

Briefing Note

Key Highlights
of the Africa
Green Minerals
Strategy
2025

MARCH 2025



AFRICAN DEVELOPMENT BANK GROUP
BANQUE AFRICAINE DE DÉVELOPPEMENT

Table of contents

Acknowledgement	3
1.0 Context	4
1.1 Rationale for an Africa Green Minerals Strategy	4
2.0 Objectives of the Africa Green Minerals Strategy	5
3.0 Implementation of Africa's Green Minerals Strategy	6
3.1 Implementation Instruments	6
4.0 Leveraging the Africa Green Minerals Strategy to Strengthen G20 Partnerships in Minerals Development	8
4.1 Aligning the AGMS with G20 Initiatives	8
4.2 Towards a New Global Framework for Equitable Mineral Partnerships	8
5.0 Conclusions	9
Annex 1	10
References	11

Figure

Figure 1: Illustration of Africa's Green Minerals Strategy

8

Acknowledgement

The Republic of South Africa's G20 Presidency presents a unique opportunity to advance Africa's global priorities, particularly regarding the sustainable and strategic development of its abundant natural resources.

Africa has diverse essential minerals indispensable in developing electric vehicles (EVs), battery energy storage systems (BESS), and other technologies underpinning a low-carbon future. If strategically harnessed, these resources offer significant potential to foster industrialization, economic diversification, value addition, and job creation across the continent.

As part of the global debate on critical minerals, the Bank's contribution focuses on twelve (12) key minerals identified as essential to developing battery value chains and additional minerals relevant to the green economy. These are also reflected in the Africa Green Minerals Strategy (AGMS), for which the AfDB played a leading role in the development and technical coordination.

The AfDB is committed to supporting policy dialogue, knowledge generation, and investment promotion in critical minerals vital to the global energy transition. In this context, the AfDB has launched the Critical Minerals Insight Series and accompanying issue papers to further inform policy and investment decisions. These outputs provide action-oriented analysis and evidence-based recommendations to address key governance, financing, and infrastructure challenges while advancing Africa's role in the global critical minerals value chain.

This paper was produced under the overall leadership of Desire Vencatachellum, Senior Director and G20 Sherpa of the African Development Bank. Preparation was supervised by Fred Kabanda, Division Manager of the African Natural Resources Management and Investment Centre (ECNR), and Amadou Boly, Lead Economist for the Central Africa Region. The core team comprised Jerry Ahadjie, Chief Minerals Officer, Deborah Umba, Senior National Country Economist for the Democratic Republic of Congo, and Paul Jordan. The editorial review by Herman Camara, design by Casterman Kokou, and administrative and communications support provided by Promise Aderibigbe, Tricia Baidoo, and Eugenia Grant are also gratefully acknowledged.



The opinions expressed and arguments employed herein do not necessarily reflect the official views of the African Development Bank, its Boards of Directors, or the countries they represent.

1.0 Context

The adoption of the Africa Green Minerals Strategy (AGMS) by the Heads of State and Government during the 38th Ordinary Session of the Assembly of the African Union, held February 2025, coincides with the G20 Presidency of South Africa. This historic milestone—marking the first time an African country hosts the G20—offers a strategic opportunity to advance the implementation of the AGMS. The G20 platform may be effectively leveraged to actively pursue the Strategy's provisions, enhance value addition, promote sustainable mining practices, and strengthen resilient supply chains for critical and green minerals across the continent. This approach aligns with the G20's broader commitment to the responsible, diversified, and sustainable sourcing of essential minerals to support global energy transitions and sustainable development while reinforcing Africa's strategic role in the emerging green economy.

This information note outlines the key components of the AGMS, including its core objectives, strategic pillars, and enabling factors, which are essential for transforming Africa's critical minerals sector into a catalyst for inclusive, sustainable socio-economic development, industrialization, and green growth. Furthermore, the note explores avenues for leveraging the AGMS to strengthen G20 partnerships in minerals to foster industrialization, economic diversification, value addition, and job creation on the continent.

