

Addressing the geopolitics of the energy transition in the African context: Insights from mineral rich Sahel countries

Key words: green minerals, geopolitics, governance, Africa Mining Vision (AMV), Africa Green Minerals Strategy (AGMS), energy transition

Executive Summary

Disruption is fast reshaping the mining, oil and gas sector whether it comes from climate change or geopolitics. One topic which is central to development and energy transition debates globally is the topic of green minerals also commonly known as strategic minerals. “Critical” and “strategic” minerals refers to minerals used in many high-tech appliances that power the global economy and the energy transition. The label “critical”, “strategic” or “green” can be used interchangeably. Across the African continent, where minerals are discovered and extracted, we encounter security and conflict hotspots. The presence of valuable minerals can attract various actors, including government forces, rebel groups, and international corporations, all vying for a share of the profits and a key position in the race for green minerals.

A research agenda on the geopolitics of renewable energy and energy transition is emerging. It requires us to recognise energy as more diverse and to rethink elements of energy geopolitics and their consequences on resource rich and dependent African countries.

This competition for securing minerals can exacerbate existing political environmental and social tensions, leading to instability and conflict

in the region. It is globally agreed that the energy transition is inevitable. However, the occurrence of green minerals overlaps with conflict hotspots, and fragility. Supplies of both lithium and cobalt are projected to run short in the coming decades, driving global competition and prices higher. This global energy transition also presents a crucial opportunity to confront larger questions of climate justice and historic responsibility. The world’s growing need for green minerals disproportionately affects developing countries. The continent contains more than 30% of the minerals required to create low-carbon and renewable energy technology, as well as 60% of the world’s renewable energy resourcesⁱ. With the desire to move away from the traditional “pit-to-port” model, the Africa Green Minerals Strategy (AGMS) grounded in the 2009 Africa Mining Vision (AMV) was developed in 2023 and consultations are currently underway before its final adoption. Signaling a fundamental shift in the way mining is to be conducted on the continent, the objectives of the strategy are to use mineral endowments to underpin growth, industrialize and create jobs by fully developing sectoral linkages and to also use the opportunity of the decarbonization agenda to electrify Africa.

This brief underscore the importance of effective governance and political stability to ensure that the extraction of green minerals contributes to inclusive growth and sustainability across the continent.

The policy brief will examine the current trends in green minerals and the geopolitical implications for Africa. It will highlight the potential role of the AGMS as a valuable policy framework for countries and Regional Economic Communities (RECs) in the sustainable extraction of these resources for broad-based and equitable development.

The policy brief calls for:

- Anticipatory governance approaches from African policy makers based on the AGMS to navigate uncertain times, volatility and challenges posed by the energy transition and peace and security.
- Current and prospective partners to seize the opportunity to strengthen their collaboration and relationships with the African mining industry by supporting AU institutions and the AMDC.
- A greater emphasis on African Local Content (ALC) which pulls African countries together based on their strengths and potential.
- A focus on fostering intra-African partnerships and interdependencies within the mining sector to achieve greater integration and achieve SDGs and agenda 2063 goals.

1. Governance, peace and security challenges and opportunities in mineral rich sub-Saharan African Countries: Focus on Sahel Countries

The Sahel region is wedged between the Sahara Desert in the north and tropical forests and the savannah to the south. There are several political definitions of the Sahel according to which the area comprises 12 countries. Sahel countries face common challenges such as food insecurity, poverty, environmental degradation, and conflicts

exacerbated by climate change and resource scarcity. The core group of Sahel countries is composed of: Mali, Niger, Burkina Faso, Chad and Mauritania, these countries were known as the G5 Sahel until the withdrawal of Burkina, Mali and Niger in 2023. Political instability and conflict have a negative impact on resource governance and natural resources management, and as a result, countries that are experiencing political instability tend to exhibit stagnation in AMV implementation which can over the medium to long term evolve into rifts with AMV principles. This leads to reduced multi-stakeholder interactions and halted public participation. According to the AMV (2009), some critical constraints and success factors for realizing the vision also weight on resource rents. All nine focal areas of the AMV are affected, in particular mining revenues and mineral rents management, building human and institutional capacities and mobilizing mining and infrastructure. The sustainability and success of the AMV depend on favorable external and internal factors such as natural resources endowments and proactive and deliberate actions from key stakeholders, particularly governmentsⁱⁱ.

