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Capital for the green energy transition not flowing to Africa

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Africa's resources are fundamental in achieving the global transition to net zero carbon emissions, and African economies can benefit tremendously from the current projected shortfalls in vital "green" metals and minerals required to meet the agreed 2050 deadline. This includes not only expanding investment and mining activities, but also maximising the social value of these investments and achieving a just transition, despite still facing logistical and energy supply challenges across the continent. However, there is already a tremendous shortfall in investment spending starting at the beginning of the value chain – exploration -- that needs to be addressed urgently. This was one of the primary messages to come from the 2024 African Mining Indaba that took place in Cape Town recently.

Although similar in theme to last year's discussions, mining CEOs speaking at the Indaba this year stressed that there was a tremendous need to invest in producing the metals essential in creating green energy, such as those for batteries (copper, nickel, lithium) for both energy storage and electric vehicles, as well as solar panels (which use large amounts of copper, nickel and zinc). These are all in relatively short supply, with more greenfield exploration urgently required – especially given the long lead times to actual production, often 20 to 30 years – as well as expansion of existing mines. But currently, Africa reportedly represents only 10% of companies' total exploration budgets.

Northern capital not flowing South

Yet there was currently a huge shortfall in capital spending by miners, speakers confirmed, with "multiples more in capex" needed at a faster pace to keep the green energy transition on track. The Global North, with its growing demand for new sources of cleaner energy, had so far proved reluctant to invest new capital into Africa, where large supply could be found. And it wasn't just greenfield exploration, but also ore bodies that have already been discovered that need developing.

The reasons behind this lag were numerous and complex, it emerged, with the primary ones being threefold: lack of commercial incentives, rising costs, and the complexities involved in value transfer to the communities most impacted by the mining activity. These came on top of the traditional barriers typical in Africa: the absence of regulatory certainty from some governments and a lack of energy supply across much of the continent.

Third-party investors keen to back the global transition to greener energy sources had also been reluctant to participate, preferring to put their capital into lower-risk, higher-profile decarbonisation projects in developed markets, rather than into higher-risk, long-term mining of copper in Zambia, for example.

A lack of commercial incentives

Looking at the first barrier to new exploration activity, some mining company CEOs noted that they required higher commodity prices than those that have been prevailing in order for new projects be profitable. The supply-demand dynamics were currently unfavourable given that strong demand for green metals was expected over the longer term, but had yet to materialize at present, despite higher prices being required to start up risky new exploration projects. For example, copper (among the most needed of the green metals) had been trading at around US$8,000 per tonne, whereas it was estimated that nearly twice that amount -- some US$14,000-$15,000 per tonne -- would be required to fund new exploration. This made it too risky to invest large sums up front.

Geo-political risks had increased as well, amid destabilisation caused by the wars in Russia-Ukraine and the Middle East, the recent de-globalisation trends, and supply chain disruptions, among other factors. Other corporate priorities had emerged, such as investing in their own businesses' decarbonisation processes, rather than in new mines, and companies were generally more incentivised to use their capital to fund shareholder dividends than embark on new projects.

Rising costs and complexities

Higher prices were required to cover the rising costs associated with present-day mining, the CEOs explained. Not only were the costs of current operations rising due to depleting ore bodies and lower-quality production over time, but stricter environmental, social and governance (ESG)-related regulations had added to the costs of both new and existing activities, as had the need for partnerships with governments and local communities to ensure benefits for society – the so-called "social license to operate".

This latter requirement, while recognised as vital to a project's success, added complexities to miners' businesses given the array of different services that might be needed for the community beyond their core mining function, ranging from providing water or electricity, to building new infrastructure like roads, schools or hospitals. These types of value transfer to local populations through public-private partnerships have been growing in recent years, with many successful examples, and help to de-risk a project despite making it more complex.

A good example of this is the relatively new Kamoa-Kakula copper mine in the DRC developed and operated by Toronto-listed global miner Ivanhoe Mines. The company has a 39.6% stake in the project, along with the DRC government at 20%. The mine started commercial production in 2021, with the copper deposits having been discovered 25 years ago, in 1996. It uses hydropower as an energy source, helping make it the world's fastest-growing and lowest-carbon major copper mine. Ivanhoe has contributed to local community development, infrastructure, farming and aquaculture projects as part of its mining commitment, reporting its social and community spending at over US$40 million so far.