1.1 Rationale For an Africa Green Minerals Strategy

Critical or green minerals refer to those essential to economic development, national security, and technological advancement but whose supply faces significant risk due to geopolitical, geological, and economic factors. These minerals are integral to the renewable energy sector, electric mobility, defence applications, and digital technologies. They are typically characterized by high economic importance, supply vulnerability, and limited substitution potential.

Africa holds considerable reserves of the minerals required for the transition to clean energy technologies, positioning the continent as a pivotal actor in the ongoing industrial era driven by low-carbon energy. Reducing carbon emissions associated with energy production and use constitutes a vital aspect of the global commitment to achieving the Sustainable Development Goals (SDGs). Six key minerals—lithium, nickel, cobalt, graphite, manganese, and phosphate—are essential cost components in electrode chemistries that determine battery cell performance (IEA, 2021). These minerals collectively represent over 55 per cent of the material costs for lithium iron phosphate (LFP) batteries and over 78 per cent for nickel manganese cobalt (NMC) batteries used by major Chinese lithium-ion battery manufacturers as of 2024 (Fastmarkets, 2024). Africa remains a primary raw source of these minerals.

The continent's mineral endowment has long been recognized as a potential driver of industrialization, as articulated in the Africa Mining Vision (AMV) adopted by the African Union in 2009. The AMV forms part of a broader framework of continental policies on investment, industrialization, trade, human capital development, environmental stewardship, international cooperation, and sustainable development. These policy instruments aim to create stronger linkages between mineral development and other economic sectors, facilitating inclusive growth. However, they did not fully anticipate the opportunities arising from the global energy transition or the significant decline in the cost of renewable energy, offering unprecedented potential for powering development across the continent.

Despite its vast energy resources, Africa faces severe energy access disparities, with over 600 million people lacking modern energy services. At the same time, Africa possesses unparalleled potential for renewable energy generation. Bridging this paradox is both imperative and achievable.

Africa must therefore pursue a green, inclusive, low-carbon, and digitally enabled growth trajectory to seize these opportunities and address prevailing challenges. The continent's substantial green mineral resources can serve as critical inputs across multiple sectors—mining, agriculture, manufacturing, transport, water, and renewable energy—to advance the 2030 Agenda for Sustainable Development objectives.

Africa's continued relevance in the global energy transition will depend significantly on the strategic utilization of its mineral resources in clean energy technologies and green industries and their integration into sustainable and resilient industrial supply chains. The AGMS, therefore, encompasses a broad range of minerals—including aluminium, chromium, cobalt, copper, graphite, iron ore, lithium, manganese, nickel, phosphate, platinum group metals, rare earth elements, vanadium, and zinc. It is acknowledged that Member States and regional institutions will prioritize these minerals based on national contexts and resource endowments.

2.0 Objectives of the Africa Green Minerals Strategy

While the AGMS focuses on critical minerals and the role of producer countries in fostering diversified, sustainable, and responsible supply chains, the term "green minerals" reflects Africa's commitment to utilizing its mineral wealth to promote strong, sustainable, balanced, and inclusive growth. Therefore, the vision of the Africa Green Minerals Strategy is articulated as follows: **"An Africa that harnesses green mineral value chains for equitable resource-based industrialization and electrification, fostering green technologies and sustainable development to enhance the quality of life for all its people."**

The AGMS is structured around four strategic pillars designed to operationalize its vision and transform Africa's critical and green minerals sector into a sustainable, inclusive industrialization and socio-economic development driver. Each pillar supports a coherent set of outcomes to achieve resource-based development, regional integration, and enhanced global competitiveness.

a) Advancing Mineral Development

This pillar focuses on enhancing geological knowledge, attracting sustainable investment, and creating an enabling infrastructure and policy environment aligned with the AMV. Key actions include:

- Streamlining the regulatory and promotional functions of government to foster coherent governance of the minerals sector and to develop both upstream and downstream linkages.
- Strengthening national and regional geoscientific institutions to expand geological mapping and mineral resource assessments.
- Addressing infrastructure and financing gaps to improve domestic firm participation and competitiveness in mineral value chains.
- Increasing mineral exploration activities to reverse the declining share of Africa in global exploration expenditure.

b) Developing Human and Technological Capabilities

This pillar aims to build the requisite skills and technological base to leverage green mineral opportunities through targeted education, training, research, and innovation. This will be achieved by:

- Strengthening institutional capacity to coordinate skills development in line with industry demands and foster partnerships with development partners for technology transfer and innovation.
- Establishing Centres of Excellence within each Regional Economic Community (REC) focused on green mineral technologies and innovation ecosystems.

c) Building Strategic Value Chains

The Strategy seeks to drive equitable resource-based industrialization by developing regional and continental mineral value chains, enhancing beneficiation and value addition, and leveraging the African Continental Free Trade Area (AfCFTA) to expand markets. Priority actions include :

- Strengthening supply chains for mining and mineral processing, including developing capital goods, consumables, and services.
- Industrializing priority value chains by aligning resource availability with market potential and technical capabilities. Strategic partnerships with international firms are encouraged to support developing and local assembly of renewable energy equipment, battery technologies, and electric vehicles, particularly in niche markets. Action plans have been prepared for:
 - ▶ Renewable energy equipment (e.g., solar panel manufacturing and assembly, hydropower turbines, wind towers, electrical controls);
 - ▶ Hydrogen production and fuel cell technologies (e.g. PEM electrolyzers, fuel cell stacks);
 - ▶ Battery storage systems (e.g., lithium-ion battery precursors, battery cell manufacturing and assembly, vanadium redox flow batteries);
 - ▶ Electric two and three-wheeled vehicles (e.g., motorcycles, tricycles, commuter buses).
- Enhancing market and industrial competitiveness through policy certainty, targeted trade incentives, and regional content requirements to stimulate investment and local manufacturing

- Developing critical infrastructure, improving logistics, expanding skills training, and strengthening supply chain responsiveness to support industrialization. Promoting cluster development and strategic partnerships through establishing Special Economic Zones (SEZs), industrial clusters, and joint ventures, particularly in collaboration with international renewable energy companies.

d) Promoting Prudent Mineral Stewardship

This pillar addresses mineral exploitation's environmental, social, and governance (ESG) dimensions, strongly emphasizing responsible resource management, community well-being, and circularity. Key elements include:

- Undertake regulatory reforms to harmonize national legal and institutional frameworks by the African Mineral Governance Framework (AMGF), as articulated in the Africa Mining Vision and published in 2017 by the African Minerals Development Centre (AMDC), particularly concerning contracts, licensing, fiscal regimes, transparency, and the mitigation of illicit financial flows, in alignment with the objectives of the AMV and AMGF.
- Prioritizing the formalization and support of Artisanal and Small-Scale Mining (ASM) to enhance livelihoods, improve working conditions, and promote environmental and social sustainability. Technical and financial assistance will be extended to ASM operators.
- Implementing regional environmental management approaches that promote knowledge-sharing, institutional coordination, and best practices in mineral stewardship across Member States.
- Ensuring increased extraction and utilization of green minerals does not negatively impact communities or the environment.
- Enforcing stringent environmental, social, health, and safety standards throughout the mineral value chain.
- Promoting circular economy principles, including material reuse and recycling, ensures long-term sustainability and efficient use of natural resources.

The implementation of the AGMS is anchored in principles aligned with the G20 mandate to foster Strong, Sustainable, Balanced, and Inclusive Growth. In an increasingly interdependent world, no individual or nation can achieve prosperity in isolation. The complex and shared challenges confronting the global community necessitate collective action guided by solidarity, equality, and sustainability principles.

The growing strategic importance of green mineral extraction and processing presents a critical opportunity for Africa to maximize the developmental impacts of its mineral endowments. In alignment with the African Mining Vision, the AGMS seeks to realize the full spectrum of mineral linkages—fiscal, knowledge-based, spatial, backwards, and forward—to drive resource-based industrialization and promote equitable and inclusive development. The accelerating global demand for green minerals positions African producers to ascend value chains through strategic partnerships with import-dependent countries seeking to secure supply chains.

To fully leverage this opportunity, African States must expedite the implementation of the AGMS. Failure to act decisively could expose producer countries to several risks, including entrenchment at the extractive end of the value chain due to intensifying geopolitical competition for critical minerals, insufficient resourcing of mineral governance institutions vital for the development of African mining capital, and the neglect of foundational mineral inputs essential for industrialization.

