

MAD AFRICA





July -2021- Issue

MINERALS ARE BORDERLESS.

MADI Signature Event

MADI is proud to announce its inaugural Madini Convention.

The MADINI Convention is a grand gathering on mineral issues hosted by Minerals Africa Development Institution (MADI). The Convention brings together over 10,000 delegates from 40+ countries, with several sessions running over a period of 2 days.

Why MADINI?

The only African Language recognized by the African Union besides English, French and Portuguese is Kiswahili. MADINI is a Kiswahili word that translates into 'minerals' in English and Rasilimali za Madini means 'Mineral Resources'.

Africa's resources do not have borders. Early demarcations made during the time of colonialism now hinder Africa's integration and divide us along lines of nationality despite the unifying spirit of togetherness we share as Africans. MADINI is a unifying factor for us to create a borderless Africa in the mineral resource sector.

Convener's Profile

Minerals Africa Development Institution (MADI) Limited is a first-of-its-kind innovation— a social enterprise, and an independent African think tank supporting African governments, private sectors, and other stakeholders along the minerals value chain for sustainable mineral resources development in Africa.

MADI operates at the international forefront to promote the transformative role of mineral— oil, gas, and solid— resources towards the achievement of inclusive growth and sustainable development as envisioned by Africa's Lagos Plan of Action, the Abuja Treaty, and Agenda 2063 as well as the attainment of the Global Agenda 2030 or Sustainable Development Goals (SDGs).

MADI's main objective is to de-risk the African minerals sector to attract responsible investments both domestic and foreign that will ensure that there are social and economic mutual benefits accruing equitably to all key stakeholders while taking environmental and climate change concerns into account. Format of the Convention

The demystification of Africa's minerals sector requires a total mindset change.

The MADINI Convention 2021 is an e-Convention

bringing together Africans of diverse races, religions, nationalities and socioeconomic backgrounds to learn and unlearn the conceptions that have until now defined our view of Africa's mineral resources.

We strongly believe in the power of example and that is why this year's convention will have a strong focus on showcasing who is doing what and where in the African minerals space. The attendants will get an opportunity to interact with the people braving the socio-political environment and thriving in this sector. This is intended to open African eyes to the immense opportunities available.

The MADINI Convention 2021 will also have a strong focus on discussing the contemporary opportunities in the minerals sector for Africans. A special focus shall be on the new opportunities as Africa unites to jumpstart the African Continental Free Trade Area (AfCFTA). The AfCFTA if leveraged upon, presents an opportunity to greatly increase Africa's bargaining power in the minerals value chain.

Due to the prevalent COVID-19 Pandemic, the MADINI Convention 2021 will be fully online.



Why Africans must stand in solidarity

An estimated third of the world's known mineral-resource reserves are located in just a third of the explored parts of Africa. Nevertheless, Africa has not benefited substantially from its mineral wealth for the past 6 or so centuries. Even the remarkable extractives-driven economic growth of the last few

Consequently, mineral-dependent African economies are in distress as they face severe fiscal and balance of payment deficits. Minerals refer to solid, liquid and gas resources.

The fragmentation of the African continent with a section still holding allegiance to the colonial masters and continuing to make huge economic sacrifices has been referred to by many scholars as a fundamental drawback to the unity and development of the continent. Intra-Continent Trade has been made difficult to impossible as a result.

This reality hitherto makes it necessary to put the deliberate effort in creating spaces for African-centered discussions that will result in Africans writing their own narrative. The MADINI Convention is an innovation in response to this urgent necessity.

