ERM

Sustainable Mining Breakfast at Indaba 2025

How to win investment to secure Africa's role as the low-carbon powerhouse?

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INTRODUCTION

A year on from our 2024 breakfast, and the world feels like a different, and even more challenging place. Physical impacts of climate change are often in the news and a political push-back on ESG is palpable in some quarters of the globe. Proxy conflicts marking mounting super-power tensions and it is increasingly difficult to see how the Paris greenhouse targets and UN Sustainable Development Goals are reached.

ERM hosted another Sustainable Mining Breakfast debate on the first morning of Mining Indaba. Our speakers: Neal Froneman (CEO, Sibanye-Stillwater), Namrata Thapar (Global Head of Mining and Metals, IFC), Jon Stanton (CEO, The Weir Group) and Petrina (Tina) Gill (Director of ESG, Simandou, Rio Tinto) this year discussed the theme: How to win investment to secure Africa's role as the low-carbon powerhouse? Stacy Hope, ERM Partner and former Director of Women in Mining UK, moderated the session.

As usual, the debate was held under Chatham House Rules, meaning that the views expressed in the room could be conveyed outside of the meeting, but could not be attributed to individual speakers. This briefing note sets out the essence and emphasis of the discussion, interpreted with our experience and outlook for the future of sustainable mining in Africa.

The Africa Mining Indaba has become the rhythm for the continent's mining and metals ecosystem. 2025's gathering revealed a fresh outlook, with fresh ideas and difficult, open discussions emerging. In the mining and metals industry, debate still focuses on critical minerals for electrification and energy transition – but in the corridors of state, tactics and policy seem increasingly driven by strategic access for defense and national security.

DISCUSSION HIGHTLIGHTS

1. Cooperation is the key

Africa is home to 54 nations, with competing priorities, regimes, levels of foreign investment and varying governmental reputations. Legal and fiscal regime maturity, stability and pliability have long been seen as the barometers of international capital flows. Many jurisdictions have advanced, yet recent events in Mali highlight a vulnerability which has difficult implications for the long-term investment propositions offered by mineral projects.

Investors have many destination options. African nations have understandably focused on their own domestic agenda. But at a time when the world's supply chains are uncoupling, there's so much to be gained during the reset. Countries in Africa that partner with one another could pool their collective assets, align their shared interests, and present investors with exciting solutions for mutual benefit.

Building cross-border infrastructure systems

Today, Africa's gaps are less legislative, and more geophysical and socioeconomic. Energy (increasingly renewables) and logistics infrastructure are vital enablers of efficient mine-to-port systems, and essential for bridging Africa's mineral-rich interiors to its relatively sparse ports. Human capital for industry is lagging.

Energy (increasingly renewables) and logistics infrastructure are vital enablers of efficient mine-to-port systems

Logistics corridors offer commercial and socio-economic arteries. They are prizes in their own right, as they stand to revitalize the affected territories (often whole nations) beyond extraction of the minerals. This is illustrated by Guinea's herculean undertaking of building the 700km Simandou dual-use railway in the face of 20 years of talks, and the encouragement of international advisors to leverage the (more direct, and pre-existing) Liberian route. The Guinean railway will be owned and operated by an independent joint venture (which includes a government share), given mixed experience of state-owned transportation reliability in other African nations.

A 2025 World Bank report showed that Malawi (a small, land-locked country) could generate $30Bn in exports by 2040 from mineral development. Without the minerals, there is no case to support the infrastructure. But without the infrastructure, there's no viable industry, foreign earnings, or generation. If nations are to win their share of international mineral investment, they will need to find new ways to expedite provision of reliable energy and logistics infrastructure. Previously sensitive cross-border alliances and venturing between neighboring nations should be re-examined in light of the new imperatives.

Investors want to see broader societal results of their investments

International investors will want to see smarter and more open approaches to whole-system strategies and inter-country alliances. They will demand capital efficiencies, and the broader distribution of socio-economic benefits. Investors will also want to see hard evidence of positive impacts (municipal essentials, trade and professional skills bench building) from state-funded initiatives, enabled by mineral- derived treasury receipts. They want to see advances in transparency, commitment and application.

Governments and industry need to reframe their relationships

The mining and metals industry has a tainted legacy, not least in Africa. The historic stereotypes are difficult to dispel. Trust must be earned, of course, but African governments remain mistrustful of corporations. Some governments feel intimidated by their electorates' greater faith in corporations. They may need a fresh ideology: trusting industry initiatives, strategically assembling a disruptive African mineral supply solution, and being transparent about national interests.

2. Industry must transform its operations

Miners may be emboldened by the critical mineral 'demand-supply gap' and its apparent promise of supply-side leverage and firmer prices. Yet mining corporate valuations are discounted and access to capital is tight.

If the industry is to achieve its scale-up ambitions, it needs to promise investors a marked improvement in capital efficiency (especially through new mine build time), productivity (radical reductions in unit cost to produce), and a reduction in liabilities (old mine rehabilitation provisions). Investors now recognize that such commercial fundamentals are tied to a mine's sustainability footprint, as determined by local community acceptance, and the secondary socio-economic stimulation that can be achieved with regional public / private sector collaboration.

‘Cleaning up’ mine operations can yield the productivity leaps we need

Miners need to break their conservative image and develop new methods to scale up their operations. They need to clean up: better use of energy, smarter use of water, shift less over-burden, break less rock, produce less waste.