In a global context marked by the erosion of multilateralism and the emergence of extractive, asymmetrical supply relationships imposed by dominant mineral-importing nations, Africa's approach must be based on the fair and equitable governance of mineral resources. A just and transparent allocation of benefits across all value chain stages is imperative for the sustainable development of the continent's green minerals sector.

3.1 Implementation Instruments

To operationalize a truly continental AGMS, unrestricted access to African markets for African manufacturers must be prioritized. This requires deeper economic integration, accelerated implementation of the AfCFTA, the removal of tariff and non-tariff barriers, and a significant reduction in

3.0 Implementation of Africa's Green Minerals Strategy

intra-African logistics costs. Progress toward establishing Common External Tariffs (CETs) for Energy-Related and Beneficiation Inputs (ERBI) is equally essential to foster value chain integration.

Given the diverse levels of development across African countries, the AGMS must incorporate instruments that acknowledge and accommodate these differences, ensuring that no Member State is left behind. The following implementation mechanisms are proposed:

i. Local-African Content (LAC)

All major African mining jurisdictions are encouraged to introduce local content requirements for procuring capital goods, consumables, and services. These requirements should include a continent-wide recognition of inputs sourced within Africa by the AfCFTA's "cumulation" clause. A weighting mechanism favouring least developed Member States—based on inverse GDP per capita—could expand market size, increase the viability of supply chain investments, and stimulate intra-African trade and development.

ii. Green Mineral Value Chains Common External Tariff

A common external tariff (CET) of $\leq 10\%$ is proposed on imports of green mineral value chain (MVC) products and exports of unprocessed key green minerals. This measure would encourage local value addition and improve Africa's participation in higher green minerals value chain segments.

iii. Green MVC Investment Fund

Establishing a Green Mineral Value Chain Investment Fund (VCF) is recommended to address the prohibitively high cost of capital in many African countries. This fund should be capitalized by African development finance institutions, international development partners, consumer countries, and energy transition funds. Eligibility criteria could favour the least developed Member States, in line with the principles outlined under the LAC mechanism.

iv. Critical Skills and Innovation Funding

Member States are encouraged to harmonize mining licence regulations related to green minerals to require a minimum allocation of 5% of payroll to local STEM (science, technology, engineering, and mathematics) skill development and 1% of sales revenue to local research, development, and innovation (RDI), including data management. These requirements should be implemented at the regional level, with support from regional centres of excellence in green mineral development. Pilot initiatives of this nature are already underway.

v. Infant Industry Protection

For Member States with GDP per capita below the continental average, temporary infant industry tariffs of up to 10% for a maximum of seven years should be considered. This measure, consistent with AfCFTA provisions, would support new greenfield investments by offsetting initial capital expenditure disadvantages and facilitating the establishment of nascent industries.

Africa's green mineral resources are complemented by its vast renewable energy potential. This synergy presents a transformative development pathway to eliminate energy poverty and accelerate industrialization through ERBI-focused value chains. The AGMS promotes the strategic integration of green minerals into priority industrial value chains, which aligns with the manufacturing action plans under Pillar III. Mining supply chains and the production of capital goods offer significant opportunities to expand the continent's industrial base and services sector while supporting the beneficiation of minerals and the development of core inputs such as base metals, construction materials, and industrial chemicals.

While African producers will continue to participate in global value chains, upholding principles of sustainability, reliability, and responsibility, the primary objective remains to promote local value addition and to advance Africa's manufacturing agenda.

These objectives cannot be achieved without strong coordination among African institutions, including the African Union Commission, the African Mineral Development Centre, the African Development Bank, the United Nations Economic Commission for Africa, the African Finance Corporation, and Afreximbank. The support of multilateral bodies and international development partners will be critical.

Moreover, regional coordination - mainly through the Regional Economic Communities (RECs) is essential to enhance information sharing and harmonize Member State efforts in the green minerals sector. Scaling up current initiatives and translating potential into implementation will require active engagement from governments, the private sector, investors, and a broad range of stakeholders.