Focus Areas

 Creating a domestic mineral resource business environment

• Leveraging on the African Continental Free Trade Area for regional value chains

 Accelerating Industrial Development for Increased Mineral Value Addition and beneficiation in Africa -(Upstream and Downstream Beneficiation)

- Women and sustainable mineral development
- Youth and the Future of Africa's Minerals
- Informal Minerals Sector (ASM)

Participants

- Policymakers and practitioners
- Academicians
- Private sector
- Civil Society
- Youth
- Small-Scale Miners (SSM)
- All stakeholders of the minerals resource sector

For more information, please visit the official event website: www.madini.africa

For details about the E-convention, contact: Convener: Okot Olaa okotolaa@madi.africa +256 (789) 042-430

Collaboration with the Calestous Juma Legacy Foundation

The MADI - Calestous Juma Essay Competition

The Minerals Africa Development Institute in partnership with the Calestous Juma Legacy Foundation are proud to announce the first ever Annual Dr. Calestous Juma Essay Competition. This competition seeks to bring together great young African minds to deliberate upon solutions to persisting problems that plague Africa's mineral resource sector, both at a national and continental level. We will be inviting essays from all over Africa on relevant thematic areas affecting the mineral resource sector at different stages of the value chain as we position ourselves for sustainable economic development for Africa.





Objectives

Broadly, the main objectives of the essay competition are:

 To increase African youth participation in policy reformation and solution finding.

• To bring together great African minds under one think tank to create a platform for future advocacy action.

• To develop current research and scholarly works on Africa's mining sector.

• To provide opportunities for the participants to take part in other aspects of the Africa mineral resource sector

• To transform the mindset of Africans in so far as narrowly construing the mineral resource sector as purely extractives-based.

• To open the African Youth to the opportunities available for innovation in harnessing Africa's resources for sustainable development

Expected Outcomes

Some expected outcomes from the essay compettion will include:

• Providing a platform for African youth to advocate for transformation in the policy climate of the mineral resource sector in Africa.

• Strengthening our relationship with our partners through coordinating our efforts and building our knowledge resource base.

 Increased youth participation in the conversation on building sustainable development through harnessing innovation and technology.

• Contributing to the body of research and scholarly works on the mineral resource sector in Africa.

Partnerships

This essay competition provides an opportunity to broaden Africa's prospects in terms of local knowledge resources and partnerships in future projects. A number of reputable African youth-led organisations and youth-centred initiatives have already expressed their interest in supporting this endeavour.

They include;

- 1. Makerere Law Society
- 2. Tanzanian Debate Society
- 3. Uganda Christian University
- 4. Federation of African Law Students
- 5. The Economic Misfit Writer's Community
- 6. Youth Advocacy Program Africa
- 7. Model Peace Forum
- 8. Goals Afrika 2063

More information to be provided on our social platforms. For inquiries: **info@madi.africa**

Interesting Reads

African Giant: Kaundanomics in the 21st century

By Charlotte Kwitonda

Many remarkable stories are told about former Zambian president, Kenneth Kaunda. He was at the forefront of the struggle for independence from British rule in Zambia (formerly Northern Rhodesia). He led the country from 1964-1991 and was well celebrated as a true Pan-Africanist who supported liberation campaigns in the whole of Southern Africa.



As a leader, Kaunda's new government inherited a vibrant economy right after independence which was organised broadly along capitalist lines— a system inherited from the previous British government. The economy was also solely in the hands of foreign investors, even the mining sector. The copper mines were owned 100% by Anglo-American Corporation, American Metal Climax and the British South Africa Company (owned by Cecil Rhodes). All companies having obtained the rights to mine copper in perpetuity from Cecil Rhodes.

The logic behind this arrangement was that the foreign capital would boost Zambia's economy on many fronts. Unfortunately, it was not so as the unfettered foreign capital did quite the opposite. The mining companies instead externalized most of their resources, bringing in their own foreign labour and repatriating most of their profits. After independence alone, the rate of re-investment in Zambian operations fell by a reported 20%. Based on what he had seen happening in the Zambian economy, with many foreign investment companies edging out Zambians in employment, failing to contribute to provision of socio-economic services and later repatriating their profits, Kaunda's vision for the newly independent Zambia began edging towards a more socialist

economy. He developed a left nationalist-socialist ideology called Zambian Humanism. While there had been several reasons for the government's decision to take ownership of the giant

copper companies in Zambia, the major motivation was thought to be somewhat political. On 19th April 1968, he announced the Mulungushi Reforms and ordered that the state would henceforth take controlling interest in all privately owned ventures. The copper mines were no exception.

