

POLICY PAPER

Lithium mining and national economic development in Zimbabwe

Prospects for resource-based national development

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July 2024

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Suggested citation

Mkodzongi, G., (2024). *Lithium mining and national economic development in Zimbabwe: Prospects for resource-based national development*. Policy Paper. Africa Policy Research Institute.

Acronyms

AfDB	African Development Bank
ANRC	Africa Natural Resources Management and Investment Center
BESS	battery energy storage systems
BMVC	battery mineral value chain
CM	critical mineral
EU	European Union
EV	electric vehicle
ICE	internal combustion engine
IEA	International Energy Agency
LFP	lithium, iron and phosphate
Li-ion	Lithium-ion
LSE	London Stock Exchange
MOU	Memorandum of Understanding
MMC	Manganese Metal Co
NMC	nickel, manganese and cobalt
PGM	platinum group metal
SDS	sustainable development scenario
STEPS	stated policies scenario
UK	United Kingdom
US	United States
WACC	weighted average cost of capital



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Executive Summary

This policy paper examines the dynamics of lithium mining in Zimbabwe within the context of a global surge in the demand for Critical Raw Materials (CRMs). The global push to reduce carbon emissions and meet net-zero targets by 2050 has fueled demand for CRMs, also known as transition minerals, which are essential for the shift to cleaner energy. The ongoing transition from fossil fuel reliant internal combustion engines (ICE) to Electric Vehicles (EVs) has influenced the rising demand for lithium, a key component in the manufacturing of electrical vehicle batteries. Developing countries such as Zimbabwe, which are rich in lithium deposits stand to benefit from the rising demand for CRMs. Lithium mining has the potential to contribute to the country's Vision 2030 which aims to '*chart a new transformative and inclusive development agenda*' through its National Development Strategy (NDS1). Zimbabwe's NDS1 is a '*first 5-year Medium Term Plan aimed at realizing the country's Vision 2030, while simultaneously addressing the global aspirations of the Sustainable Development Goals (SDGs) and Africa Agenda 2063*'. Under the NDS1, Zimbabwe seeks to leverage on its natural resource endowments and its skills base (NDS1 2018) to realize its developmental objectives.

Zimbabwe holds the largest reserves of lithium in Africa and ranks fifth globally (although estimates vary) in terms of lithium deposits. The vast lithium deposits, if properly mined, beneficiated and exported, could earn the country the much-needed foreign currency to meet its developmental objectives. Furthermore, the lithium deposits could be a basis for a green economy, potentially making Zimbabwe a key player in the region for the production of lithium batteries and other green products critical for a transition to cleaner energy. More importantly, Zimbabwe's rich mineral resource endowments could help it achieve an upper-middle-income economy by 2030, as outlined in its NDS1 medium-term policy.

The link between extractives and local economic development is a subject of ongoing scholarly debates (Niederberger and Haller 2016,

and Zabyelina and Uhm 2020). Some studies have shown that natural resource endowments can be a double-edged sword. On one hand, they have the potential to transform economies and improve the livelihoods of rural inhabitants (Ferguson 2006, Mkodzongi and Spiegel 2019, and Mkodzongi 2020). On the other hand, extractives can also trigger land and resource grabs by political elites and global criminal syndicates, who often have sufficient financial and legal resources to influence government policies in their favor (Zabyelina and Uhm 2020, and Verbrugge and Geenen 2020).

Across many jurisdictions, resource endowments have been linked to conflicts, smuggling, racketeering, and civil war. To seize resource-rich lands, global criminal syndicates can raise militias and forcibly acquire mineral rights (the Democratic Republic of the Congo (DRC) being a case in point). They can also bribe politicians, illicitly acquire mineral rights at the expense of local communities, and evade taxation, thereby denying developing countries the ability to collect resource rents essential for national economic development. The bribery scandal surrounding Glencore's mining activities in several African countries, including Nigeria and DRC exemplifies this.

In light of the aforesaid, Zimbabwe is likely to encounter challenges in its pursuit of a resource-driven national economic development strategy. For instance, a recent investigation by the Aljazeera Television Network (Al-Jazeera 30 March 2023) exposed an alleged '*Gold Mafia*' illegally exporting gold from Zimbabwe to Dubai, reportedly with the collusion of the country's Reserve Bank and diplomatic personnel. These allegations, if substantiated, exemplify the challenges faced by resource-rich developing countries in utilizing mineral resources for national economic development. Given the above, it is essential that Zimbabwe implements mechanisms to limit resource leakage and improve revenue collection. This could contribute to achieving NDS1 and Vision 2030's aspirations of an '*empowered and prosperous upper middle-income society by 2030*'.



This policy paper explores the potential for CRMs to contribute to Zimbabwe's national economic development within the context of the global clean energy transition. It examines how Zimbabwe can leverage its rich resource endowments to achieve its goals of attaining an upper-middle-income status by 2030. The paper also highlights challenges associated with a resource-driven development strategy. Some of these challenges are historical, stemming from the historical tendency of global capitalism (and neocolonialism) to confine formerly colonized countries to primary commodity production, hindering their ability to industrialize and bring their populations out of chronic poverty and deprivation. Additionally, the paper highlights how volatile global commodity markets, weak regulatory regimes, porous borders and mineral smuggling pose challenges for resource-rich African countries pursuing resource-driven national development strategies.

Zimbabwe, and indeed other resource-rich African countries, must capitalize on the geopolitical fragmentation caused by the Russia-Ukraine conflict to which has increased the demand for Africa's CRMs to leverage better deals with those seeking to acquire mineral rights in their territories. A Financial Times report

(April 3, 2023) noted that '*concern over access to critical minerals is at an all-time high*' following Russia's invasion of Ukraine and amid rising tensions between the West and China. This geopolitical climate, coupled with rising global demand for Africa's CRMs, empowers producer countries to negotiate better deals. This could involve, among other things, mandating potential investors to commit to local mineral beneficiation, knowledge transfer to local communities, or equity in the finished product in situations where beneficiation happens outside the country.

This policy paper concludes with recommendations on how Zimbabwe can capitalize on its vast lithium deposits to benefit from the global clean energy transition. As the holder of the largest lithium reserves in Africa, Zimbabwe must seize this opportunity to leverage the rising demand for the mineral. This can be achieved by developing a robust sector that attracts new investments and fosters skills development, thereby adding value to its lithium resources. This approach could create jobs, promote economic growth and industrialization, ultimately helping the country to achieve its national development objectives outlined in its medium-term macroeconomic policy.



Introduction

Until a few years ago, very few Zimbabweans knew about lithium and its use in the global automotive industry. It was only after newspaper reports of a Chinese mining company having paid nearly half a billion United States dollars to acquire a lithium mine (Reuters, 22 December 2022) that the so-called '*lithium fever*' started to grip the country. In the last few years, more Chinese companies have acquired lithium mine claims across Zimbabwe and have already started mining operations (Mining Technology 2023). Locals have also joined the '*lithium rush*' by illegally mining on privately owned lithium claims, although this has led to conflicts (New Zimbabwe, 05 January 2023).