4.0 Leveraging the Africa Green Minerals Strategy to Strengthen G20 Partnerships in Minerals Development

Development Finance Institutions (DFIs) will play a pivotal role by supporting regulatory reform, building institutional and human capacity, and facilitating the preparation of bankable projects. This includes conducting feasibility studies, implementing de-risking strategies, and mobilizing appropriate debt and equity financing instruments to bring projects to market and realize the full promise of Africa's green minerals.

The AGMS offers a pivotal opportunity to recalibrate global mineral partnerships by aligning Africa's mineral endowments with sustainable industrialization and economic transformation objectives. The G20, comprising a balanced representation of significant mineral-producing and -consuming nations, provides an appropriate platform for fostering equitable and mutually beneficial partnerships that address consumer countries' supply security concerns and Africa's aspirations for value addition, beneficiation, and inclusive development.

The imperative to establish a cooperative framework for mineral resource development is increasingly evident. Without such a framework, global supply chains remain vulnerable to disruption, price volatility, and geopolitical instability—factors that may impede progress towards the green transition and compromise global economic resilience. As the global community advances towards cleaner and more sustainable energy systems, Africa's critical minerals—including lithium, cobalt, and rare earth elements—will be indispensable to ensuring energy security. However, to guarantee that Africa derives equitable benefits from these resources, G20 partnerships must extend beyond the extraction of raw materials to actively support industrialization and structural transformation across the continent.

4.1 Aligning the AGMS with G20 Initiatives

The AGMS presents a comprehensive and structured framework to ensure that Africa's critical minerals contribute to long-term economic transformation rather than perpetuate extractive and export-oriented models. By prioritizing value addition, environmental sustainability, intra-African trade, and green industrialization, the AGMS constitutes a robust foundation for strategic engagement with G20 initiatives.

To enhance G20-Africa cooperation in mineral development, it is recommended that a comprehensive and inclusive framework be developed—building on existing declarations—to promote transparency, sustainability, and inclusive growth across the mineral value chain. Such a framework should incorporate enforceable trade and investment policies, robust traceability and due diligence systems to ensure the responsible sourcing of minerals and the prevention of illicit trade.

In this regard, G20 member states are encouraged to :

- Support investment in local processing facilities and the establishment of green industrial zones.
- Facilitate technology transfer and capacity-building to enable Africa's progression along the value chain, particularly in battery manufacturing and renewable energy systems.
- Provide targeted financing for mineral processing powered by clean energy, sustainable mining practices, and the integration of circular economy principles.
- Promote infrastructure, logistics, and workforce development investments, fostering a competitive, diversified, and resilient African mineral economy.

4.2 Towards a New Global Framework For Equitable Mineral Partnerships

The G20 is well positioned to lead the development of a fair, rules-based global framework for critical mineral supply chains that reflects Africa's industrialization ambitions while safeguarding global supply security. This new framework must incorporate the core priorities of the AGMS and ensure that mineral-rich African countries are :

- Empowered to advance along the value chain and exercise greater control over their mineral resources;
- Guaranteed fair and equitable market value for their critical minerals, thereby reducing dependency on the export of unprocessed raw materials;
- Supported the development of competitive industries in mineral processing, battery production, and environmentally sustainable manufacturing.

Through such a framework, G20-Africa partnerships can evolve from traditional extractive relationships to comprehensive collaborations encompassing industrial development, infrastructure investment, and

5.0 Conclusions

clean energy integration. This paradigm shift will strengthen Africa's leadership in sustainable mineral development and contribute to building resilient, transparent, and equitable global mineral supply chains that serve regional and international development objectives.

The AGMS, formally adopted during the 38th Ordinary Session of the Assembly of the African Union in February 2025, constitutes a timely and transformative policy framework to leverage Africa's vast endowment of critical mineral resources to advance equitable, sustainable, and inclusive development. Rooted in the AMV and aligned with the SDGs, the AGMS delineates a coherent roadmap to foster value addition, beneficiation, and industrialization within the broader context of the global energy transition.

At its core, the AGMS seeks to transcend traditional extractive models by fully operationalizing the spectrum of mineral linkages—fiscal, backward, forward, spatial, and knowledge-based. Its implementation is anchored in four strategic pillars: (i) enhancing mineral development, (ii) strengthening human and technological capacities, (iii) developing strategic value chains, and (iv) promoting sound mineral governance and stewardship. These pillars collectively provide a holistic framework for industrial policy, governance reform, regional integration, and capacity development in alignment with Africa's broader aspirations for structural economic transformation.