Under Kaunda's new policy, Zambians were at the helm of the mineral resource sector and steps were taken to ensure mass employment of Zambians. The nationalisation of Zambian copper mines gave the government the powers to use the revenue from the mines to substantially improve social services for all Zambians such as education, health, water and employment. The mines were used as a cash cow to advance this new ideology of Zambian Humanism.

Kaunda's socialist policies later failed to improve the economy of Zambia and when the copper prices collapsed in the mid-1970s, the Zambian economy began to decline. One consequence of Zambia's nationalisation of the copper industry was to place the country deeply in debt simply to sustain its operations. This had the effect of forcing the government to put off its development plans for the mining industry. The effects of the gradual decline of the mining industry and its revenue plunged the country into an economic depression that later sparked off riots and social unrest that eventually saw Kaunda vacate the presidential seat in 1991.

While many have criticised the nationalist policies of Kaunda, not many have chanced to appreciate Kaunda's vision for an Afrocentric mineral resource sector as we perhaps ought. A story is told that a few years after independence in 1964, Kenneth Kaunda visited one of the mines in the Copperbelt Province and was immediately struck by the complete absence of Zambians in senior management positions. This reportedly greatly perturbed the Pan-Africanism loyalist. Compared to what was happening in 1964, not much has changed presently.

Following the reversal of Kaunda's policies, the 1990s saw a significant flow of foreign direct investment in Zambia's mineral resource sector which saw the Zambia Consolidated Copper Mines (ZCCM) later privatized. With increased foreign direct investment, one would expect a corresponding increase in the socio-economic development of the sector and economy at large over the years. Conversely, this is not the case as the mining foreign direct investment has not significantly improved the rate of unemployment or alleviated the poverty rates in Zambia. The revenue earned from the mineral sector is not only tainted by gross corruption but also heavy profit repatriation and low levels of re-investment in other sectors by FDIs. Environmental degradation and pollution concerns have taken the back burner even as the environmental integrity is further compromised.

Not much has changed since Kaunda's time. Perhaps this calls for us to re-examine why the mineral resource sector in Africa remains stunted— lagged down by the same problems constantly. There is a need for re-strategizing at a national, regional and continental level if we are to pave a way forward to sustainable economic development backed by a vibrant mineral resource sector.

We remember Kenneth Kaunda for many things. He was an African giant who rose to the occasion in the liberation struggle at home. We remember him as a leader who united a country so ethnically diverse under the motto 'One Zambia, One Nation'. Kaunda's emphasis on building social infrastructure and instituting a policy of free education which enabled most Zambians in the early years of nationhood to get free education and contribute to national development also stands out. A true African icon, we honour his legacy.

Global Mineral Prices

Platinum

Source World Bank Commodities Price Data

Metals and Minerals	Unit	May 2021	June 2021
Aluminium	\$/mt	2,434	2,447
Copper	\$/dmt	10,162	9,632
Iron Ore	\$/mt	207.7	214.4
Lead	\$/mt	2,182	2,191
Nickel	\$/mt	17,577	17,980
Zinc	\$/mt	32,246	32,503
Tin	\$/mt	2,966	2,952
Precious Metals			
Gold	\$/toz	1,850	1,835

Silver	\$/toz	27.5	27.0
Energy			

1,214

1,124

\$/toz

Coal, South Africa	\$/mt	99.3	112.9

MADI News

MADI Collaboration with Next Generation Explorers Award Association (NGEAA)

We are pleased to announce our new collaboration with the Next Generation Explorers Award Association (NGEAA). This collaboration aims at supporting the development of future African geoscientists for responsible and sustainable African mineral resource development.

MADI and NGEAA are teaming up to support Africa's mineral sector by focusing on local knowledge development whereby African geoscience students can enhance their university-acquired and collaborative group skillsets on relevant applications used in the African and worldwide mineral exploration industry.

Both the NGEAA and MADI share a common goal to bring together all key stakeholders—government, academia, industry, communities—for responsible and sustainable minerals development in Africa. Through our collaborated efforts, we hope to expose young geoscientists to the collaborative challenges needed to support responsible and sustainable African mineral development.



VISIT US AT PDAC 2020!