In Africa, some of the largest reserves of minerals used for energy transition are located in contested democracies and conflict areas: bauxite (Guinea), lithium (Mali), cobalt (DRC), Gabon (Manganese), Niger (Uranium). Conflict and poor governance negatively impact mining operations at an early stage of the value chain affecting exploration, extraction, and transportation. Mali, a country with proven reserves of lithium, is aiming to enhance its production capabilities for lithium and uranium in the southern region. The Malian junta in power since the 2021 coup highlighted lithium production as a key economic focus, while a new law entitles the states to a greater share of mineral revenues. The new law allows the government to take a 10% stake in mining projects and gives the option of buying an additional 20% within the first two years of commercial productionⁱⁱⁱ. The Goulamina mine

located 195km from the capital Bamako is confirmed as one of the world's best hard rock lithium assets for scale and cost of production when compared to current operations and prospective projects and the first of its kind in west Africa. Production at Goulamina is expected to reach 455,000 tonnes per annum of concentrate for the first five years^{iv}. The government is still facing challenges from Salafi-jihadi insurgents and pro-separatist rebels in areas with gold and potential uranium deposits. Security forces are struggling to maintain control in these areas due to insufficient numbers and lack of local support, especially with the increased activity of Salafi-jihadi insurgents near the capital. Despite the presence of large deposits in the southern and western areas, Mali currently lacks the necessary infrastructure and security climate for extraction and processing, leading to reliance on foreign companies for project development and external support to guarantee access and security at the mine sites. In neighboring Niger rich in uranium, a strategic mineral for both civilian and military purposes, the self-appointed military government has temporarily suspended the granting of new mining licences and ordered an audit of the sector, a ban on small scale mining was also put in force. The Nigerien ministry of mines recently launched a special committee to revise the mining fiscal regime. For the new military governments, the focus is on securing mineral rents by focusing on taxes or royalties. The emphasis is on the mineral rents and management cluster of the AMV, leading to an unbalanced alignment with the AMV principles.

Although the link and overlap between mineral resources and conflict is apparent in Africa, it is important to note the rise of global uncertainty with hotspots also prevalent in the middle east, Europe and Asia.

The AMV and AGMS can be used as tools to prevent and resolve natural resources related conflicts. The AGMS in particular with its emphasis on the role of

regional cooperation and its instruments created to offset the unevenness between countries, can support countries in building resilient mineral development and transition plans. The continent, over the past years, witnessed a wave of military coups, contested governments, cancelled or postponed elections. Many observers and analysts have warned of a possible domino effect in the region. In fact, as pointed out by H.E. Ambassador Bankole Adeoye in 2022 *"at no time in the history of the African Union have we had four countries in one calendar year, in 12 months [...] suspended,"*^v Suspensions are applied until constitutional order is restored and to encourage the suspended country to address the underlying issues and comply with the AU's principles and values. Military coups have been consistently followed by changes in mineral governance. Predatory mining practices, once confined to the extraction of precious metals and stones, are now on the rise in countries abundant in transition minerals.

There are considerable risks in increasing the extraction of minerals needed to facilitate the transition to a low-carbon economy, which could lead to the emergence or exacerbation of tensions, violence, and fragility in producing countries. Mining is very local and site-specific, however mineral extraction has global repercussions from their supply chain to the end user. Extraction happens in specific socio-political and geographic contexts which may exacerbate tensions and issues on a local or regional level. Traditional linear thinking particularly when it comes to tackling governance, peace and security challenges fall short when it comes to providing practical solutions. This approach tends to oversimplify the nature of poor governance and resource related conflict. To deal with rapid progress and uncertainty, African countries should embark on a process of public sector renewal by adopting new approaches that feature futures literacy^{vi}. Futures literacy is centered on understanding

how individuals notably policy makers imagine the future. In the extractives context it highlights the fundamental attitudes towards African mining to empower key stakeholders to make effective use of these forward-looking perspectives. Anticipatory governance should be embraced by African policy makers to navigate uncertain times, volatility and challenges posed by the energy transition and peace and security.

