

AUDA-NEPAD Africa Policy Bridge Tank 2024 Inception Conference: African Futures

Futures Thinking Workshop Report: Reflections and Recommendations On

Futures of Green Minerals in Africa: Building Anticipatory Governance and Regional Value Chains

The Three Horizons Framework was employed in a futures thinking workshop at the African Union AUDA-NEPAD Africa Policy Bridge Tank 2024 Inception Conference on African Futures. Focusing on "Futures of Green Minerals in Africa," the workshop aimed at facilitating a strategic conversation on building anticipatory governance in how to best take advantage of the growing economic importance of green minerals in building regional value chains.

During the workshop, the expert group were introduced to the [Three Horizons Framework](#), a strategic foresight methodology to help structure individual and collective thinking about the future in ways that spark innovation. It describes three patterns or practices of thinking about the future and how all three horizons are always present. In addition, the framework describes the relative prevalence of specific patterns and interactions over time. The framework helps us understand how our individual and collective intentions and behaviours shape the future today. By mapping three ways of relating to the future from the perspectives of the three horizons, we can bring the value of each of them to the conversation generatively, fostering understanding and future consciousness as the basis for collaborative action and transformative innovation.

The discussion was organised according to the Three Horizons framework, and each of the three horizons was explored sequentially as per Figure 1. The first horizon (H1) represents the currently prevalent systems that are beginning to show symptoms of decline and shortening cycles of crisis and temporary, but never fundamental recovery. In simpler

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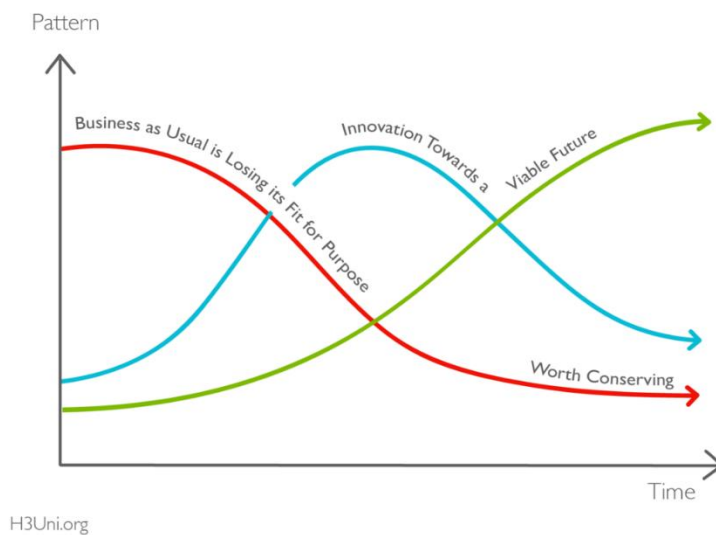
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terms, Horizon 1 is commonly referred to the 'business as usual,' and 'the voice of the incumbent,' or 'the world in crisis.' This designation underscores H1's role in unveiling the inadequacies of the current state of affairs and how it is losing its fit for purpose.

Horizon 3 (H3) is how we envision a 'viable world' and represents 'the voice of the visionary' and the preferred longer-term future embedded with new values. We may not be able to define this future in every detail — as the future is always uncertain — yet we can intuit what fundamental transformations lie ahead. We can pay attention to social, ecological, economic, cultural and technological experiments or small movements around us that may be pockets of the future in the present.

Horizon 2 (H2) represents the 'world in transition' — the entrepreneurial and culturally creative space of already technologically, economically and culturally feasible innovations that can disrupt and transform H1 to varying degrees and have either regenerative, neutral or degenerative socio-ecological effects. Horizon 2 explores the 'voice of the entrepreneur' in an effort to identify sustaining or transformative/disruptive innovations as a means to respond to emerging opportunities and risks of real-world complex, pressing problems. The second horizon maps the transformational shifts required to help the current system transition to preferable futures.

Figure 1: Three Horizons Framework



Source: H3Uni

Horizon 1 (H1): The Voice of the Incumbent

Systemic Challenges and Policy Gaps

The first horizon highlighted significant systemic challenges in the green minerals sector, encompassing human rights, small-scale and artisanal mining, mining pollution, downstream water impacts, and the involvement of various stakeholders in policy creation. The discussion emphasised the absence of holistic understanding across government departments of the green minerals value chain and intersecting problems, the existence of departmental silos and siloed thinking, and the power of traditional chiefs in decision-making that often created obstacles to effective community consultation. The scarcity of green mineral strategies and policies among African countries emerged as a major concern, with some nations implementing bans on the export of such minerals. Furthermore, there were also limited domestically undertaken geological surveys, which meant that many countries did not know what resources they had underground. These systems that are increasingly losing their fit for purpose require careful reflection.

