimbabwe, a country notorious for announcing projects that rarely reach fruition, is the main outlier. It is home to the only project rated as likely and over one-third of the capacity we rate as still unclear.

Conclusion: We remain confident that the future of coal in Africa is dead.

TABLE 2: NEW COAL PROJECTS IN AFRICA				
	Country	Capacity (MW)	Status	Assessment
ZhongXin	Zimbabwe	300	Likely	Under construction, but delayed due to COVID
Mabesekwa Export Independent Power	Botswana	600	Unclear	Incomplete financing, pre-construction, partially licensed
Morupule IPP	Botswana	600	Unclear	Unfunded, pre-construction
Sese Integrated Power	Botswana	450	Unclear	Partially licensed, unfunded
Lubhuku	Eswatini	300	Unclear	Only announced
Imaloto Coal	Madagascar	60	Unclear	Pre-construction planning
Rukuru	Malawi	100	Unclear	Pre-construction, no recent info
Benga (Kibo Energy)	Mozambique	300	Unclear	Pre-construction, submitted draft PPA
Ncondezi	Mozambique	300	Unclear	Delayed, but submitted revised plans
Tete	Mozambique	200	Unclear	No recent info, pre-permit stage
Musina-Makhado	South Africa	3000	Unclear	Pre-permit, no recent news
Mbeya Coal to Power	Tanzania	300	Unclear	Pre-construction
Binga Unit 1A + 1B	Zimbabwe	700	Unclear	Pre-construction, planning
Sengwa	Zimbabwe	2800	Unclear	Pre-construction, faces opposition, new Phase 2
Yayu	Ethiopia	90	No/Unlikely	Cancelled but could revive
San Pedro Port	Ivory Coast	700	No/Unlikely	No progress, likely dead
Lamu Power	Kenya	1050	No/Unlikely	Licenses revoked, likely dead
Kamwamba	Malawi	300	No/Unlikely	Delayed pre-construction
Pamodzi Unit 1	Malawi	120	No/Unlikely	Shelved
Khanyisa	South Africa	300	No/Unlikely	Funders withdrew, licenses revoked
Transalloy	South Africa	150	No/Unlikely	Complex under force majeure
Western Coal and Energy	Zimbabwe	600	No/Unlikely	Extremely Preliminary

Source: [Global Energy Monitor](#) (2021) and other publicly available data.

Likely: Project at an advanced stage of development and expected to commission soon.

Unclear: Project at an early stage of development or lacking any clear signs of significant recent progress.

No/Unlikely: Project has been shelved, suffered major setbacks, or has shown no progress for multiple years.