According to different clean energy scenarios, the demand for some of the most important critical minerals (i.e., lithium, cobalt, nickel, copper, and neodymium) will likely increase between 1.5 and 7 times by 2030 ^{vii}. Despite the uncontested green mineral potential, investments in Africa are yet to fully realise their potential, due to perceived risks, security, transparency, and governance issues. According to the Fraser Institute, in 2023 Africa had the most countries ranking in the bottom 10 least attractive for mining investments, Niger ranked last in investment attractiveness and also based on policy scores; amongst African countries only Botswana ranked in the top 10 in terms of investments attractiveness ^{viii}. Investments remain modest despite the pressure to reach zero net targets and capital traditionally targeted at African oil and gas projects now redirected into mining projects. While the sector has massive opportunities as a key player in global decarbonisation, electrification, and the transition to more sustainable mining it is also vulnerable to political instability and environmental damage if it fails to effectively tackle its current challenges.

2. The paradigm shift in mineral resources management: why partnerships matter

In light of the abundant mineral resources crucial to the global energy transition, many African countries are taking proactive steps to capitalize on

their natural assets and support the shift towards renewable energy. This strategic approach is evident in the implementation of policies, partnerships and regulatory frameworks tailored to facilitate the energy transition and efforts towards reaching net zero. Since the beginning of the COVID-19 pandemic and with increasing intensity following the Russian invasion of Ukraine, a politicization of transnational supply chains that potentially will affect global trade relations can be observed ^{ix}. A growing number of states are increasingly involved in the race for resources with the spectrum of state activity ranging from stronger partnerships to “friendshoring”. Friendshoring is a strategy anchored in fortifying supply chains through political and strategic alignment. Overall, the energy transition is creating a new set of “winners” and “losers” on the global geopolitical map ^x. Muller (2023) further argues that current geopolitical changes open a window of opportunity for African states to overcome existing export dependencies in the raw materials sector and to foster local value creation. In 2006, China announced plans to set up Strategic Mineral Reserve to stockpile uranium, copper, aluminium, iron ore and other minerals. In 2019 alone, China imported nearly \$10 billion worth of minerals from sub-Saharan Africa ^{xi}. Africa plays a critical role in Chinese mineral supply chains; however, China’s strategic focus so far has been on the central southern African copper belt comprising of the Democratic Republic of Congo (DRC)-Zambia-Tanzania-Mozambique. The United States, Japan, and South Korea also have strategic mineral stockpiles, these strategic stockpiles serve several purposes in the event of national emergencies, such as a war, and defends local industries against severe price fluctuations ^{xii}.

The recent wave of military coups notably in resource rich Sahel countries such as Guinea, Mali, Burkina-Faso and Niger illustrated how mineral resources can play a role in applying pressure. In fact, mineral resources, exported in

their raw form represent the leading exports for these countries. Military coups placed the affected nations' resources under the spotlight, notably in the cases of Mali and more recently Niger. The Sahel is a significant mineral resource and security hotspot with proven abundant reserves of bauxite, manganese, phosphates, iron ore, lithium, rare earths, gold, but also uranium (see table 1).

Table 1: Snapshot of mineral resources in some Sahel countries

Country	Mining Investment attractiveness index (2023) ¹	Estimated mineral reserves	Extractive dependency	Major mining policy changes post-coup
Mali	38,04	Lithium: 4million tons Gold: 800 tons Manganese: 20 million tons Limestones: 10 million tons Uranium: 5000 tons	Gold accounted for 80% of total exports	2023: Mali adopted a new mining code and legislation on local content. The new Code allows the government to take a 10% stake in mining projects and gives the option of buying an additional 20% within the first two years of commercial production.
Guinea	46,04	Bauxite: 7.4 billion metric tons	Minerals accounted for 90 % of total exports	2021: New local content law. Indefinite ban of ASM.
Niger	14,61	Uranium: 311,110 tons	Uranium accounted for 75% of total exports	2024: Niger will temporarily suspend the granting of new mining licenses and begin an audit of the sector. Temporary suspension of new ASM permits.
Burkina	38,95	Copper: 70 million tons Manganese: 19 million tons	Minerals accounted for 79% of exports	2023: New mining regulation. Increase in gold royalties. Temporary ASM ban. Part of the Mining Fund for local development will be transferred to the Patriotic Support Fund.