Horizon 3 (H3): The Voice of the Visionary

Shaping Positive Long-term Futures and Values

The third horizon focused on envisioning positive futures and values for the green minerals sector. The group discussion suggested a paradigm shift towards transparency, trust, respect, non-exploitative practices, and intergenerational fairness. Participants highlighted the importance of integrated solutions and the adoption of values aligned with preserving ecologically sensitive ecosystems and ensuring benefits accrue to local mining communities beyond short-term gains.

Intergenerational fairness in mining and the need for a paradigm shift that was less extractive, more environmentally friendly were identified as crucial values for the future. The LiFE principles (Lifestyle for the Environment) that were adopted by the G20 Development Working Group in 2023, could form a good basis for these values shift.

Pockets of the future in the present were identified. These are small, not widespread or well-known initiatives in the present which hold potential to shape the future towards more viable futures. Examples of these 'seeds' are the Zambia-DRC Battery Alliance and the establishment of an AMDC Green Minerals Observatory.

Reflecting on H3, fostering a collective vision for mining futures and adopting values that prioritise sustainability is critical. Recommendations include fostering transnational

cooperation through initiatives like the Zambia-DRC Battery Alliance, promoting a deeper understanding of the entire value chain, and supporting the establishment of an AMDC Green Minerals Observatory. In addition, supporting initiatives such as the idea of "From Mine to Mind" which calls for a paradigm shift in our approach to mining that is more foresight-informed and less focused on short term profits. Embracing values that promote long-term environmental preservation, and encouraging integrated solutions were also discussed among the preferred vision for green minerals mining.

Horizon 2 (H2): The Voice of the Entrepreneur

Concentration and Monopoly

The second horizon underscored the concentration of technology and green minerals in the hands of a few major players, leading to potential monopolies in processing, refining, manufacturing, and commercialisation. Other dimensions discussed as sustaining and transformative innovations were legislation and governance tailored for the effective management of critical minerals, creative approaches to combat corruption, and a regional plan addressing the concept of 'criticality' within the SADC framework. A key dimension that could unlock transformative innovation is shifting away from the existing 'sovereignty' or protectionist/nationalist approaches to green minerals mining in the pursuit of regional development and integration. This would mean deliberate discussions on enhancing trust among crucial stakeholder entities, including government, private sector, and civil society/communities.

Reflections and Recommendations

Reflecting on Horizon 1, it is evident that national, regional and continental policymakers need to adopt a comprehensive, cross-sectoral approach to address the complex challenges associated with green mineral extraction.

Considering H2, the innovations required to achieve the vision in H3, it is imperative to address the concentration of power and resources within the green minerals sector and adopt regional approaches to green minerals governance. Recommendations include promoting the development of continental and regional green minerals strategies that address overly dominant actors and enhance the diversity of stakeholders in green minerals mining. Innovative interventions to overcome monopolies also include the need to build up skills transfer pathways and local content policies through opening more effective negotiations and granting access to a wider variety of stakeholders to these resources. Efforts that promote transparency for mining communities in decision making should be included. Other innovations include equitable participation and supporting small-scale artisanal miners in experimental safe to fail projects. The discussion also

highlighted the need to encourage values that prioritise environmental sustainability over short-term profits and political gains.

Crafting a set of future-oriented recommendations based on the Three Horizons framework necessitates a comprehensive understanding of the dynamic interplay among various factors. Key elements such as understanding what the dynamic patterns of green minerals ecosystem reveal over multiple time horizons in relation to multi-perspectival approaches requires sufficient time for reflection and collaboration. However, the value of the strategic conversation in a short period of time lies in that participants could identify three distinct ways of thinking about the future.

This workshop marked the initiation of this strategic undertaking, specifically within the context of the continent's wealth of green minerals. By delving into the strategic opportunities and challenges posed by this abundance, participants embarked on a journey to discern potential pathways for alternative futures and visions of green minerals, supported by initial sustaining and transformative innovations.

The incorporation of anticipatory governance principles further enriched the deliberations. Anticipatory governance involves a forward-looking and proactive approach, anticipating and addressing potential issues before they arise. In the context of green minerals, this approach becomes pivotal in navigating the complexities of their extraction, processing, and utilisation, ensuring responsible and forward-thinking strategies are in place to maximise benefits while mitigating potential risks.

Conclusion

The futures thinking workshop provided valuable insights on applied strategic foresight in practice and highlighted the challenges and opportunities within the green minerals sector in Africa. By exploring the future over multiple time horizons and from multiple perspectives through the Three Horizons Framework, the workshop generated recommendations that promote a holistic, equitable, and sustainable approach to the future of green minerals, emphasising the importance of anticipatory governance in devising strategies for the future around green minerals and regional value chains. Moving forward, these insights should inform policy discussions, collaborative efforts, and strategic planning for the green minerals sector in Africa.