The global demand for lithium, a mineral which is abundant across Zimbabwe, has raised hopes that its mining, beneficiation and export could transform the fortunes of millions of Zimbabweans who have suffered decades of economic under-development and poverty. As a result, the government has been quick to highlight how its '*Zimbabwe is Open for Business*' policy is beginning to pay dividends as an increasing number of investors are lining up to invest in Zimbabwe's mining sector. The Zimbabwe government has placed mining at the center of its economic development strategy under its Vision 2030 policy. As a result, the government's five-year medium-term plan was designed to address some of the United Nations Sustainable Development Goals (UN SDGs) and the Africa Agenda 2063.

Under the NDS1 medium-term plan (2018), Zimbabwe seeks to leverage its mineral resource endowment to support its economic recovery and industrialization. It is within this policy context that the global demand for lithium could support Zimbabwe's developmental priorities and its aspirations to become an upper-middle-income

country by 2030. Beyond Zimbabwe's medium term policy objectives, the global energy transition underpinned by the electric vehicle revolution and the need to meet net zero emissions targets by 2050 presents important economic opportunities for resource-rich countries such as Zimbabwe. What is however important is for such countries to take advantage of economic opportunities presented by the global transition from fossil fuels. The abundance of transition minerals such as lithium in Zimbabwe, a mineral whose demand has dramatically increased globally, presents a golden opportunity for a resource-driven economic development trajectory. Moreover, the growth in voluntary carbon markets also presents economic opportunities for the government and indeed local companies who can take advantage of the rising demand for carbon credits by western governments and global corporations. Most carbon offsetting schemes are in countries such as Zimbabwe which has historically emitted insignificant greenhouse gases but bear the brunt of climate change. Like so many countries in the so-called '*third world*', Zimbabwe's mineral resource endowment must be utilized to support economic development and industrialization. For example, rather than continue with the historical trend of exporting unprocessed commodities (so-called commodity exports), beneficiation of minerals locally creates both downstream and upstream linkages through, for example, local supplier development and acquisition of technologies which is necessary for industrialization. To achieve the above, the country must overcome many challenges facing resource-rich developing countries such as bribery, tax avoidance, illegal export of minerals, and illicit financial flows.



Data gathering and methodological approaches

Lithium mining in Zimbabwe is a relatively new phenomenon fueled by the reconfiguration of the global automotive industry in favor of EVs. There is thus very limited scholarly research on the extraction and export of lithium and indeed other CRMs. Most of what is known about this rapidly growing industry is largely based on newspaper reports, government policy documents and parliamentary reports.

In order to gain a better understanding of how the lithium mining sector has unfolded in Zimbabwe, it was necessary to undertake fieldwork and gather empirical data that could help to explain who is mining where, how they are mining and processing lithium ores, and how the mineral is marketed and its contribution to Zimbabwe's national economic development strategy. A purposive sampling approach targeting stakeholders in the lithium mining sector was adopted. Qualitative data was gathered through in-depth interviews and informal interviews with mine owners, mine workers and key informants such as Zimbabwe Ministry of Mines officials, the Zimbabwe Chamber of Mines, politicians, local government officials, customary authorities, Rural District Councils (RDCs), NGOs, CSOs and others involved in the lithium mining sector. All in all, over 30 informants were interviewed. An effort was made to interview people of diverse backgrounds in terms of age, gender, class, and political affiliation. This helped to bring diverse perspectives on lithium mining and its potential to contribute to Zimbabwe's national economic development.

Research Informants were accessed through their representative organizations and at mine sites. Government officials and politicians were met in town at their place of work while others were met on the way to mine sites. Fieldwork involved meetings with politicians, Members of Parliament, senior personnel from national NGOs working with communities affected by mining such as Christian AID, Zimbabwe Environmental Lawyers Association, Oxfam, and interviews were also undertaken with representative organization of the mining sector such as Lithium Miners Association, Chamber of Mines Zimbabwe. Senior personnel from large-scale mining companies such as RIO-ZIM were also interviewed to gather their perspectives on the potential of lithium mining to contribute to national economic development. Small-scale lithium miners were also interviewed at mine sites in Mberengwa (Midlands Province) and in Murehwa and Mutoko (Mashonaland East Province). Interviews with a diverse range of informants helped us to gather rich data reflecting the "lithium fever" that has gripped Zimbabwe in the last few years. Given the gap in literature on lithium mining and indeed other transition minerals such as nickel, manganese, and graphite, data gathered as part of the development of this policy paper can be a basis for further research into the dynamics underpinning the mining of CRMs in Zimbabwe and their potential to contribute to national economic development within the context of an energy transition currently unfolding globally.



The dynamics underpinning the global lithium rush

The global push to cut carbon emissions in order to meet net zero targets by 2050 (IPCC Report 2023) has influenced the reconfiguration of the global automotive industry from ICE to EVs. A major component of EVs is the battery which is made up of critical raw materials such as copper, nickel, aluminum, cobalt and lithium. Some of these minerals are generally found in many African countries, including Zimbabwe.

The transition to cleaner energy thus creates economic opportunities for countries such as Zimbabwe where many of the critical raw materials are found in abundance. The mining and beneficiation of these resources has the potential to transform local economies by addressing high levels of unemployment, revamping infrastructure, and growing the tax revenue base. However, developing countries such as Zimbabwe currently face energy poverty due to both historical factors and climate change-induced severe weather patterns which have undermined power generation. The push towards net-zero targets currently popularized by western countries brings another dynamic to the current energy crisis facing developing countries. Most of these countries continue to rely on fossil fuels for their current energy needs and continue to invest in new coal-powered electricity power plants - this goes against the global push to decarbonize and adopt clean energy. Yet most of these countries do not have the technology to transition to new clean energy sources. For example, solar power remains very expensive as most people cannot afford the latest solar technology such as the use of lithium-ion batteries. Given the fact that most of these countries have to rely on new technologies (which many of them do not afford) to transition to cleaner energy, they also face a problem of energy sovereignty as the new technologies are not locally based and have to be imported and adopted locally at a premium.

The geo-political instability caused by the ongoing conflict between Russia, Ukraine, and the rest of the Western world creates new economic opportunities for resource-rich African countries. While these geo-political tensions have created economic opportunities for African countries who now have to compensate for the disruption of mineral supply chains caused by the war in Ukraine, the global shifts in global resource supply chains creates other challenges. Most mineral-rich African countries such as Zimbabwe lack the technological know-how to beneficiate these minerals locally. Unlike their western counterparts who have been able to provide financial incentives to lure battery manufacturing companies to set up shop within their shores. For example, through its Inflation Reduction Act (IRA), the United States government has offered financial incentives worth US\$370 billion to companies willing to locate their operations in the United States. Similarly, a report on the Business Chief news site (25 May 2023) showed how the British government offered GBP 800 million (USD 1.02 billion/ EUR 870 million) to the Tata Group (owners of Jaguar Land Rover) to convince them to build a new EV giga-factory in England rather than Spain. African countries lack the financial wherewithal to offer such financial incentives and are thus forced to export unprocessed ores rather than set processing factories locally.

African countries must adopt policies that can enhance their capacity to benefit from the boom in CRMs by, for example, making it compulsory for those who are seeking to invest in the local mining sector to commit to technology transfer and where necessary the setting up of local refineries. This could create local economic opportunities through backward and forward linkages which will benefit local entities engaged in mining. In order to leverage their resource endowments for local economic development, African countries can utilize continental trade pacts such as the African Continental Free Trade Area (AfCFTA)



and the Africa Mining Vision (AMV) to negotiate with countries such as China (through the Forum for China-Africa Cooperation) to secure a better deal for their mineral resources. Currently, many resource-rich African countries such as Zimbabwe

have a weak industrial base and lack the technical infrastructure to beneficiate minerals, which forces them to continue on a commodity export trajectory despite their resource endowments.