Sources: Mali Ministry of Mines and Petroleum (2024), Fraser Institute, EITI (2021), Bloomberg News (2023), Enact (2022), IMF (2021), Mali New Mining Code (2023), PWYP (2021), Africa Intelligence (2024), (International Trade Administration, 2023)

¹ The Investment Attractiveness Index is a composite index that combines both the Policy Perception Index (PPI) and results from the Best Practices Mineral Potential Index. A best practices environment is one that contains a world-class regulatory environment, highly competitive taxation, no political risk or uncertainty, and a fully stable mining regime (Fraser Institute 2023).

Over the recent years, the Sahel countries have experienced the most significant transformation in their extractive landscape compared to anywhere else on the continent. Post coups directives highlighted a series of patterns: distancing from the European Union (EU) and in some countries from the United States (US) as well, rejection of France, protectionism paired with strengthening of ties between neighboring countries sharing the same dialogue and vision. The AU and the EU consistently backed sanctions against the new regimes, leaving a gap and an opportunity for new partners to emerge and strengthen their position. While the EU and the US suspended aid and supported sanctions following coups, back in 2022 Russia and China blocked the United Nations Security Council from supporting a decision by the West African economic bloc ECOWAS to impose new sanctions on Mali, after its military leaders proposed staying in power for up to five years before staging elections. Between Iran and Niger, a major producer of uranium, diplomatic ties are strengthening with economic and health agreements signed in January 2024.

While aid from US, EU and Canada has decreased or halted, Chinese Foreign Direct Investments (FDI) have remained stable. FDI play a crucial role in the development of a country's industry and production, representing significant contributions to its economic growth making them instrumental in driving sustainable economic development and prosperity for nations around the world. It is also a pathway to access certain markets or resources and an opportunity to take a position on global value chains^{xiii}. Chinese FDI flows to Africa declined in 2019 to \$2.7 billion, and then despite the COVID-19 pandemic rose to \$4.2 billion in 2020. Over the same period, Chinese FDI stocks in Africa grew nearly 100-fold over a 17-year period from \$490 million in 2003 to reaching \$43.4 billion in 2020^{xiv}. That makes China Africa's fourth largest investor, ahead of the United States since

2014^{xv}. Chinese investments are concentrated in construction and in mining, further cementing China's dominant position in processing. African countries such as Angola, Cameroon, Ethiopia and Zambia are among the top ten (10) countries that received loans from China, accounting for 68 percent of the total loans provided by China^{xvi}. In the Democratic Republic of Congo (DRC), where roughly 70 percent of the world's cobalt is produced, Chinese firms owned or had stakes in 15 of the 19 cobalt producing mines^{xvii}. China's notable stature in the critical minerals supply chain, while undeniably influential, is multifaceted and warrants a nuanced understanding, particularly in light of its vulnerabilities and dependencies within this dominance^{xviii}. China dominates processing but is heavily dependent on extraction on the African continent.

The reduction in aid and the increase in sanctions can create significant budgetary and structural challenges for countries experiencing political unrest in the short to medium term, such challenges can translate into difficulties in maintaining essential services and infrastructure, as well as potentially exacerbating social and economic instability. However, over the long term, it might push affected countries to focus more on development from the ground up and with resources available nationally or regionally. In one scenario, it will create a need for structural transformation, self-reliance away from aid dependency and certain strategic partnerships and towards intra African partnerships (Mali, Burkina-Faso, Niger) or alternatively push towards "friendshoring" with other allies such as China, Russia or Iran. Aid in Sahel countries mostly focuses on humanitarian aid, peace and security and strengthening of institutions. Peace and security are a focus due to the presence of jihadist groups in the region causing societal and business hardship and disruptions. With the overlap of jihadist presence in mining zones, a deterioration in security and stability will have a direct negative

impact on the investment climate and mining operations especially large-scale mining.

New cooperation can also go beyond financial aid, this new form of cooperation will allow Mali to better develop its gold resources and reduce its dependency on foreign markets. The Malian Ministry of Mines also stressed the importance of diversifying the country's mineral resources, in particular by positioning itself as a leader in African lithium. Mali and Russia are increasingly cooperating on mineral extraction to boost both countries' revenues. Russian companies have made several road-map agreements with Mali for gold refinery construction, geological mapping, and civil nuclear power cooperation since March 2024, The Malian and Russian governments also signed several cooperation agreements on oil, gas, uranium, and lithium production ^{xix}.