About the Frank Arnott NGEA Award

The Frank Arnott - Next Generation Explorers Award (NGEA[™]) is an international competition where teams of mineral geoscience university students collaborate and innovate to transform geoscience data sets into their interpretation of the subsurface geology and mineralisation targets. Its aim is to build a sustainable supply of enthusiastic, skilled geoscientists that can steer the mineral industry going forward.

Visit **www.pdac.ca** for more information.

About MADI

MADI is an African think tank that has been created by Africans to find African solutions to African challenges. Its core objective is to de-risk the African mineral resource sector in order to attract responsible and ethical investments that will contribute to Africa's inclusive growth and sustainable development as envisioned by Agenda 2063 and ensure that there are mutual social and economic benefits accruing equitably to all key stakeholders (public, private and communities) while protecting the environment. MADI focuses on building capacities, research for policy guidance and promoting knowledge-based African solutions for mineral resources development, building upon international practices.

Visit our website at **www.madi.africa** for more information on our work.

Contact us: info@madi.africa

Partnership with Economic Misfit

The Minerals Africa Development Institution is elated to announce its collaboration with The Economic Misfit. This collaboration will include aspects of rebranding, web restructuring as well as marketing and events management for the benefit of MADI. The team at Economic Misfit will be working closely with the MADI team to ensure that they see to the implementation of the MADI vision to create a robust platform to de-risk the Africa minerals sector for sustainable development.

The Economic Misfit is a knowledge hub that seeks to power African knowledge. MADI and the Economic Misfit share a common goal to facilitate the conception of African solutions for Africa's challenges that are home-grown and better suited to Africa's intricacies.

The Economic Misfit

About The Economic Misfit

The Economic Misfit is a venture that powers African knowledge in diverse ways. It was founded by Okot

Sam Olaa and is currently based in Kampala, Uganda. The Economic Misfit runs an online publication which provides a platform for many African writers to advance their ideas in a bid to reimagine a better Africa for Africans.

The Economic Misfit is also a digital communications agency which offers a wide range of services to other companies or ventures. These include web structuring, communications and marketing services as well as events planning and promotion.

Visit: https://theeconomicmisfit.com for more information on their work.

We are Rebranding



Our vision is "An African-led transparent, strong, responsible and sustainable Africa's mineral resources sector that creates wealth and opportunity for all Africans".

Visit our website at: **www.madi.africa** for more information.

We Have Moved! Our New Social Media Handles

We would like to inform our dear readers and partners that our social media handles have changed. We remain committed to the same vision of creating African solutions for sustainable development of the Africa mineral resource sector.

For more information about **MADI's work**, you can now follow us on:

Facebook: Minerals Africa Development Institution Twitter: @AfricanMADI LinkedIn: Minerals Africa Development Institution Instagram: @AfricanMADI

Contact us on our new email address: info@madi.africa

Or visit our website: www.madi.africa

Other Sources

Africa Mining Vision Can Help Put ESG Benefits in Focus By Ross Harvey

Source: www.businesslive.co.za

When the Africa Mining Vision (AMV) was launched in 2009, few could argue with its forward-thinking approach. It envisions a continent that harnesses its mineral and hydrocarbon wealth for broad-based development. With governance — transparency and accountability — as its heartbeat, the vision delineates mining as a flywheel for structural transformation. This is the DNA of the AMV, and it is undoubtedly good.



For all its promise, however, the vision has not delivered. This is easily explainable. A vision is only as strong as its implementation. For this reason, the African Minerals Development Centre (AMDC), which is the custodian of the vision, quite rightly embarked on a mission to domesticate the AMV for each country.

This strategy recognises that each country is unique. Each has a peculiar set of institutions inherited from the colonial era, most of which were designed to extract and repatriate raw materials to the imperial powers. Post-independence, those institutions have largely been subverted into tools of narrow enrichment for wealthy elites and entrenched them in power. This is the essence of the resource curse — the paradoxical correlation between mineral abundance and underdevelopment — and it must be reversed.

As with all correlations, however, they should not be confused with causation. Correctly harnessed, the AMV can cut through the vicious cycle of rent accumulation to the elites at the expense of citizens. Mineral wealth can and should lead to development that benefits most citizens.