The urgency of AGMS implementation is underscored by current economic indicators. In 2023 alone, Africa imported over USD 11 billion in mining capital goods, reflecting significant unrealized potential for local production and the development of backward linkages. The AGMS introduces a suite of practical and implementable instruments—including Local-African Content frameworks, Common External Tariffs for green mineral value chains, a dedicated Green Mineral Value Chain (MVC) Investment Fund, and targeted innovation-based skills development strategies—designed to catalyze public and private sector engagement. These mechanisms include provisions responsive to diverse national contexts, thereby ensuring equitable access to the benefits of green industrialization, particularly for Least Developed Countries (LDCs) within the continent.

The energy transition presents a historic opportunity for Africa to position itself as a strategic actor in global value chains related to battery storage systems, electric mobility, hydrogen technologies, and renewable energy infrastructure. The AGMS is deliberately structured to translate these opportunities into actionable industrial development plans, operationalized through the Energy-Related and Beneficiation Inputs (ERBI) framework.

The G20 Presidency of the Republic of South Africa has elevated the themes of critical minerals and green industrialization on the global policy agenda. In this context, the AGMS provides a comprehensive vision and strategic direction to guide G20–Africa cooperation toward equitable, mutually beneficial, and sustainable mineral partnerships. As the G20 encompasses both major producers and consumers of critical minerals, it is well-positioned to advance Africa's objectives through coordinated action in trade policy, investment facilitation, technology transfer, supply chain transparency, and green infrastructure development.

Looking ahead, the AGMS calls upon G20 Member States to build on existing commitments by supporting the establishment of a global framework for equitable mineral partnerships, with particular focus on:

- Promoting value addition at or proximate to the point of extraction;
- Capitalizing a dedicated Value Chain Fund (VCF) to enable African enterprises to engage meaningfully in upstream and downstream segments of the mineral economy;
- Ensure that the sourcing and utilization of Africa's critical minerals contribute to fair market access, inclusive economic growth, and environmental sustainability.

The overarching vision is clear : "An Africa that harnesses green mineral value chains for equitable, resource-based industrialization and electrification, promoting green technologies and sustainable development to improve the quality of life for all its people."

Realizing this vision will require robust political commitment, enhanced institutional coordination, and sustained engagement with development partners, RECs, and the private sector. DFIs will be pivotal in facilitating regulatory reform, supporting project preparation, and mobilizing financing mechanisms that mitigate risk and enable project scalability.

The AGMS presents a bold and actionable strategy to reposition Africa from a supplier of raw materials to an integrated partner in global critical mineral value chains. It supports the G20's mandate to foster strong, sustainable, balanced, and inclusive growth while reinforcing Africa's leadership in responsible mineral development and green industrial transformation.

