

Africa's minerals and energy potential: A modern-day 'gold rush'

By [Bhavtik Vallabhjee](#)

14 Jun 2023

With the African minerals and energy sector flourishing with possibility, one can't help but draw parallels with the late 1880s when the first gold was discovered on the Witwatersrand in Johannesburg, South Africa, that kick-started the 'gold rush'. The same palpable energy exists today as new players enter the market with new technology, infrastructure, and innovation.



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When we examine the energy and resources sector on the African continent, there are two fascinating dynamics unfolding. If they both come to fruition, it will have a massive multiplier effect for the prosperity of the continent.

The first is the rise of battery metals or green minerals that include the likes of lithium, nickel, cobalt, copper, manganese and graphite, inter alia - all of which are abundant on the continent. Mozambique, South Africa, Tanzania, Zimbabwe, and the DRC are rich in these minerals and potentially provide a significant windfall for local miners and governments.

For context, South Africa holds 80% of the world's manganese deposits, was the second largest producer of world palladium (at 80MT) in 2022, to date SA has supplied over 75% of the world's platinum, and to date has supplied over 40% of the world's gold, amongst other minerals. Zimbabwe is estimated to have the world's seventh largest lithium deposits, while Mozambique, Madagascar, and Tanzania are all in the top 102 global reserves for graphite.

Importantly, discussions have recently moved beyond extracting for short-term profits to beneficiation for longer-term benefits. This includes employment,

skills development, local shareholding, and support of corporate and social investment initiatives that uplift surrounding communities and shared value.

If one considers that the United Nations Economic Commission for Africa (UNECA) recently highlighted that nearly 70% of Africa's exports are unprocessed commodities, it is a non-negotiable that there is a focus on creating an enabling environment to encourage mineral beneficiation and processing.



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Creating long-term value

With the rise of environmental, social and governance (ESG) metrics and sustainable finance solutions, robust debate is taking place to ensure that long-term value is being created on the back of the battery metals boom.

In addition to the above minerals, Africa boasts a plethora of glorious natural resources (wind potential, solar irradiation, hydro-resource and space) that the continent offers to generate power from renewable energy.

The second shift taking place is the transformation of the electricity grid across the African continent which has traditionally favoured centralised energy generation and distribution via a state-owned entity.

A shift to incorporate captive power projects and public-private partnerships (PPP) will fundamentally change how electricity reaches the end-user in the coming years. The lack of secure, stable energy supply and infrastructure has curtailed local economic growth and foreign direct investment (FDI). Power is the backbone to industrialisation and prosperity in any economy. Millions of dollars are being lost each year as vast quantities of diesel are burnt to power generators which carry environmental downsides.



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Opportunity for SA to take the lead

The opportunity exists for South Africa to take the lead as a blueprint for the rest of the continent. While persistent load shedding has weighed on the economy, we cannot lose sight of the fact that South Africa has one of the world's boldest and most successful independent power producer (IPP) programmes (REIPPP) that was ever developed in Africa with over 120 IPP projects already contracted, 87 of which are already operational. We also have a proven track record of delivering PPPs for infrastructure projects such as hospitals, prisons, toll roads and transportation projects (such as the Gautrain). Importantly, participation in the power sector is not limited to the generation side.

The sixth round of the Renewable Energy Independent Power Producer Programme (REIPPP) by the South African government highlighted that while generation capacity is coming onboard, the new challenge relates to distribution and transmission. While Eskom is being restructured and broken up into three distinct business units – generation, transmission and distribution – there could still be opportunities to bring in private-sector players.

A regional example of this private-sector participation in transmission projects would be Gridworks, an entity created by the British government's BII (British International Investment) and the Government of Uganda cooperating to design, build and finance a transmission project that allows Uganda to meet export demand of power to the DRC and Kenya. This is one of the few standalone, privately financed transmission projects in Africa.



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Energy landscape of the future

In five to ten years, the African energy landscape will likely be completely different. Captive power projects (or decentralised/distributed generation at load centres where power is specifically required by end-users) will continue to be catalysts for economic activity and investment, making this the trend of 'energy of the future' – a clear, gradual shift away from 'large-scale centralised generation'.

The 'gold rush' of the 1880s was transformative for South Africa but failed to deliver maximum return on investment for the country because more could have been done to broad-base industrialisation and job creation beyond mining to include beneficiation in order to capture the various ancillary revenue rather than only selling raw materials.

The green metals boom and the rollout of renewable energy to increase our electrification rates across the continent has the potential to deliver billions of dollars of economic and social benefits for the African continent - but only if we are bold

enough to imagine a materially different future and governments catalyse their energies to create the enabling environment to solicit investment and capitalise on these emerging trends.

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