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## **Bridging Security Futures: Why Critical Minerals Matter for Southeast Asia**

*By Vlado Vivoda*

### **SYNOPSIS**

*This commentary explores the rising importance of critical minerals in Southeast Asia, highlighting their intersection with development, security, and global supply chains. It suggests that ASEAN could benefit from a more integrated and strategic approach to resource governance, enabling the region to navigate complex geopolitical dynamics while advancing shared sustainability goals.*

### **COMMENTARY**

#### **Why Critical Minerals Now?**

Critical minerals underpin nearly every facet of modern life, yet their strategic importance is only beginning to gain wider recognition across policy, industry, and society. These minerals, including nickel, rare earth elements (REEs), cobalt, and tin, are vital to everything from smartphones and electric vehicles to advanced computing, clean energy, aerospace, and missile systems. Their cross-cutting relevance challenges the conventional boundaries between traditional and non-traditional security.

In ASEAN, the geopolitics of critical minerals is no longer a hypothetical debate – it is a lived reality that touches on national development, regional diplomacy, economic diversification, environmental governance, and the social dynamics of affected communities.

#### **ASEAN's Resource Landscape and Strategic Imbalance**

Southeast Asia is rich in critical mineral resources. [According to the US Geological Survey](#), Indonesia is the world's largest producer of nickel, and the second largest

producer of tin. The Philippines contributes substantially to the global supply of nickel, cobalt and copper. Myanmar and Vietnam are emerging REE suppliers. Laos is the second largest producer of bismuth. And Malaysia is one of the few countries globally with REE processing capacity outside China.

These natural endowments could position ASEAN as a key player in strategic supply chains. Yet the region's current role remains overwhelmingly upstream – extracting and exporting raw materials while much of the refining, value-added processing, and technology manufacturing takes place elsewhere, predominantly in China. Most of the region's refining and processing capacity [is controlled by Chinese entities](#), including the vast nickel processing complexes in the Indonesia Morowali Industrial Park (IMIP) in Central Sulawesi.

This imbalance is not merely economic. It has profound geopolitical and security implications. The United States, European Union, and allies are now seeking to reduce their dependency on China for critical minerals. New trade frameworks, investment incentives, and strategic stockpiles are being established across the Global North. Yet ASEAN's ability to plug into these frameworks remains uneven, complicated by fragmented regulations, infrastructure deficits, and limited policy coordination.

### **Regional Coordination and the Risk of Fragmentation**

Moreover, the shift toward bilateral deals, often pursued for short-term gain, risks weakening ASEAN's regional coherence. When individual states compete for the same investments or concessions from major powers, the bloc's collective leverage diminishes. To balance development aspirations with external pressures, ASEAN may find value in pursuing a more coordinated response. [AMCAP-III \(ASEAN Minerals Cooperation Action Plan\)](#) provides a constructive foundation, though its implementation has so far shown uneven progress – highlighting opportunities for deeper engagement and alignment across member states.

[A regional framework](#), akin to the EU's Critical Raw Materials Act, focused on value-chain integration, policy harmonisation, and shared resource management could enhance ASEAN's strategic weight and policy relevance. Rather than intensifying competition among its members, ASEAN could explore mechanisms for joint investment zones, shared processing facilities, and mineral reserves to stabilise supply in times of crisis. These initiatives could also attract higher-quality investment that is aligned with sustainability standards.

### **ESG as a Strategic Lever, Not a Burden**

Southeast Asia also navigates rising expectations around ESG (Environmental, Social, and Governance) standards. From local communities to global markets, there is growing scrutiny of the social and environmental costs of mining. Issues such as deforestation, pollution, forced labour, and land dispossession have tarnished the sector's reputation in parts of the region. Addressing these concerns is not just a matter of compliance but a prerequisite for access to high-value markets and for securing the social license to operate. ASEAN countries are increasingly aware of these stakes. But aligning national standards with global benchmarks requires capacity, coordination, and trust-building across borders.

Importantly, ESG governance should not be viewed merely as an external imposition, but as a strategic asset. Regions that can credibly demonstrate responsible production will have a competitive advantage in future-oriented supply chains. Singapore, for example, while not a mineral producer, could play an outsized role as a regional platform for certification schemes, green finance, and digital traceability systems. Its position as a global trading and financial hub enables it to influence how ESG norms evolve across ASEAN's mineral economies. It could also serve as a bridge between capital providers, technology developers, and policymakers seeking to align commercial viability with sustainability goals. Strengthening governance is also essential in light of emerging criminal risks. As highlighted in a recent [UNICRI report on crimes associated with critical minerals in Southeast Asia](#), illegal mining, smuggling, and corruption are growing concerns that threaten the long-term integrity and sustainability of the region's mineral sector.

ASEAN's broader challenge lies in navigating the intensifying strategic competition between China and the United States over critical mineral supply chains. Both powers are expanding their influence through infrastructure investments, trade deals, and diplomatic overtures. Southeast Asian countries, which already maintain diverse alignments across security and economic policy, face difficult trade-offs. A regional approach to critical minerals could provide a buffer against being pulled too far in one direction, offering ASEAN greater agency in shaping how external partnerships unfold.

### **From Geopolitical Tensions to Regional Opportunity**

The long-term implications extend beyond economics and diplomacy. Critical minerals touch on food and water security through their impact on land use and ecosystems. They affect energy access, jobs, and innovation ecosystems, including the infrastructure that underpins digital economies and data centres. They intersect with human security by shaping migration, health, and the resilience of local communities. In this sense, ASEAN's ability to manage its mineral wealth responsibly is not just a question of trade or geopolitics; it is fundamental to regional stability and sustainable development.

For Southeast Asia, critical minerals represent a convergence of opportunities and vulnerabilities. They offer pathways to industrial upgrading, clean energy transitions, and digital transformation. But without stronger governance and regional integration, the risks – economic dependency, social unrest, environmental harm – may outweigh the benefits. Rather than being framed solely as a competition, the global race for critical minerals should be viewed as an inflexion point: one that allows ASEAN to strengthen its regional voice, shape its own industrial future, and contribute constructively to global sustainability goals.

Southeast Asia does not need to position itself as a leader in the global minerals industry to be impactful. Instead, it can serve as a platform for uniting regional interests around a collective cause, advancing security and prosperity through responsible resource governance. As a region long defined by diversity and diplomacy, ASEAN has an opportunity to turn its critical mineral wealth into a foundation for strategic unity. The path forward is not simple. But it is possible.

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*Dr Vlado Vivoda is the CEO and Director of Strategic Minerals Advisory & Research in Canberra, Australia. He is also an Industry Fellow at the Centre for Social Responsibility in Mining, Sustainable Minerals Institute, The University of Queensland, Brisbane, Australia.*

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**S. Rajaratnam School of International Studies, NTU Singapore**  
Block S4, Level B3, 50 Nanyang Avenue, Singapore 639798