An overview of lithium mining in Zimbabwe

In the last few years, Chinese owned mining companies have acquired many lithium claims across Zimbabwe's provinces. These acquisitions have been celebrated by the government, which sees them as an outcome of its efforts to attract foreign direct investments (FDIs) under its "Zimbabwe is open for business" mantra. Investments in the resources sectors are expected to contribute to the government's Vision 2030 policy, which aims to achieve a USD12 billion (EUR 11 billion) economy by 2023 based on the exploitation of the country's mineral resources. As a result, the country has deliberately promoted investments in the resources sector, including lithium mining. Given the global scramble for CRMs, which are a key part of the global energy transition, African countries and indeed many resource-rich countries across the world are expected to economically benefit from the global boom in the demand for CRMs. For countries such as Zimbabwe, the global surge in the demand for CRMs creates an important developmental opportunity.

Zimbabwe has rich mineral resource endowments with large deposits of Platinum Group Metals (PGMs), chromite, gold, and lithium. Although estimates vary, the country has the 5th largest reserves of the mineral in the world. According to a report in the Mining Weekly newsletter (18 April 2023): *'Zimbabwe is estimated to have the highest number of lithium projects under exploration on the African continent'*. Unlike in the so-called lithium triangle in South America where lithium is mined from salt pans along the borders of Argentina, Chile, and Bolivia, Zimbabwe's lithium resources (and indeed across African countries) are largely made up of hard rock pegmatites rich in spodumene, lepidolites and petalites. Lithium ore is largely extracted through opencast mining as lithium bearing rocks are located close to the surface.

Given Zimbabwe's vast lithium reserves, it is not surprising that the country has witnessed a dramatic increase in the number of companies

who have either acquired lithium claims or are currently prospecting for the mineral. Major acquisitions of Zimbabwean lithium assets have been concluded with some currently underway. According to the Mining Weekly Newsletter (18 April 2023): *'some notable lithium projects over the past two years in Zimbabwe include: the USD 422 million (EUR 388 million) deal where Zhejiang Hua You (world's biggest producer of cobalt) acquired the controlling rights to Zimbabwe's Arcadia Mine (Prospect lithium (Pvt) Ltd); the Premier African Minerals Limited joint venture agreement with Li3 Resources Inc. to acquire a 50% interest in Premier's lithium assets in Mutare; the acquisition of a 100% stake in African Metals Management Services and Southern African Metals and minerals by Hong Kong's Sinomine for USD 180 million (EUR 165 million) (Bikita lithium mine); and more recently the potential acquisition of a Zimbabwean lithium mine between China Natural Resources Inc., Feishang Group Limited and Top Pacific (China) limited valued at approximately USD 1.75 billion (EUR 1.61 billion).'*

The above shows the growing number of foreign companies who have invested in Zimbabwe's growing lithium sector. In response to the dramatic demand for mining leases, the Zimbabwean government has put in place a regulatory regime which allows ease of doing business through a one-stop-shop registration system that allows investors to quickly set up shop and start their operations. The Zimbabwe Investment and Development Agency (ZIDA) Act was enacted to, amongst other things, *'reduce the bureaucracy in setting up companies for foreign investors'*. ZIDA has thus created a conducive environment to allow potential investors to quickly register their mining operations and overcome the red tape which is common when investors are dealing with many government departments.

The *'lithium fever'* that has gripped the country has also forced many locals to join the rush for the *'white gold'*. As a result, many lithium-rich lands have



been 'invaded' by artisanal and small-scale lithium miners seeking to take advantage of the boom in the demand for the mineral. The illegal artisanal and small-scale mining (ASM) of lithium by local miners has triggered conflicts between artisanal miners and lithium claim owners, which has led to evictions supported by the government. Some of the lithium claim areas invaded by ASM miners are government-owned. This is especially the case with Sandawana mine in southern Zimbabwe where a former gemstone mine (owned by the government) was illegally occupied by artisanal miners who started mining lithium and selling it to middlemen who would then export it to China. Within a short space of time, the lithium rush at the government-owned Sandawana mine attracted ruling party politicians and other 'investors' which led to the violent eviction of artisanal miners who lost their lithium ores in the process. These evictions, which were filmed and circulated on social media, triggered widespread condemnation of the government, which was accused of stealing ores from locals and promoting the grabbing of lithium rich lands by mostly Chinese investors who now dominate lithium mining in the country. There were also claims that political elites with links to high-profile politicians in the ruling Zimbabwe African National Union Patriotic Front (ZANU PF) political party were evicting artisanal miners in order to allow their proxies to mine and export lithium ores while denying unemployed youths access to mineral-rich lands. The subsequent banning of exports of unprocessed lithium ores through a statutory instrument further intensified rumours that political elites were blocking ordinary Zimbabweans from benefiting from the lithium rush in favour of their own proxies and the Chinese who would normally pay them bribes. These rumours intensified after the government confirmed that it had licensed some companies to continue exporting lithium while the ban was in place. Allegations of looting of lithium ores by local political elites and foreign mining syndicates have also been reported in the media, although these are difficult to verify. An article in the Zimbabwean daily newspaper (Newsday, 24 May 2023) reported that:

Zimbabwe's largest lithium mine Bikita Minerals, currently owned by China's Sinomine

Resource Group, has been ordered to suspend operations... 'It suspended operations at its Masvingo mine for seven days to address 'concerns raised by authorities' a few weeks after claims of looting were raised by a local watchdog. Mines and Mining Development deputy minister Polite Kambamura confirmed the suspension which came after an inter-ministerial audit last week, reported Newsday. Centre for Natural Resource Governance (CNRG) Director Farai Maguwu on May 2 claimed massive looting of lithium at the mine. 42 trucks of lithium ore were said to be leaving the site on a daily basis, reported New Zimbabwe.

While these allegations are difficult to verify, the exclusion of locals (who constitute a large number of unemployed people), in favor of foreign mining syndicates is likely to undermine resource-driven national economic development. Another report in an independent newspaper highlighted how the continued export of lithium at a time when an export ban is in place was underpinned by corruption, this forced the government to impose a temporary ban on a company owned by the Zimbabwe National Army (ZNA) from exporting lithium (The Zimbabwe Independent Newspaper, 12 May 2023):

The government has directed an arms manufacturing company controlled by the Zimbabwe National Army to halt lithium exports after unearthing explosive corruption linking its senior officials to illegal exports. There was outrage over government's decision to grant the army's Zimbabwe Defence Industries (ZDI) a special permit giving it exclusive rights to export raw lithium to help it ride out operational challenges. The government extended the permit to ZDI immediately after imposing a blanket ban on lithium exports last year, as it received reports of rampant smuggling of the mineral. The bulk of the lithium was at the time being smuggled to neighbouring South Africa, from where it would find its way to the international markets. The demand has been underpinned by the growth in electric vehicle assemblies in advanced countries including the United State (US) and China.



