

Sustainable mining is a profit and planet balancing act

By [Selim Kaymak](#)

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The South African mining industry holds a lot of economic power. Our rich resources drive global supply chains and provide for countless families. But large-scale mining carries unavoidable environmental costs. This tension – between progress and preservation – is the defining challenge of our sector.



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The crucial question isn't whether mining is bad, but how we can make it better – minimising its negative footprint while maximising its contributions to the nation and the continent's progress.

Transforming the mining sector demands a multifaceted approach and a commitment to integrating sustainability into core business strategy. This starts with changing the company culture: educating employees at all levels about their responsibility in creating a sustainable future.



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It also requires a willingness to invest in innovative solutions like advanced coal washing technologies and water treatment systems. These not only reduce environmental impact but also yield long-term operational efficiencies.

Proper mine rehabilitation holds significant potential for both positive environmental and economic outcomes. A well-rehabilitated site mitigates potential hazards, supports local ecosystems, and can even create new economic opportunities for communities surrounding the mine.

It's a win-win scenario that multiplies a positive economic effect across numerous objectives that is often neglected in the pursuit of short-term gains.

Collaboration is vital

Collaboration is another vital component. Partnerships with specialised waste management companies ensure safe disposal practices that align with industry and government standards.

Working with local communities to build awareness around environmental initiatives helps secure the social licence to operate, ensuring that everyone benefits from mining activities.

Sharing knowledge and skills can develop new industries and create local expertise that could be exported and contribute positively to GDP.

The elephant in the room is emissions. Reducing reliance on carbon-intensive energy sources is a complex, long-term target – and extending those values across the mining value chain is an imperative.

In the interim, a focus on minimising emissions must be paired with the pursuit of sustainable energy sources. This remains the shortest route to compliance with international customer environmental demands.

Strict adherence to industry regulations and responsible waste management practices are non-negotiable steps towards reducing our environmental impact.

Not an easy journey

Make no mistake, the transition to sustainable mining won't be easy. It demands a shift in mindset, substantial investment, and proactive engagement across the entire sector. It will require a strong will across political and economic spheres.

However, South Africa is a nation that understands the power of overcoming challenges. By prioritising sustainable practices, innovative technology, and social responsibility, we have the potential to build a mining sector that is a global leader in sustainability.

This will enable the nation to be a strong competitor as a key supplier in the global energy transition and a sought-after partner to advise other regions in the global south to make similar adjustments.

This ensures our industry propels our economy forward while safeguarding the environmental legacy we leave for future generations.

ABOUT THE AUTHOR

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