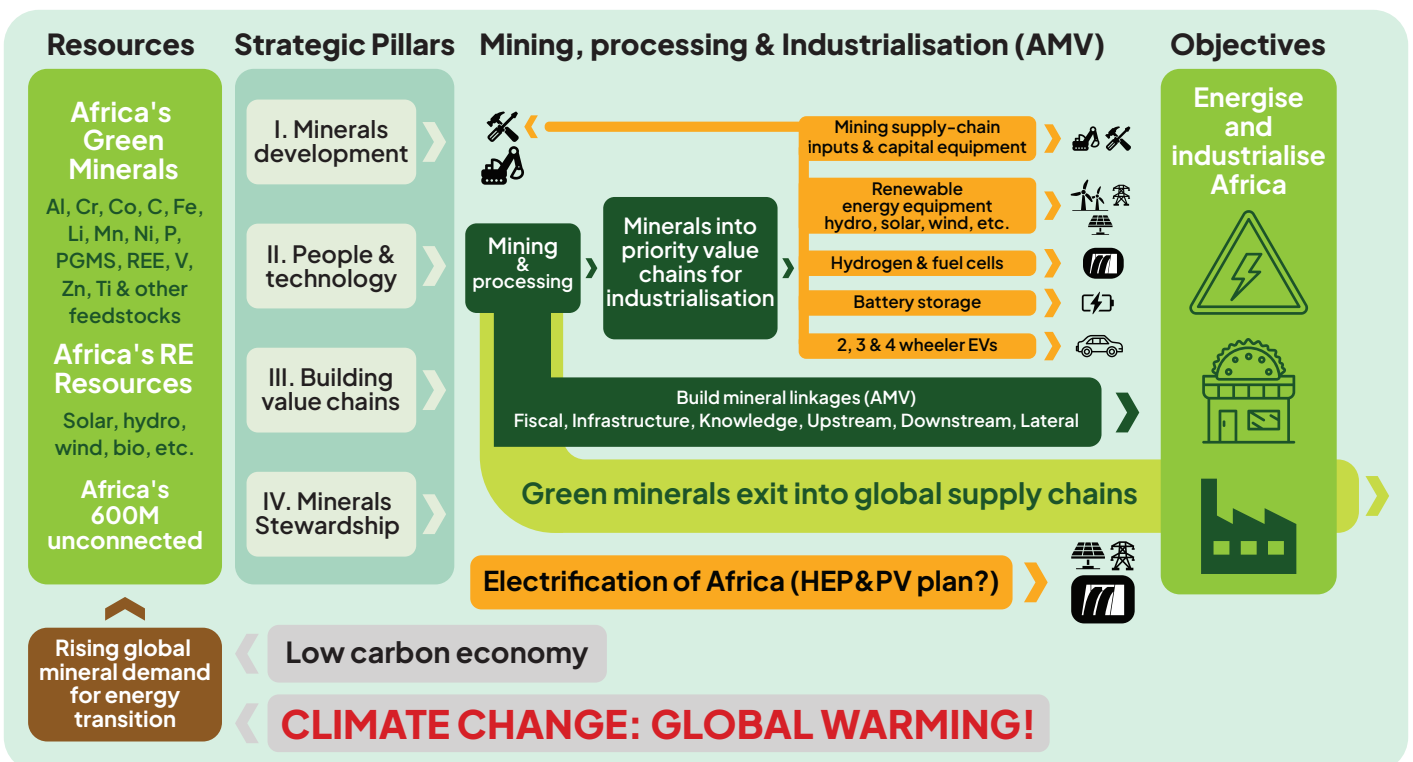
Annex 1 Strategic Value Chains and Investment Opportunities

The extraction and processing of green minerals constitute foundational pillars of Africa's industrialization agenda. As illustrated in Figure 1, these minerals underpin a series of priority value chains critical to the continent's transition towards a sustainable, low-carbon economy. These value chains present significant and strategic investment opportunities across the following domains :

- a) Development and expansion of mining supply chains, including the manufacturing and distribution of capital goods, consumables, and technical support services;
- b) Manufacturing of renewable energy equipment and infrastructure, such as solar panels, wind turbines, and hydropower systems;
- c) Production of green hydrogen and the development of related fuel cell technologies, leveraging Africa's abundant renewable energy resources;
- d) Manufacturing of energy storage systems, including advanced battery technologies essential for electric mobility and grid stabilization;
- e) Production of light electric vehicles, mainly two- and three-wheeled models adapted to African transport needs;
- f) Provision of electrification solutions to address widespread energy access challenges, particularly in rural and underserved areas;
- g) Development of enabling technologies and infrastructure to support the continent's transition from fossil fuels and accelerate the deployment of clean energy solutions.

Collectively, these domains represent critical components of Africa's emerging green industrial ecosystem. They offer concrete pathways for value addition, regional integration, technological innovation, and inclusive economic development. Building on these strategic pillars, the figure below illustrates the foundational framework underpinning Africa's Green Minerals Strategy.

Figure 1 : Illustration of Africa's Green Minerals Strategy





African Development Bank Group
African Natural Resources Management and Investment Centre
Immeuble du Centre de Commerce International d'Abidjan CCIA

01 BP 1387
Avenue Jean-Paul II
Abidjan 01, Côte d'Ivoire

anrc@afdb.org
www.afdb.org

© 2025 African Development Bank
All rights reserved