Lithium mining and national economic development in Zimbabwe

While government policy clearly stipulates the need to harness its natural resource endowments and human capital to achieve an upper-middle income in 2030, there is a need for transparency and accountability in the resources sector. The dramatic increase in the number of companies acquiring lithium claims worth billions of dollars is a welcome development which the government touted as a potential basis to achieve its national developmental objectives under the NDS1 medium-term policy. If these investments were properly harnessed and resource leakages were minimized, a resource-driven economy could be an achievable objective. By harnessing some of the provisions enshrined in its own development policy and in continental agreements such as the Africa Mining Vision and the United Nations Sustainable Development Goals, the country could take advantage of the boom in the mining of CRMs and other minerals (such as the abundant PGMs) to achieve its developmental goals.

It is now a known fact that resource endowments alone cannot be a basis for broad-based development. In some resource-rich countries, resource extraction can lead to enclaves which do not benefit the broader population (Ferguson 2006). Given the above, resource-rich governments must put policies in place to avoid resource grabs, corruption, leakages of resources across porous borders, and illicit financial flows. These undermine the ability of the government to benefit from taxation and royalty payments which are critical for development. Moreover, mining companies are notorious for tax avoidance and can often hire the best lawyers to negotiate contracts with governments who often have poorly capacitated government officials to negotiate mining leases. In many developing countries with weak regulatory regimes, mining companies often prefer to bribe government officials to gain preferential access to resource-rich lands and avoid paying taxes: The Glencore bribery scandal captured below is a case in point. According to the Reuters News agency (Reuters 28 February 2023):

A U.S. judge on Tuesday ordered Glencore Plc (GLEN.L) to pay \$700 in connection with its guilty plea over a decade-long scheme to bribe foreign officials across several countries.

The sentence handed down by District Judge Lorna Schofield in Manhattan federal court consisted of a \$428.5 million fine and a \$272 million in forfeiture in line with a plea deal reached last May between the mining and commodity trading giant and federal prosecutors in Manhattan. Prosecutors have said Glencore paid more than \$100 million in bribes to officials in countries including Nigeria, Brazil, Venezuela and the DRC to win business or avoid audits.

Similarly, in the United Kingdom Glencore was fined over USD 400 million (EUR 368 million) for paying bribes in order to gain preferential access to oil reserves across African countries (UK Serious Fraud Office 2022). The above highlights how mining companies can pay millions of dollars to government officials to gain access to resource-rich lands and avoid taxation and audits. For countries such as Zimbabwe which are already struggling economically, corruption, bribery and tax avoidance undermine revenue collection and investments in social services. Given the above, resource endowments alone are not enough to propel a country towards its developmental goals. Apart from bribery and corruption, organized crime syndicates are now operating in resource-rich countries running criminal syndicates engaged in the illegal exports of minerals, money laundering, and bribery schemes. In eastern DRC, organized crime syndicates are believed to be sponsoring civil wars while looting and exporting minerals illegally through porous borders (Geenen 2015 and Autesserre 2010).

In Zimbabwe, an investigation by the Al Jazeera News Network, (Al Jazeera Investigations, 2023) exposed a so-called 'gold mafia' engaged in illegal exports of gold, money laundering, and bribery schemes facilitated by government officials and airport security. Illicit financial flows and illegal exports of minerals can undermine the potential for extractives to contribute to national economic development. According to Zabyelina and van Uhm (2020:5), 'one of the most disturbing trends since the 1990s has been the increasing involvement of organized crime in mining activities in different parts of the world. From Latin American drug cartels, African criminal gangs, the rising global



scarcity of natural resources and steady prices for mined commodities ...have made illegal mining and trafficking in mined commodities a lucrative criminal enterprise'. A result of the above is that the governments lose potential revenue to criminal syndicates who will not pay tax or royalties for the minerals they export illegally. Within Zimbabwe's macroeconomic context, illegal exports of minerals facilitated by key state institutions such as the Reserve Bank of Zimbabwe (as per the allegations) undermines the key objectives of the NDS1 which stipulates that 'the NDS1 must attend to the development and capacitation of key national institutions which will create the enabling environment critical for transformative economic growth' (National Development Strategy 1, 2021-2025).

To avoid the usual pitfalls faced by resource-rich countries (so called the resource curse), the country must tighten its regulatory regime in order to promote compliance with its tax laws. This can discourage corruption and tax avoidance. In a country such as Zimbabwe, which is struggling economically, resources provide a lifeline to its millions of citizens who are facing skyrocketing inflation and unemployment. Moreover, the mining and beneficiation of CRMs could be critical for industrialization if proper policies are

put in place. For example, the banning of exports of unprocessed lithium ores through Statutory Instrument 213 of 2022 Base Minerals Export Control (Veritas. Net 2022) is a step towards the right direction, but the country must also address allegations of corruption and illegal exports of minerals by politically connected individuals. Moreover, such a ban must be based on fairness and in consultation with key stakeholders in the mining sector such as local communities (where the resource is located), artisanal miners, Chamber of Mines, parliament, and other key state institutions. A partial ban is often viewed by people as a political gimmick benefiting a few individuals, which is not sufficient to promote broad based development. Again, countries that promote transparency in their resources sector are more successful in their efforts to utilise natural resources for national economic development. According to a report by the Zimbabwe Policy Analysis and Research Unit (2012:29), *'a Zimbabwean resource-based development strategy should rather seek to establish a mineral regime that competitively and transparently concessions all known mineral assets a time-limited leases to achieve the optimal resource rents and economic linkages'.*



Data analysis: prospects for a resource-driven economic development strategy

Below is an analysis of interviews undertaken with a diverse range of stakeholders as part of the writing of this policy paper. These interviews highlight some of the opportunities and challenges facing Zimbabwe in its attempt to pursue a resource-driven national development strategy in order to achieve an upper middle-income economy by 2030. As noted earlier in this policy paper, the main aim of the data-gathering process was to investigate the contribution of the Zimbabwe's growing lithium mining sector to its national development strategy. During an interview, an independent Member of Parliament who once chaired the Zimbabwe's Parliamentary Portfolio Committee on mining argued that:

When it comes to lithium mining, we are giving away our minerals for free. Most foreign mining companies are coming here to mine lithium and export it to their countries for processing. As a result, we lose value as these companies end up beneficiating these minerals and then come back to sell us expensive finished products such as lithium batteries for solar. Why can we not make it a policy that whoever wants to mine our lithium should set factory here so that we benefit from the processing and export of finished products? If they cannot set shop here, why can they not give us a share of the percentage from processed products? As law makers, we must put together a policy framework that protects our mining sector from resource grabs that do not benefit our people. The current ban on the export of unprocessed lithium ores is benefiting certain individuals who have been allowed to continue exporting the mineral, while everyone else has been banned. Corruption is another challenge we face as we try to benefit from the global demand of mineral which are in abundance in our country (Themba interviewed in Harare 04 July 2023)

As captured in the above interview, the issue of corruption was also highlighted by other informants who argued that corruption in the awarding of mining leases and export of minerals was undermining local economic development. During an interview, a researcher working in the mining sector observed that:

There has been a lithium rush all over the country, everyone is prospecting for lithium. The major challenge is corruption. Politicians and certain individuals who have influence are the major beneficiaries of the lithium rush as they are forcing those without political connections out. Some of these political figures are using their connections to facilitate the acquisition of lithium mine claims by foreign investors while locals have been barred from prospecting for lithium. It is like what happened at the Marange Diamond Fields in 2006 and 2007 where foreign mining companies were allowed to loot diamonds while locals were violently evicted. If it is not well managed, we are likely to see no social benefits from lithium mining especially where the resource is being mined. So, you find that in most cases the major beneficiaries of lithium mining might be those from outside such as the Chinese, the Russians are other Europeans, and particularly the British. (Chigomba interviewed in Harare 15 July 2023)