3. Positioning the AGMS as a game changer in the energy transition strategy

In the context of the initiatives that have seen the light in the minerals sector, particularly surrounding green minerals, the African continent has come under greater political scrutiny. At the global level, geopolitical competition over the access to minerals is clearly increasing. A just energy transition agenda would necessitate stronger partnerships, which may rely on bilateral agreements with African countries. It is important to consider the broader implications of such partnerships and ensure that they align with the AMV and other continental strategies and goals. Regional and continental bodies such as RECs and the AU now more than ever have the opportunity to play a bigger role at the negotiating table. The current geopolitical tug of war presents a significant opportunity for African states to advance the integration of the continent into mineral

supply chains and enhance their governance performance in the mineral sector. A more robust coordination among African states at the AU level could enhance their bargaining position. The implementation of the AfCFTA offers an opportunity to explore potential intra-African cooperation within the framework of regionalisation strategies. A stronger coordination and collaboration between and among African states instead of competition could harness synergies and sustainable growth. In this context, the regional economic communities and the AU could play a stronger role. The AMV, which was adopted by African countries in 2009, is the blueprint for inclusive and sustainable development of the continent's mineral resources sector to underpin broad based development. Among others, the AMV requires local mineral value-addition to maximize the impact of the mining sector and economic transformation of African countries. The Vision received support from international and bilateral development agencies over the years. However, since its inception, a clear need to update it arose due to the changing economic circumstances and new opportunities emerging from the rush for green minerals. Minerals required for the energy transition, abundant and extracted on the continent define the scope of the AGMS. The vision for the strategy is to guide Africa to strategically exploit the continent's green mineral resources for industrialisation and to assert control over its destiny to create an African presence in emerging green technologies ^{xx}. Since its creation in 2009, the AMV was criticized notably due to its lack of implementation, the AGMS while taking stock of changing times calls for a more coordinated effort and to act at regional and continental level and to depart from the previous model of raw minerals exports.

BOX 1. The AGMS vision: “An Africa that harnesses green mineral value-chains for industrialisation and electrification, creating green technologies and sustainable development to enhance the quality of life of its people”.

Four pillars support the strategy to deliver this vision:

1. Advancing mineral development by increasing geological knowledge, conducting feasibility studies to attract investment, establishing the infrastructure to create an enabling environment and aligning mineral resource management with the African Mining Vision (AMV).
2. Developing people and technology capabilities by identifying the skills needed to capitalise on opportunities and building the institutions ready to generate them.
3. Building key value chains to achieve resource-based industrialisation and access wider regional and continental markets through the African Continental Free Trade Area (AfCFTA). The case is made for establishing battery and electric vehicles value chains as a priority, starting with two-and three-wheeled vehicles and commuter buses.
4. Promoting mineral stewardship to responsibly guide the environmental, social and governance aspects of green minerals, together with increasing material reuse and recycling.

Source: Africa Green Minerals Strategy (2023)¹

In line with the AfCFTA, the AGMS lays down the foundation for stronger coordination and synergies between African states throughout the mineral value chain. The AGMS is based on a robust and comprehensive assessment of the evolving mineral landscape and the needs at country level for “backward” and “forward” linkages. The strategy can support and guide the development of policies and regional strategies that will foster linkages and energy transition. With adequate support, AU institutions and the AMDC through minerals strategies, regional approaches and partnerships can support the implementation of the AfCFTA. Based on its linkages with other sectors, the mining sector is particularly suitable for regional cooperation such as the one proposed by the AfCFTA. Current and prospective partners should seize the opportunity of building closer ties with the African mining industry and energy transition by supporting AU institutions and the AMDC. The African Minerals Development Centre (AMDC) is taking significant strides in supporting the continent’s mineral sector through various

initiatives. One such initiative is the forthcoming development of an African Green Minerals Observatory (AGMO), which plays a crucial role in mapping mineral deposits and tracking investments. The AGMO serves as a platform for gathering and analyzing data related to mineral deposits, investment trends, and value-addition efforts. This information is instrumental in guiding decision-making processes and promoting responsible and sustainable mineral development across the continent. The establishment of the AGMO exemplifies the AMDC’s commitment to fostering a thriving and sustainable mineral sector in Africa.