Prospects for mining investment in South Africa

For African countries to establish mutually beneficial relationships with international mining groups and attract private sector investment, governments need to offer a stable long-term environment, adequate basic infrastructure, the correct legislative and governance frameworks and a cooperative approach. Companies assume significant risk in order to start up the new mines, with long-term security vital. However, it was apparent at the Indaba that mining bosses were very concerned about the ongoing challenges around doing business in South Africa, including the electricity and water shortages, and logistics shortcomings, with crime and corruption as the primary causes. These all kept the costs of doing business in South Africa high compared to other countries where municipalities are able to provide basic infrastructure needs, and needed to be addressed quickly.

In his keynote address, President Cyril Ramaphosa acknowledged these challenges, noting that improving logistics was crucial. He reminded the audience that, as he had said last year, the government's priority was to achieve a sustainable and competitive mining industry through:

1. Establishing a secure supply of electricity;
2. Accelerating economic reforms;
3. Tackling illegal mining, damaged infrastructure and criminality; and
4. Improving the regulatory environment.

Reporting back on the progress made in each of these areas, Ramaphosa noted that committees had been established to tackle the challenges in each of the first three areas, the President said, with clear progress made. Addressing electricity supply, he noted:

- Through the Electricity Action Plan, government had taken several critical measures to improve the performance of the country's existing generation fleet and to add new electricity capacity.

- The Department of Mineral Resources and Energy (DMRE) had secured 1,384 MW of new generation capacity that was currently in construction or already in operation.

- The Department had released requests for proposals for the procurement of 5,000 MW of renewable energy under Bid Window 7, 2,000 MW of gas-to-power and 615 MW of battery storage.

Transmission capacity remained a challenge, especially in the Cape provinces, he added, and Eskom had consequently recently published a curtailment regime which unlocks 3,470 MW of additional capacity in these provinces, and which would be essential to the success of Bid Window 7.

Turing to the second priority around accelerating economic reforms to improve the operating environment, the President said that since the removal of the licensing threshold for embedded generation, the National Energy Regulator had registered no fewer than 1,312 generation facilities with a combined capacity of over 6,300 MW. Around one-third of this capacity supplies the mining load. In addition, an increasing number of mining companies, including Gold Fields, Anglo American, Seriti and Exxaro, had begun to take advantage of these reforms to power their mining operations and curtail their operational costs.

In terms of tackling illegal mining and damage to infrastructure, the DMRE continued to seal ownerless and derelict mines, reported Ramaphosa. Since 2019, some 251 had been sealed, and over the next three years another 352 would be closed.

Meanwhile, he acknowledged that criminal activity, and copper cable theft, in particular, had had a serious impact on key rail freight corridors, including the supply of coal for export through Richard's Bay. Cooperation between the private sector, Transnet and the security services had resulted in an improvement in the security situation over recent months. Working with the private sector under the auspices of the National Logistics Crisis Committee, the government was working to overcome the challenges with ports and rail. The Freight Logistics Roadmap, which had recently been approved, sets out a clear plan to guide this process. This included introducing competition in freight rail operations, while maintaining state ownership of the routes, and upgrading and expanding port terminals through public-private partnerships.

Finally, the President said that the government had identified a preferred bidder to develop and implement a new cadastral system for South Africa (delineating the geographical boundaries of mining rights areas) which would allow proper administration of mining rights, clear the backlogs in prospecting and mining applications, and pave the way for the development of new mines.

Conclusion: Much more to be done

Clearly, given these headwinds, African governments, miners and third-party investors need to cooperate more closely to ensure more green investment flows to the continent. This can happen through partnerships that alter the risks, costs and incentives faced by all, so that all parties – from the North and the South, public and private sectors, and communities -- can benefit. From pooled capital investment and government guarantees, to joint projects to mine and beneficiate green metal products across multiple African countries, great innovation will be required on all sides. Simply stated, African governments, including South Africa, cannot afford to squander the opportunity presented by the global energy transition.