Corruption does not only undermine development, but it also promotes the exclusion of locals from participating in mining activities in favor of so-called investors who are given preferential treatment by the government. This highlights some of the potential challenges facing resource-rich countries in addressing socio-economic challenges facing their populations such as high levels of unemployment. However, not everyone was pessimistic about the potential of the lithium sector to contribute to national



economic development. During interviews, a trade unionist highlighted how the opening of new lithium mines across Zimbabwe was creating employment and other economic opportunities:

We are a trade Union registered to represent mine workers in Zimbabwe and beyond. The Lithium sector to us is an emerging sector, we used to know one lithium mine called Bikita Minerals but now we currently have five mining companies that have moved into the lithium sector. We are seeing a big constituency in terms of workers being employed. Jobs have been created, if I tell you Bikita Minerals has developed itself from employing 200 workers to about 1200 workers as of today. Zulu Lithium has about 300 in Fort Rixon it was an area that was quiet in terms of mining. You would see cattle and no rain etc. There is now a huge company that has been established and by December it will employ a lot of people amounting to 800 workers. We also have prospect resources that have created over 2000 jobs right now. We have Kamativi which is setting up it has been closed now its opening and will be mining lithium instead of tin. It's going to have about 500 workers by December. These are jobs that have been created. So, to us as a trade union we are seeing job creation, and this makes us very happy. It's an emerging sector which has some problems as we are celebrating the job creation that has come. (Bhebhe interviewed in Harare 15 July 2023)

However, despite the new employment opportunities created by the new lithium mines, the trade union official highlighted some of the challenges associated with the growing lithium mining sector such as poor working conditions and lack of compliance with environmental regulations by some mining companies:

We are so angry about the poor working conditions although we celebrate the jobs that have been created. We are facing a big challenge in terms of the working standards and working environments, the salaries and abuse of workers in many ways. The Chinese who are the main investors who have come to mine lithium in Zimbabwe, are people who don't even recognize the labor laws of the country including any other law be it environmental or our cultural beliefs. The

safety conditions, especially in the lithium sector, are a major concern and they need urgent review. We once raised a lot of these issues to an extent where Bikita Minerals was once forced to suspend operations due to poor working standards. The subcontractors especially the Chinese manage each section without providing proper protective equipment. Some people are working without proper protective clothing. As much as the jobs are created the working conditions are very bad. (Bhebhe interviewed in Harare 23 July 2023).

Although most informants agreed that lithium mining had the potential to transform the economic fortunes of Zimbabwe, they were aware of many challenges that the country faced in its pursuit for a resource-driven development strategy:

I will hasten to say that the boom in lithium mining is just a small window, the price of metals, commodities and natural resources go up and down in terms of their demand so it's a window that Zimbabwe can benefit from or lose if the natural resources governance sector is not well attended to. If the framework is not right, which I think is not right at the moment, we are not going to achieve a lot from this window of opportunity. Remember that Zimbabwe has had booms in diamonds, it still has abundant resources of gold and other minerals. We have up to 44 commercially viable minerals, but we have not seen a lot of development, or we have not developed at a pace that we think we deserve. Lately we have been talking about resource curse and so on. I think it stems from the fact that we have weak government systems in terms of economically exploiting resources and allowing investors into the country. (Ziga interviewed in Harare 27 June 2023)

As noted in the previous interviews, corruption and weak government institutions were highlighted as potential bottlenecks which undermined the country's ability to realize the full value of its mineral wealth. During an interview, an informant went further to highlight some of the challenges a resource-rich country like Zimbabwe is likely to face in using its resource endowments to promote national economic development:



From a developmental point of view investments are not being channeled properly in terms of the law governing the royalties they pay, the fees they pay, the taxes they pay, the development projects that they pay. There is a need to implement an Environmental and Social Governance framework. There are a number of weak links and the government of Zimbabwe just like any other African governments are very weak when it comes to negotiating mining leases because they use antiquated laws, they do not have the political willpower to implement some of these things because some of our authorities seem to get corrupted along the way and we do not have the competence to fundamentally change the status quo of our laws which were created towards exploiting resources for the benefit of conglomerates. Given this trajectory, we do not think that we are going to see fundamental changes from this. We can get some money, very quick money from investments that are coming but I don't think it will bring so much change to the economy especially in a long term. (Ziga interviewed in Harare 27 June 2023)

The problem of exporting unprocessed raw materials such as lithium ores remains one of the fundamental challenges facing African countries such as Zimbabwe. Lack of industrialization and technological capacity to process minerals forces many resource-rich countries to allow the export of unprocessed ores. Until recently, Zimbabwe suffered under two decades of unilateral sanctions imposed by the United States after the implementation of its fast-track land reforms in 2000. This economically crippled the country and undermined its ability to invest in infrastructure and attract FDI. Through its 'Zimbabwe is open for Business' mantra, the country has been on aggressive drive to promote investments across key sectors of the economy including the mining sector. As a result, there has been an increasing number of investments in the lithium, gold and platinum group metals sectors. The creation of the ZIDA in 2020 to streamline various government policies and lessen red tape in setting up businesses has promoted new investments especially in the mining sector. However, the country is yet to go

beyond the banning of export of unprocessed lithium ores to putting in place a deliberate policy to promote local beneficiation of its minerals such as lithium. Unless the country puts in place a deliberate policy to promote local processing and beneficiation of minerals, the historical trend of commodity exports will continue to the detriment of local economic development. As a counter point to the above, an interview with a Zimbabwe Ministry of Mines official highlighted what influenced the government's controversial ban on the export of unprocessed lithium ores:

There is a lot of potential in terms of lithium. You then realize after this boom that we have different deposits or discoveries of late, which is a sign of great potential. We also need to explore more to identify other larger discoveries of lithium. I believe there could be larger deposits of lithium because we are under exploring. The ban on the export of unprocessed lithium ores is a strategic move that will force investment into lithium processing, because if investors know that there is plenty of lithium but there is a gap of value addition they will be forced to invest in local processing. So, it's a strategic move for the government to draw investment in the value addition sector. If you look at it from the perspective that minerals are a finite resource, you will understand that we can get value from processing lithium because if we leave it there it's not going to lose value there. If we are looking at the global trajectory where the demand for electric vehicles, electronics, you will notice that lithium will always be in demand because of the global trajectory. So, if you look at it from a perspective that you want money now, it won't make sense but if it is future investments that you want to benefit from then that will come in handy. (Pangu interviewed in Harare 23 June 2023)

While the ban on the export of unprocessed lithium has been blamed by some commentators as unfair and beneficial to a few politically connected companies. The above highlights the government's thinking around the ban, especially its intention to promote local processing of lithium as a value addition measure. Whether this ban will lead to the setting up of local refineries given



the challenges in setting such infrastructure remains to be seen. The Ministry of Mines official interviewed above went on to clarify why some companies especially those which are partially owned by the government were allowed to continue exporting unprocessed lithium ores:

The exemption on the ban is because there are companies which are strategic to government remember we are under sanctions raising capital is difficult so why can't we not empower our indigenous companies to export and fund their investments in local processing plants. Would you be comfortable if we leverage those resources or others to come and say we are using those resources to raise funds for you? So, these indigenous companies with potential are given that exemption so that they raise funds from the ore. (Pangu interviewed in Harare 23 June 2023)

However, the problem of processing lithium is not limited to African countries. China remains a dominant player in the processing and manufacturing of lithium products as it has the refining infrastructure and the leading technology in lithium-ion batteries. According to Meghalayan News (25 February 2023), while China holds 'less than 7 percent of the world's lithium reserves, it is the world's largest importer, refiner and consumer of lithium, buying 70% of lithium compounds and supplying 70% of lithium product to domestic lithium battery makers six of which are among the top ten in the world'. The report further goes to say that after a 'long push China' wields considerable control over supply chains for lithium-ion batteries'. As a result, 'Chinese companies have managed to make good quality batteries in large quantities and at a low cost'. Given the above, a major question to be asked is whether -resource-rich African countries, such as Zimbabwe, are able to compete against dominant players, like China, who now control the global lithium value chain or, are they better off maximising their tax revenue? This is an important question with no easy answers. The potential challenges facing Zimbabwe's lithium sector were highlighted during an interview with a Researcher working in Zimbabwe's resources sector:

We lack industrial capacity to process our minerals, we have to rely on foreign countries such as China with the capacity to beneficiate these minerals. The government has tried to stop the export of raw lithium with limited success. Some companies have ongoing obligations to supply the unprocessed lithium, they had signed contracts before the ban was implemented, they cannot just stop. Lithium mining has already created employment opportunities in rural areas although the quality of some of the jobs is poor compared to for example to the platinum mining sector. It has also created business opportunities such as retailing businesses that were not there before lithium mining companies started operating in these areas. From a fiscal perspective, there are always tax avoidance risks when it comes to mining, the government must tighten its tax regime and make sure there is compliance across the board. China is a global player in the processing of minerals, we should make sure we negotiate better deals with Chinese mining companies which can promote long term technological transfer which could benefit us. (Chipo interviewed in Mberengwa 22 June 2023)

The problem of poor industrialization and lack of capacity to beneficiate minerals featured across many interviews. A diversity of stakeholders including government officials highlighted this challenge during interviews. The fact that most resource-rich African countries lack the technological capacity to process minerals reduced them to what a government official called 'price takers' during interviews:

The main challenge of resource-rich countries is we are price takers, yet we have the producer power. Look at how many people are producing lithium. We are price takers. So, if there are going to dictate to us that is the challenge number one. We do not have adequate technology and expertise to process our minerals. So you will find that if these things are in play the foreigners have the upper hand. We do not have much to say or control, we just produce, and we take what is there. That's a major problem that I see especially in mineral resource-rich countries of Africa. We cannot utilize producer power we are producers



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of platinum, but we have South Africa right down there but we cannot really come up with an OPEC of some sort for us to come up with global prices because we are the producers. So we wait for the international markets to dictate the price for us. (Chari interviewed in Harare 15 June 2023)

During fieldwork, the issue of industrialization and poor technological capacity appeared across interviews. This situation reflects the broader challenges facing many resource-rich African countries in utilizing their mineral resource endowments for national economic development. While Zimbabwe has imposed a ban on the export of unprocessed lithium ores, this should be followed by a deliberate policy of promoting industrialization and technological transfer. Some of the challenges of beneficiation are to do with bureaucratic capacity to implement technical projects. During interviews, a director at a large mining company in Zimbabwe observed that:

Our company currently owns a nickel refinery in Empress near Kadoma. While this refinery was designed for nickel processing, it could be easily retrofitted to process lithium at a cost of US\$ 30 million dollars. This is a worthwhile investment which the government must promote. As long as there is a guarantee on ore supply this refinery can promote local beneficiation of lithium and local manufacturing. What is needed is political will by the government to promote such an investment. (Interview Denga 29 July 2023)

The above shows that sometimes lack of political will and bureaucratic bottlenecks undermine the implementation of key infrastructure projects which could help the country benefit from the boom in CRMs. Beneficiating minerals locally is achievable if the policy framework is in place, a recent article in the Mining weekly magazine (02 July 2023) showed how Argentina is setting up a lithium-ion battery plant which would process lithium mined locally. According to the report:

Argentina's first plant for lithium batteries will begin operations in September, using metal extracted locally by US company Livent Corp. mining officials said on Saturday. Livent had agreed earlier this year to supply lithium

to the new plant, which was developed by Y-TEC, a unit of Argentine state oil firm YPF.

The above shows how Argentina (located in the mineral rich lithium triangle) are promoting the mining and beneficiation of lithium locally in the process improving the value of their minerals and creating local economic linkages which benefits local companies. Another challenge raised during interviews is tax evasion and corruption. Weak tax laws undermine revenue collection which is critical for investments in social services and other key infrastructures. For a country to benefit from a boom in its resources sector, it must strengthen its tax laws to improve compliance and hence revenue collection. It has been proven that in developing countries with weak tax laws and poor law enforcement regimes, mining companies often prefer to pay bribes in order to gain access to the resource and to avoid paying taxes. According to a Ministry of Mines official:

Investors generally don't want to pay taxes but as a country we need those taxes, we need that revenue. What is important is to have a stable taxation and royalty system which is transparent to investors, so they know before they make decisions. Because you find that the moment we put tax incentives like rebates on royalties it's a race to the bottom we won't be getting anything because our revenue comes out of taxation that's where we get our revenue as government so if we reduce that, it means we are reducing the revenue that we are going to get as a government. (Pangu interview in Harare on 3 June 2023)

The issue of a flexible taxation regime also came up during interviews with government officials. A government official highlighted that there is a need for a flexible tax regime which can quickly adjust to global trends in commodity prices. This could allow governments to realise more value during commodity booms in form of windfall taxes:

We do not have flexible taxation systems in resource-rich countries. If you look at the royalties you will find that they are flexible when there is a global boom, and prices are high you also charge higher prices of royalties. It's difficult to adjust these when there is a slump in



global commodity prices. I think there is need to have a hybrid system which adjusts to global prices because I don't think right now with the current prices which lithium is fetching the 2% in royalties for base mineral is correct, it needs to be reviewed. You will find that the process of reviewing royalties is underpinned by too much bureaucracy. You will see that by the time a certain percentage is approved the prices will have adjusted. An example is copper in Zambia where the copper prices were high by the time they were adjusting royalties the prices went down so you will find that the process is long. (Pangu interviewed in Harare on 3 June 2023)

More importantly, a resource-based development strategy must be based on transparency and fair competition, this will boost the economy through optimal resource rent collection. Australia provides a classic example of how a vibrant resources sector underpinned by a competitive environment can boost the economy through taxation and payment of royalties. A report by the Minerals Council of Australia notes that

'Minerals have helped propel our economy forward, boosted economic opportunity and freedom, and enabled the governments to invest in the things that really matter (such as) families, communities and vital services like hospitals, schools, childcare, aged care and infrastructure,' MCA chief executive officer Tania Constable said. "Australia does well when Australian minerals do well." Over the past ten years, Australian minerals have contributed 21 per cent of Australia's gross domestic product growth, through \$168 billion paid in company tax and \$127 billion paid in royalties- adding to a total of \$295 billion that underpinned Australian government revenue. The above highlights how a transparent resources sector can boost government revenue through taxation which can be invested into key sectors of the economy. According to the Mineral resources council of Australia, 'The royalty and company tax payment report found that in 2021-22, the country's minerals sector contributed \$63 billion to federal, state and territory governments, a notable increase of \$21 billion from the previous year. Out of the total, \$39 billion was company tax, a third

of all company tax paid in Australia, and \$24 billion was the sector's contribution to royalties'.

