

From Orbit to Ore: MAKOR RESOURCES and AUYAN receive funding from INNOVATE UK to Harness Space Tech to De-Risk and Drive a Sustainable Mining Future

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This week, **Makor Resources** and **AUYAN** announced funding from **Innovate UK** to advance the technical development, on-the-ground verification and commercialization of **Project Sensr360**, a satellite imagery and AI-driven monitoring system that evaluates and measures the risks associated with investments in capital-intensive sectors with high environmental and social sensitivity, such as mining.

Mining has been a cornerstone of human progress for millennia, providing essential resources that power our modern world. However, extracting these valuable materials often comes at a cost, with environmental, social, legal, and safety concerns looming large.

Makor Resources Chief Executive Officer, Brooke Bibeault commented:

“As the energy transition intensifies, so does the demand for critical minerals. The affordability and speed of the energy transition will be heavily influenced by the availability of critical mineral supplies and could further push mining into environmentally and socially sensitive areas. The industry finds itself at a crossroads, seeking innovative ways to meet the world’s resource demands while minimizing its impact on the environment and the local communities, fostering responsible mining practices and guaranteeing sustainable development.”

Project Sensr360 is a solution set to pave the way for transforming responsible and sustainable mining through satellite imagery fused with other remote sensing technologies and artificial intelligence.

Project Sensr360 provides a comprehensive situational awareness to facilitate the due diligence and de-risk investment by enabling continuous and real-time monitoring of mining activities and providing critical insights into these activities’ environmental and social impacts, which is crucial for responsible energy transition and climate change mitigation efforts.

AUYAN’s founder and key development partner, Alix Leroy, further remarked, *“Satellite imaging provides a layer of information that complements data from in-situ remote sensors at mines. Our technology allows us to monitor the impact of mining activity over time, detecting potential environmental risks through wastewater monitoring and vegetation change detection.”*

With further continued investment and enhanced development, this technology can observe the rehabilitation and restoration of natural habitats, ensuring that various companies meet environmental commitments.

Leroy added, *“Remote sensing boosted by AI supports automating assessment of environmental risks in the mining sector in a scalable, cost-effective and more accurate fashion. This leads to actionable insights being produced faster, near real-time, and with great accuracy.”*

Bibeault went on to say, *“Through this project, we want to bring awareness to the mining industry on the capability of such technology and its pivotal role in aiding to various mining projects. There is potential for satellite data to be used across the full breadth of mining, from exploration to mine closure.”*

Project Sensr360 provides stakeholders with near real-time data on land use and degradation, deforestation, water resources and contamination sites, migration and movement, infrastructure development, safety measures, illicit activity and permit registration to aid in determining the quality of potential investments and in monitoring various ESG and CSR initiatives and efforts.

“The solution has potential for rapid growth and scalability, as it covers large territories and can be easily adapted to different geographic regions and regulatory environments”, stated Leroy.

Until recently, very high-resolution satellite imagery, advanced data collection, and cutting-edge analysis tools have been exclusive to leading players in the mining industry, given their extensive capabilities. However, this innovative remote sensing technology offers an accessible and cost-efficient option for junior mining companies to now reap the benefits.

Makor’s Chairman, Ricus Grimbeek, stated, *“The transition from fossil fuels to renewable energy is*

causing a seismic shift, and today's current mineral supply and investment plans fall short of what is needed to transform the energy sector."

Mining, while offering significant opportunities for socio-economic development and a just energy transition, is fraught with uncertainties and potential risks that can threaten the sustainability and profitability of investments.

"A number of the resources required for a just transition sit in Africa," added Grimbeek, "and significant amounts of external investment – both financial and human capital – are required to make the sustainable extraction of this possible. Sensr360's solution offers investors detailed insights to make informed and responsible investment decisions. It provides continuous and real-time monitoring of virtually all activities to secure the capital-intensive investment over a long-dated period."

Bibeault stated, "Ensuring the sustainability of these investments is paramount, as they must balance economic goals with environmental stewardship and social responsibility to be viable in the long term."

According to a report published by the World Economic Forum, it's estimated that using satellites to track changes in water, land, vegetation, and construction could unlock more than \$2 billion a year in benefits for Africa alone. Earth observation with remote sensing has the potential to be one of Africa's most valuable assets, helping to tackle water scarcity, coastal erosion, deforestation, food security, and illicit movement of people and products.

The alignment with global Sustainable Development Goals (SDGs) positions Project Sensr360 as a key tool in promoting responsible investments and industry practices, advancing sustainable development in rural communities and combating climate change.

This solution provides stakeholders across the value chain with detailed insights and in-depth analysis to make informed investment decisions, ensure compliance with regulatory standards, promote responsible sourcing of minerals and mitigate potential risks.

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