While innovation and change carry risks, the industry will benefit greatly. Technology partners (digital, chemical, mechanical) are working hard to provide corporates with innovation. In fact, many feel that the technologies the industry will rely on to make the leap it needs, are already available and proven today. For example, a new flowsheet implemented by one mining company achieved 20% cost reduction, 40% energy efficiency, and 50% CO2 reduction. How can the industry accelerate the replication of such breakthroughs?

The industry needs to deliver these new stories and secure the investments before its downstream customers innovate to lower cost substitutes e.g. hydrogen fuel cell mobility platforms are currently anticipated to arrive after a generation of battery powered vehicles. But BMW has already made this commercial and ideological leap to hydrogen fuel cell vehicles.

Partnerships and collaboration with technology partners seems to hold the key to many of the industry’s productivity challenges, which in turn will contribute to unlocking investment.

From a lone operator to a multi-stakeholder joint enterprise

Perhaps the toughest of all challenges still lies with people: those inside and outside of the operations. The industry has long recognized the criticality of maintaining ‘social license to operate’ (SLO). To achieve the breakthroughs the industry needs, this time-stamped construct itself might need to be reframed. Companies begin to talk about the stakeholders as partners, rather than ‘opposition’, transforming into a genuine joint enterprise, rather than trying to ‘win’ an argument. If this vision succeeds, parties will pool their goals and influence to accelerate delivery of a generative pool of financial and non-financial benefits, while ensuring that the downsides of resource extraction are controlled to the satisfaction of all.

A starting point could be the re-tooling of what is typically regarded as a statutory tick- box permit: the mine ESIA (environmental and social impact assessment). ESIAs could provide a strategic roadmap for navigating the complex risks of capital projects. They have the potential to be living, dynamic tools to monitor and jointly manage the evolving risk profile and benefits.

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This profound shift would involve communities and stakeholders in the co-design of their 'bespoke transition', providing foundations for local employment, education, and the collaborative dialogue that makes the difference between the mine being viewed as a begrudged imposition, and a quality-of-life endowment to be curated for all. What a lift this would be to current industry practice!

Combine the best of the global industry to create a better blueprint

Many eyes rest on Guinea's grand ferrous corridor undertaking, and its realisation through what promises to be the new benchmark for international collaboration and transformative programme delivery.

Rio Tinto has gone to lengths to embed international ESG standards, assurance and governance into its joint venture and EPC (engineering, procurement and construction) agreements with Chinese partners. The programme has confronted immense complexities: many communities, ethnicities, languages, variability of risks and needs according to location and topography.

What part might Chinese developers and EPC partners play in the next era? It is tempting to imagine a chimeric delivery model, embodying Chinese tenacity, leanness and innovation, multiplied by the ESG standards, outcomes-to- impacts focus of western corporates and investors.

In Guinea, Rio Tinto is acutely aware of domestic and international expectations for local employment, diversification of sectors, strengthening government institutions. Their team has learned just how vital it is to be brilliant at the grass roots level, including on basics such as noise, dust, vibration control make or break community relationships. If well-managed, the rest can follow.

3. Markets will support the green transition

The industry's transition to 'green' metal production is impaired European and North American end users of metals for the energy transition (e.g. automotive and renewables OEMs) promote efficiency and environmental values. They avoid sourcing products harmful to the communities where they are mined. They are keenly focused on carbon footprint (including the contribution of extended logistics chains), even with relaxation of some of the standards on the horizon.

Customers must encourage the transition of their supply chain partners

Customers must manage their margins tightly. They can spare little ground on price to incentivize or compensate the companies which have invested in low carbon, or socially friendly mineral production.

Miners must create more margin headroom to fund their own green product initiatives through productivity gains

Miners must create more margin headroom to fund their own green product initiatives through productivity gains (see above). At the same time, customers are likely to stick to their long-term carbon management ambitions, despite some policy headwinds likely to influence short-term decisions.

The world needs affordable green critical minerals from Africa

China's influence, assets and tenure are firmly embedded in much of the continent, elegantly tapered into the belt and road. European, Indian and North American industries have still to scale their own mineral delivery arteries. These will be a vital in the new-era of industrial re- shoring and friend-shoring.

African jurisdictions are tussling for capital with those in other mineral endowed continents. Previously no-go origins are becoming viable. Might the synchronicity of China's dual circulation strategy, and the rise of Saudi as a near-shore mineral processing hub, present African nations with an edge, just at the right moment?

The African continent has the critical minerals the world needs. Many countries in Africa can and should be viable low-cost sources. Their governments want advancement, but on their terms. Countries will compete for capital based on their natural resource and human capital endowments. Their institutional capacity to attract and sustain these international investments will be vital. Those countries and regions that get themselves organised can develop the necessary business platforms to sustain the long-term needs of mining investments. It's up to the electorates and their leadership to reform, revitalise and reposition their countries to be natural partners for the critical minerals future.

Reality is that there is still a fair amount of capacity shortage within African governments. If the bold and radical change is to occur, the private sector is the most mature source of vision, convening power and leadership.

With technology and social process enhancements, the industry could unlock productivity of sufficient increment to excite the owners of capital. The industry must accelerate its renovation. It must provide the low cost, whole life-cycle solutions which investors want and governments will welcome.

Contact Us

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