Given the above despite the popularity of the 'resource case' concept in literature on extractives it is possible for a country to prosper on the back of a resource - boom if it puts in place rigorous tax laws. Australia provides a good example of how revenue from taxation and royalties can be used to invest in communities. Despite many informants being pessimistic about a resource-driven development strategy in Zimbabwe, interviews with government officials from the Ministry of Mines show that they are optimistic about the potential for CRMs and indeed the broader mining sector to transform the economy:

Resource-driven economy is feasible in Zimbabwe. If you look at the exports receipts 60% are coming from minerals or mining that means that our economy is resource-driven. That means the growth even if you look at all blueprints there have been talking to mining as a pivot for economic growth. So a resource-based economy is feasible. Yes, mining will definitely lead to the country realizing its national goals because it's attracting FDIs into the country so it's important. It's creating employment local community development. If you look at the issues of devolution you will see how critical this sector is in terms of driving economic growth. People know where there is money. Currently, the government has banned the registration of lithium claim for strategic reasons. The remaining claims are now reserved for the government for strategic purposes. There are some resources or areas that are large that if you give a small-scale miner, they will scrap the ground and leave so for such areas we would need serious investors who can be able to market and develop those areas effectively. So, such strategic areas have been banned to register and are now reserved for government (Jari interviewed in Harare on 11 June 2023).

The debate on the benefits of local beneficiation remains unresolved, most resource-rich African countries lack the technology to process minerals locally. Beyond technological limitations, the manufacturing of for example lithium-ion batteries



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require the creation of an entire value chain in order to bring all the required minerals and components in place. For example, Zimbabwe might produce lithium but making the batteries require other components made from minerals that might not be available in Zimbabwe. Given the above, the setting up of a battery manufacturing plant might require regional collaboration as countries like Zambia, South Africa and the DRC are major producers of some of minerals needed for making batteries. There thus a need for collaboration and cooperation among African countries in order to build their capacity to beneficiate some of their minerals. The bilateral agreement between Zambia and the DRC to produce nickel, manganese and cobalt battery precursors provides an example of a regional approach to mineral beneficiation which can be cascaded across the southern African region.

A major change that emerged during interviews is how resource-rich African countries like Zimbabwe are often vulnerable to bribery and corruption which undermine revenue collection. This is why in countries such as Angola and the DRC's resource endowments have not resulted in what James Ferguson (2006) have called '*social thickness*', which generally means a boom in resources must be accompanied by investments

in social services such as schools, hospitals, roads and other social welfare arrangements which can improve the social welfare of local communities. Instead in these mineral rich jurisdictions, mining (of a diverse range of minerals) has led to '*enclaves*' and '*social thinness*' which has not improved the social wellbeing of local communities or national economic development. In countries where extractive activities do not contribute to '*social thicknesses*' and resource rents benefit a few politically connected elites, conflicts and social instability emerges as the mining activity fails to secure a '*social license*' to operate among local populations. This is especially the case of the DRC where in some areas extractive activities have led to conflicts and civil war thus destabilising the country, rather than enriching it. For Zimbabwe to avoid the above, it must tighten its taxation regime, promote industrialization and technological transfer for the long-term sustainability of its mining sector. The boom in the global demand for CRMs which it has in abundance can bring the much need foreign currency to invest in public services such as health, schools, electricity generation and infrastructure development which has for many years suffered from under funding due to a decade's old economic crisis.



Conclusions and recommendations

The global scramble for CRMs presents an important economic opportunity for developing countries such as Zimbabwe which can leverage its natural resource endowments to achieve its national development goals. However, there remains obstacles that need to be overcome if the country were to realize its Vision 2030 aspirations. Currently, Zimbabwe lacks the infrastructure to beneficiate lithium (and indeed other minerals) and is thus forced to export unprocessed ores which fetches poor prices on global commodity markets.

There is also a need for the country to develop strategic partnerships with those that can set up processing plants on benefit-sharing arrangements. This could promote industrialization and employment creation. As noted earlier, resource leakages pose a threat to the realization of the country's aspirations of an upper middle-income country by 2030. Given the above, the country must put in place a robust policy framework to minimize resource leakages in order to improve revenue collection and promote economic development. As a resource-rich country, Zimbabwe must develop an industrial strategy in collaboration with other countries in the region which seeks to beneficiate most of its minerals locally as a way of getting better value rather than exporting them unprocessed. While this is an ambitious proposal given the challenges to be confronted, it has the potential to promote economic development and could help the country to meet some of the UN SDGs and the Africa Agenda 2063 as highlighted in its national development strategy.

Given the centrality of CRMs and indeed other minerals to Zimbabwe's NDS1, efforts must be made to retrofit the existing refinery to build its capacity to refine lithium locally. The government can compel all lithium miners to pool financial resources together in order to retrofit the current Rio Zim owned nickel refinery. This can be a starting point in the development of local capacity in the beneficiation of minerals locally.

However. Having a functional lithium refinery is easier said than done, a '*full-scale lithium hydroxide plant needs power, chemicals and raw lithium for processing*' all these requirements are not yet available in Zimbabwe no in any African country as the lithium sector is still in its infancy'. (The Financial Times Newspaper, 3 April 2023)

The government can also put policies in place to make it compulsory for new mining investors in the lithium sector to enter MOUs which compels them to setup plants and transfer technology to locals as a way of building local capacity to manufacture green energy products.

The government can provide tax incentives that promote the mining and beneficiation of minerals as a way of adding value and promoting industrialization. A public-private partnership such as the one subsisting Botswana (which is not by any means perfect) where the country has partnered with De Beers diamond mining company on agreed revenue sharing arrangements provides a good example of best practice in terms of benefit sharing arrangements between the government and the private sector. The global scramble for CRMs and the unfolding geo-politics pitting the United States against China and more recently the geo-political instability triggered by Russia's war in Ukraine has reconfigured resource value chains and has forced western countries to offer incentives to encourage private companies to set up factories in their countries as a de-risking measure. African countries must learn from these countries-by offering incentives to companies wanting to venture into the production of green economy products such as lithium-ion batteries, solar panels, etc.

Zimbabwe could also utilize certain provisions of the AfCFTA, AMV and the UN's SDGs to leverage better deals with those seeking to invest in its mining sector. Since China is the market leader in the production, marketing, and processing of CRMs, it can be a strategic partner for many countries in Africa that seeks to get better value



for their minerals through bilateral cooperation and technological transfer. FOCAC is an important platform which these issues can be debated.

Moreover, rather than go it alone or rely on foreign investors, governments can enter regional cooperative arrangements to promote the beneficiation of minerals through the support of technical partners. There are already existing arrangements where for example platinum concentrate from Zimbabwe is currently shipped to South Africa where it is refined. Such an arrangement could be applied to lithium given the challenges facing Zimbabwe in setting up one. The boom in lithium mining globally is likely to trigger a competitive environment in which new affordable processing technologies will eventually emerge. This will benefit resource-rich African countries who are struggling to afford current refining technologies.