Win-win partnerships under the AGMS distance themselves from the previous export models based on raw resources exports. The European Union (EU) under its European Critical Raw Material Act engaged into “raw material” diplomacy, this led to EU proposals to several African countries to enter into raw materials partnerships. However, the continent is looking to tap into its mineral potential, by building green mineral value chains to industrialize, create

renewable energy systems. The strategy further highlights the potential for assembling electric two-wheeler vehicles and other niche markets locally and creating the conditions conducive for developing green manufacturing value chains.

The AGMS is well positioned to address the growing global demand for green minerals amidst governance and security challenges. By strategically leveraging these resources, African countries and RECs can foster sustainable development and create economic opportunities. The strategy acknowledges the differences in development and industrialization levels among countries. This understanding allows for tailored approaches and support to address the specific needs and challenges of each country, ultimately promoting more effective and sustainable development through its emphasis on an African Local Content (ALC), which pulls African countries together based on their strengths and mineral potential ^{xxi}. The recognition of African wide local content is crucial for promoting stronger integration and realizing the full potential of the African Continental Free Trade Area (AfCFTA). By prioritizing ALC, African countries can foster economic growth, create employment opportunities, and boost intra-African trade. This emphasis on local content also promotes the development and utilization of Africa's own resources, contributing to the continent's overall prosperity, stability and self-sufficiency. Ultimately, embracing and prioritizing African wide local content is a key step towards reaping the benefits of the AfCFTA through mineral resources and advancing the continent's economic and social development.

4. Way forward and conclusion

Africa must prioritize equipping itself with the necessary tools to navigate the complex geopolitical landscape surrounding its natural resources. Through its institutions, the continent must redefine

its position in the world. It is imperative for African leaders to remain focused on achieving Agenda 2063 and the success of the AGMS amidst the new scramble for resources. In order to prevent Africa from being overshadowed by external interests and to maintain its strategic direction towards sustainable development, it is imperative to place a stronger focus on fostering intra-African partnerships and interdependencies within the mining sector. This can be achieved through collaboration with other sectors such as education, manufacturing, and technology. By doing so, Africa can ensure that its mineral resources are utilized in a way that benefits its own development and growth, rather than being solely driven by external influences. This approach will ultimately contribute to the continent's long-term prosperity and stability.

Cooperation is crucial for the success of the AGMS and the AfCFTA. It is imperative that African countries prioritize the establishment of bridges and complementarity between countries and regions. By fostering collaboration and mutual support, Africa can effectively harness the potential of these initiatives for the benefit of all involved. This approach will not only facilitate economic growth and development and promote stability and prosperity across the continent. With its mineral wealth, Africa can be an active player in the energy transition. However, meeting AGMS goals and achieving Agenda 2063 will require resilient forward thinking mineral policies. In that light, the recommendations are for governments to:

- Ratify the AMDC statutes to make full use of its instruments to realize an integrated, prosperous Africa and ensure minerals contribute to sustainable development.
- Adopt the AGMS to create an African unity around a continental strategy that will foster a just energy transition.
- Adopt resilient mineral policies that are adaptable to fluctuations and political turmoil.

- Priority should be given to policies that enhance industrialization and regional integration.

Africa through the AGMS, is presenting an ambitious plan that considers the continent's comparative and competitive advantages in minerals. This strategy aims to leverage Africa's mineral resources to drive economic growth and development. By focusing on the continent's mineral wealth, the AGMS seeks to create opportunities for investment, innovation, and sustainable development across Africa. This approach reflects a proactive and forward-thinking mindset towards harnessing Africa's potential for the benefit of its people.

5. End Notes

ⁱ Unctad (2023) Investment Policy hub: Mali adopts new mining code increasing the state and local participation in new mining projects. Available at : Mali - Adopts new Mining Code increasing the State and local participation in new projects. | Investment Policy Monitor | UNCTAD Investment Policy Hub

ⁱⁱ Africa Union (2009) Africa Mining Vision, available at: 30995-doc-africa_mining_vision_english_1.pdf (au.int)

ⁱⁱⁱ Unctad (2023) Investment Policy hub: Mali adopts new mining code increasing the state and local participation in new mining projects. Available at : Mali - Adopts new Mining Code increasing the State and local participation in new projects. | Investment Policy Monitor | UNCTAD Investment Policy Hub

^{iv} Leo Lithium Limited (2024) GOULAMINA PROJECT DETAILS, available at: Goulamina Project Details – Leo Lithium Limited