As the world deals with the fallout of COVID-19, there

is no better opportunity than the present to realise the AMV. For the last few decades we have known that climate change is a serious threat to the future of our shared planet. We have failed, however, to change direction, largely because profits — inaccurately measured — were high and the costs of generating pollution were seen as low by those with decision-making power. We have therefore continued to mine and burn coal, and we have continued to exploit oil resources, both at substantial environmental cost.

The key to a set of desired futures is to eliminate what economists call negative externalities, the divergence between private returns and social costs. The 2015 Paris Agreement, for all its flaws, commits countries to reducing emissions and therefore global warming to below 1.5°C above preindustrial levels, a necessary but insufficient mechanism for reducing negative externalities.

Because it is essentially nonbinding, it cannot generate the incentives required to force companies to internalise the costs of pollution. Until now, there has been little in the way of credible deterrence to disincentivise firms from offloading social and environmental costs onto local communities who can least afford it. It is partly for this reason that Covid-19 erupted — we ignored the costs of environmental encroachment. Climate change unleashes viral dark matter and we have probably only seen the tip of the iceberg.

There is, however, always hope. Environmental, social & governance (ESG) performance is rapidly becoming a determining variable in capital allocation decisions. The world has finally realised that true sustainability lies in committing to the spirit of good governance, eliminating environmental degradation and doing right by citizens. Merely ticking boxes on these three metrics will take us no closer to where we need to be, but at least greenwashing is becoming a serious operational risk. Because access to capital will increasingly be contingent on authentic ESG credentials, firms are being disciplined to this end. There is nothing quite as powerful as a market tool to reduce negative externalities.

Development Partners

So, what does this all mean for mining in Africa? Because the drive towards global carbon neutrality by 2050 will require the minerals and metals Africa has in plentiful supply — copper, cobalt, lithium and the like the demand-side of the positive futures equation looks promising. The key to translating this demand into sustained development lies in the bread and butter of better governance

The ESG moment presents an opportunity to attract

responsible mining firms that will help build state institutions and become real development partners. African governing elites will have to make a conscious decision to attract responsible capital. It may appear less costly to run after irresponsible finance from jurisdictions that pay no heed to our development imperatives. But the least costly options in the short run invariably have the most devastating long-term consequences.

With the guidance of the AMV's emphasis on structural transformation, it is essential that policymakers connect mining opportunities to green industrialisation. A critical strategic goal of African countries is to reverse premature deindustrialisation — the process by which we are transitioning out of manufacturing into services much earlier, and at lower levels of per capita income, than our industrialised counterparts. Doing so will necessarily mean connecting mining to global value chains involved in producing new, low-carbon forms of energy and transport.

Realising these strategic objectives will require a commitment to good governance and sensible policymaking. Mining and industrialisation policies simply must reflect the DNA of the AMV and be orientated towards attracting players that are ESG committed.

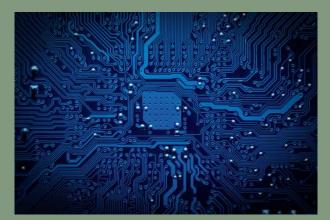
Similarly, mining firms must endure the upfront learning costs of embodying ESG principles as part of their ethos. The long-term payoff is that social performance will become mainstreamed and produce genuine sustainability. With more effective states and more responsible mining and manufacturing firms, broad-based development may become a realisable future.

Opibus Builds First Fully Electric African Mining Vehicle

By Remeredzai Joseph Kuhudzai

Source: www.cleantechnica.com

Opibus, a Kenyan electric vehicle designer and manufacturer focused on creating products tailored for the region with quality, price and local production in mind, has just unveiled one of Africa's first fully electric vehicles for the mining sector.



The vehicle system is based on a modular electric powertrain which makes it easy for mining operators to convert their current fleet of vehicles to electric without having to invest in new vehicles. This reduces cost as well as resource usage even though new vehicles can also be made completely electric. The first step in the conversion process is to service the vehicle to ensure that the body and chassis is in prime condition if it's a used vehicle. Secondly, the fuel tank and engine are removed to leave space for the new electric powertrain.