Another challenge associated with commodities is price volatility. Lithium prices have been volatile thus creating uncertainty among major producers. According to the Financial Times Newspaper (3 April 2023) *'lithium is volatile; prices for lithium hydroxide soared throughout 2022 and peaked at USD 80,000 [EUR 73,358] a ton in December but have since dropped to USD 55,000 [EUR 50,558]. Although that is still almost four times the long-term average of about USD 15,000 [EUR 13,778], the dip has led some western miners to come under pressure from investors to moderate their investment plans'*. Major producers in Africa such as Zimbabwe might struggle to cope with these volatile commodity markets - they must therefore diversify their resource portfolios to avoid the disruptions caused by unpredictable commodity markets.

List of interviews

- ▶ Themba interviewed on 4 June 2023
- ▶ Chigomba interviewed on 15 July 2023
- ▶ Bhebhe interviewed on 15 July 2023.
- ▶ Ziga interviewed on 27 June 2023.
- ▶ Pangu interviewed 23 June 2023
- ▶ Chipo interviewed on 22 June 2023
- ▶ Chari interviewed on 15 June 2023
- ▶ Denga interviewed on 11 June 2023.



References

- Autesserre, S. (2010). The trouble with the Congo. *Local violence and the failure of international peacebuilding*, 211.
- Birch, K. (2023). UK Govt's billion-dollar gamble on Tata battery gigafactory. Accessible at: <https://businesschief.eu/leadership-and-strategy/uk-govts-billion-dollar-gamble-on-tata-battery-gigafactory>. Date accessed 5 August 2023.
- China's Huayou buys lithium mine in Zimbabwe for \$422 mln: accessed from: <https://www.reuters.com/business/chinas-huayou-buys-lithium-mine-zimbabwe-422-mln-021-12-22/>. Accessed 12 April 2023.
- Ferguson, J. (2006). *Global shadows: Africa in the neoliberal world order*. Duke University Press.
- Geenen, S. (2015). *African artisanal mining from the inside out: Access, norms and power in Congo's gold sector*. Routledge.
- Glencore sentenced to pay \$700 million in US after bribery guilty plea. Accessible from: <https://www.reuters.com/markets/companies/GLEN.L/>. Date accessed 1 August 2023.
- Gold Mafia - Episode 1 - The Laundry Service | Al Jazeera Investigations, Accessible from: <https://www.youtube.com/watch?v=evWEuVR1XIs>. Accessed on 15 June 2023
- Government of Zimbabwe. (2023). SI 2023-005 Base Minerals Export Control (Unbeneficiated Base Mineral Ores) Order, 2023.pdf. accessed from: <https://www.veritaszim.net/node/6096>. Date accessed 17 June 2024.
- Government of Zimbabwe. (2020) Zimbabwe National Development Strategy1: Accessed from: <https://www.veritaszim.net/node/4583>. Accessed on 13 April 2023.
- IPCC (2023) AR6 Synthesis Report, Climate Change 2023. Accessed from: <https://www.ipcc.ch/report/ar6/syr/>, date accessed 13 April 2023.
- How China is winning the race for Africa's lithium. Accessible at: <https://www.ft.com/content/02d6f35d-e646-40f7-894c-fcc6acd9b25>. Accessed on 2 august 2023.
- Makopa, F. (2023). Rampant looting in army lithium project unearthed... military hardware producer directed to halt exports. Accessible from: <https://www.newsday.co.zw/theindependent/local-news/article/200011442/rampant-looting-in-army-lithium-project-unearthed-military-hardware-producer-directed-to-halt-exports>. Accessed 28 July 2023.
- Mining Technology. (2023). China Natural Resources to acquire Zimbabwe lithium mine: Accessed from: [https://www.mining-technology.com/news/china-natural-zimbabwe-lithium/#:~:text=China%20Natural%20Resources%20has%20agreed,for%20electric%20vehicles%20\(EVs\)](https://www.mining-technology.com/news/china-natural-zimbabwe-lithium/#:~:text=China%20Natural%20Resources%20has%20agreed,for%20electric%20vehicles%20(EVs)). Accessed on 11 April 2023.
- Mkodzongi, G. (2020). The rise of 'Mashurugwi' machete gangs and violent conflicts in Zimbabwe's artisanal and small-scale gold mining sector. *The Extractive Industries and Society*, 7(4), 1480-1489.
- Mkodzongi, G., & Spiegel, S. (2019). Artisanal gold mining and farming: Livelihood linkages and labor dynamics after land reforms in Zimbabwe. *The Journal of Development Studies*, 55(10), 2145-2161.
- Muronzi, C. (2023). Zimbabweans outraged by Al Jazeera expose on gold smuggling elite. Accessed from <https://www.aljazeera.com/news/2023/3/30/zimbabweans-outraged-by-al-jazeera-expose-of-gold-smuggling-elite>. Accessed 13 April 2023.
- News Day. (2023). Zimbabwe shuts down Chinese-owned Bikita Minerals weeks after claims of lithium looting. Accessible from: <https://www.newsday.co.zw/business/article/200011993/zimbabwe-shuts-down-chinese-owned-bikita-minerals-weeks-after-claims-of-lithium-looting>. Accessed on 2 August 2023.
- Niederberger, T., Haller, T., Gambon, H., Kobi, M., & Wenk, I. (2016). *The open cut: mining, transnational corporations and local populations* (Vol. 2). Lit.
- Otaola, J. and Solomon, D.B. (2023) Argentina to begin lithium battery production in September: Accessible from: <https://www.mining.com/web/argentina-to-begin-lithium-battery-production-in-sept/>. Accessed on 29 July 2023.
- Pavlovic, C. and Chivanga, T.J. (2023). Zimbabwe: A new focus for lithium mining. Accessible from: <https://www.miningweekly.com/article/zimbabwe-a-new-focus-for-lithium-mining-2023-04-18>. Date Accessed 15 June 2023.
- Serious Fraud Office. (2022). Glencore to pay £280 million for 'highly corrosive' and 'endemic' corruption. UK government. <https://www.sfo.gov.uk/2022/11/03/glencore-energy-uk-ltd-will-pay-280965092-95-million-over-400-million-usd-after-an-sfo-investigation-revealed-it-paid-us-29-million-in-bribes-to-gain-preferential-access-to-oil-in-africa/>
- Verbrugge, B., & Geenen, S. (Eds.). (2020). *Global gold production touching ground: Expansion, informalization, and technological innovation*. Springer Nature.
- Zabyelina, Y., & van Uhm, D. (2020). The new Eldorado: organized crime, informal mining, and the global scarcity of metals and minerals. Illegal mining: Organized crime, corruption, and ecocide in a resource-scarce world, 3-30.



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Acknowledgements

We gratefully acknowledge our research team, expert contributors, reviewers, and advisors for their invaluable input. Furthermore, we are grateful to APRI Critical Raw Materials project team: Dr. Olumide Abimbola, Dr. Amir Lebdioui, Dr. Patience Mususa, Dr. Amandine Gnanguenon, Nora Chirikure and Rajneesh Bhuee for their invaluable conversations, guidance, and feedback in drafting this report. Financial support was received from APRI through the Open Society Foundation grant.

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