^v Africa Center for Strategic Studies (2022) Africa Media Review for February 7, 2022, available at: Africa Media Review for February 7, 2022 – Africa Center for Strategic Studies

^{vi} Cloete D. et al (2023) Re-imagining the Critical Minerals Ecosystem in SADC Report Subtitle: Building Anticipatory Governance Published by: South African Institute of International Affairs

^{vii} IEA (2023) Mining and materials production, accessible at: <https://www.iea.org/reports/energy-technology-perspectives-2023/mining-and-materials-production#abstract>

^{viii} Fraser Institute (2023) SURVEY OF MINING COMPANIES 2023, available

at : 2023-annual-survey-of-mining-companies.pdf (fraserinstitute.org)

^{ix} Muller, (2023) The 'new geopolitics' of mineral supply chains: A window of opportunity for African countries, SOUTH AFRICAN JOURNAL OF INTERNATIONAL AFFAIRS 2023, VOL. 30, NO. 2, 177–203 <https://doi.org/10.1080/10220461.2023.2226108>;

^x S.M. Hayes et al. Critical minerals: a review of elemental trends in comprehensive criticality studies Resour. Policy (2018)

^{xi} United States Institute of Peace (2023) China's Critical Mineral Supply Chains in Africa, available at : China's Critical Mineral Supply Chains in Africa | United States Institute of Peace (usip.org)

^{xii} Wischer G.D. (2024) ASPI China shows how Western governments should stockpile minerals, available at : China shows how Western governments should stockpile minerals | The Strategist (aspistrategist.org.au)

^{xiii} Bonnet, T. (2023). Foreign Direct Investment and Strategic Minerals, HAL Open Science, available at: <https://hal.science/hal-04159841>

^{xiv} Fu, Y. (2021) The Quiet China-Africa Revolution: Chinese Investment, available at: <https://thediplomat.com/2021/11/the-quiet-china-africa-revolution-chinese-investment/#:~:text=Since%202003%2C%20the%20earliest%20date%20official%20data%20is,swung%20up%20again%20to%20%244.2%20billion%20in%202020.>

^{xv} Unctad (2021)

^{xvi} Fu, Y. (2021) The Quiet China-Africa Revolution: Chinese Investment, available at: <https://thediplomat.com/2021/11/the-quiet-china-africa-revolution-chinese-investment/#:~:text=Since%202003%2C%20the%20earliest%20date%20official%20data%20is,swung%20up%20again%20to%20%244.2%20billion%20in%202020>

^{xvii} CSIS (2023) A Window of Opportunity to Build Critical Mineral Security in Africa, available at : <https://www.csis.org/analysis/window-opportunity-build-critical-mineral-security-africa> (accessed 09/04/2024)

^{xviii} Vlado Vivoda (2023) 'Friend-shoring' as a Panacea to Western Critical Mineral Supply Chain Vulnerabilities, Article in Mineral Economics · October 2023 DOI: 10.1007/s13563-023-00402-1

^{xix} Karr.L and Gianitsos. M. (2024) Africa File, April 4, 2024: Mali and Russia Explore Mali's Mineral Wealth; Niger Plays the Field; the Kremlin's Red Sea Ambitions in Eritrea, available at: <https://www.criticalthreats.org/analysis/africa-file-april-4-2024-mali-and-russia-explore-malis-mineral-wealth-niger-plays-the-field-the-kremlins-red-sea-ambitions-in-eritrea>

^{xx} AFDB (2022) Approach Paper towards preparation of an African Green Minerals Strategy

^{xxi} Africa Union (2023) Africa Green Minerals Strategy



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ADDRESSING THE GEOPOLITICS OF THE ENERGY TRANSITION IN THE AFRICAN CONTEXT: INSIGHTS FROM MINERAL RICH SAHEL COUNTRIES

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The African Minerals Development Centre (AMDC) is a specialized agency of the African Union, dedicated to advancing mineral resource development in Africa. Its primary mission is to provide coordination and oversight for the effective execution of the African Mining Vision (AMV) and its associated action plan.

The opinions expressed in this paper do not necessarily reflect those of the African Minerals Development Center (AMDC). Authors contribute to the AMDC policy brief series in their personal capacity

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POLICY BRIEF