Vehicles are also sent to any of Opibus' certified partners, where the proprietary electric conversion kit is then installed. The motor is bolted on to the vehicle with an adapter (retaining 4×4 capabilities), while the front battery box and center battery box are bolted into the old component placements, meaning most of the vehicle is being used without invasive operations. This gives the new vehicle enhanced dynamics as the batteries move the center of gravity lower. Opibus also provides charging and energy solutions, as the vehicle can be charged completely with solar to lower operational costs even further and minimize diesel transport. This will be critical in areas where mines are running where there is no grid connection.

The vision for the company is to electrify Africa's transport sector and accelerate the transition to renewable energy. The company is founded on three pillars, electric conversion systems for utility and public transport, electric motorcycles, and energy and charging solutions. The company not only builds products that are more sustainable for the environment, but is also building an end-to-end sustainable ecosystem. This creates much needed local job opportunities. Opibus is building products that make sense for local use cases, designed for Africa, in Kenya.

Opibus initially focused on the safari and tourism industry to anchor its business, converting old off-road safari and game drive vehicles to electric using its proprietary electric vehicle drivetrain. The Opibus team is very passionate about the electric vehicle conversion business and they see it as the most resource efficient way of accelerating the transition to electromobility in a less capital intensive manner. There are tens of thousands of old ICE vehicles on the continent that have their chassis and bodies still in very good condition, making them ideal for conversion. The mass transit market is also a priority market for Opibus. Opibus is converting small and high capacity buses from ICE to electric and the first deliveries will begin in October of this year. Opibus is now also scaling up production of its electric motorcycle that was fully designed and developed in-house in Kenya. You can have a look at the motorcycle and the assembly line in

this video here.

The first fully electric vehicle for the mining industry whose powertrain is designed and built in Africa for Africa is a game changer. The mining sector plays a major role in a lot of countries across the continent. For example, the mining sector in Zimbabwe accounts for about 60% of the country's exports. The mining sector contributes significantly to government revenue and employs more than 37,000 people in formal jobs and over 200,000 artisanal and small-scale miners. In South Africa, in 2018 the mining sector contributed R351 billion (\$25 billion) to the South African gross domestic product (GDP). A total of 456,438 people were employed in the mining sector in 2018 and each person employed in the mining sector has up to nine indirect dependents. In Ghana, the mining sector also plays a vital role in the economy. The mining sector is responsible for more than half of all foreign direct investment (FDI) and generates more than one-third of all export revenues.

Campus-centric businesses such as mines are perfect for electrification. Fleet managers at campus-centric businesses are generally in a position to afford new electric vehicle models as well as these converted vehicles. This makes it an industry where quick wins can be realized on the road to electrifying the transport industry. Fleet managers have a periodic fleet replacement cycle that could be taken advantage of. They offer an opportunity for high volume orders, further incentivising original equipment manufacturers.

Vehicles operating at these mining campuses generally have predetermined routes and duty cycles which makes it easy to plan charging sessions. This removes one of the major concerns highlighted by people, which is range anxiety. These predetermined/set routes of known distances allow fleet operators on these large campuses to easily adopt electric vehicles without disrupting their normal operations, as well as scheduling charging sessions using onsite EV charging points. A lot of these mines are starting to install solar to help power their operations, which means these mining vehicles will be charged with cleaner and more affordable electricity onsite, which will further improve the value proposition. EVs and PV are a match made in heaven and we will soon start to see more developments in this space in the critical mining sector.

The Opibus vehicle enables mining to become more sustainable and will also reduce the need for expensive ventilation underground as there are no emissions. Also, with electric vehicles makes the working environment safer as the risk of flammable fuels is completely gone and communication is easier with the silence of the vehicles. Charging of the vehicle can be done on the grid or completely off-grid with solar panels or other systems. Lucy Mugala, Research and Development engineer at Opibus, says "This vehicle is a game changer for the mining industry. It makes it possible to operate a mine completely without need for fuel infrastructure. Even more so if solar panels and battery backup systems are combined with the electric vehicles. It makes it possible to lower operations costs by almost 60%."

