

ECONOMY WATCH

By ICMA Research and Publications Department



Pakistan's Strategic Entry into the U.S. Critical Minerals Market

In a landmark step that reshapes Pakistan's economic and geopolitical profile, the country formally entered the global critical minerals market on October 2, 2025, dispatching its first consignment of enriched rare earth elements and critical minerals to U.S. Strategic Metals (USSM) under a USD 500 million agreement. This marks Pakistan's transition from a resource-rich yet underutilized nation to an emerging participant in the global supply chain for strategic raw materials.

The shipment, containing antimony, copper concentrate, and rare earths such as neodymium and praseodymium, marks the beginning of a partnership between USSM and Pakistan's Frontier Works Organization (FWO). Signed in September 2025, the agreement outlines plans for an integrated value chain within Pakistan, covering exploration, processing, and refining to ensure greater domestic value addition.

Despite vast deposits of copper, gold, chromite, and rare earth elements (REEs), Pakistan's mining sector has historically contributed less than 3% to GDP. The government's recent push toward value-added mineral exports reflect a strategic shift toward industrial diversification and high-value trade.

While the inaugural shipment is historic, sustaining growth will require overcoming structural and operational challenges. Progress is expected in phases:

- **Phase 1:** Demonstration period of 2–3 years.
- **Phase 2:** Moderate commercial scaling over 5–7 years.
- **Phase 3:** Significant impact after a decade, subject to effective security, technical, and financial risk management.

Pakistan's Mineral Opportunity

Pakistan stands on the brink of a mineral-driven economic transformation, with an estimated USD 8 trillion worth of mineral wealth spread across 600,000 square kilometers. The country hosts 92 identified minerals, 52 of which are commercially extracted, including copper, gold, lithium, cobalt, chromite, and rare earth elements, alongside large reserves of marble, granite, coal, and gypsum.

At the centre of this potential is the Reko Diq copper-gold project, among the world's largest untapped reserves. Production is expected to begin in 2028, with capacity expanding from 45 million tonnes to 90 million tonnes per annum by 2034, according to Barrick Gold Corporation. With rising global demand for green energy minerals, Pakistan has a unique window to emerge as a key exporter.

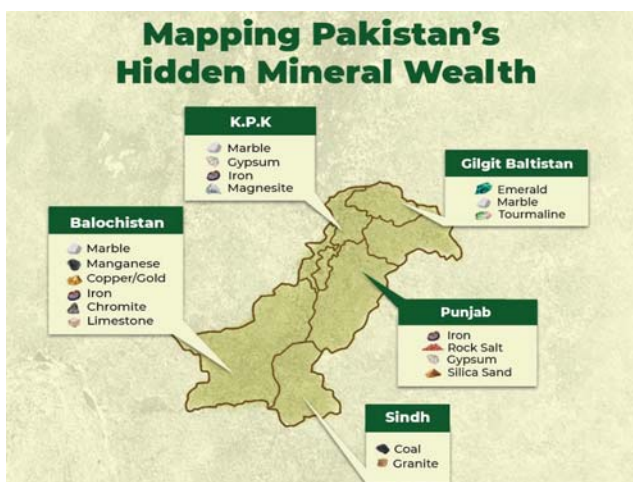


Figure 1-Source: The Diplomatic Insight



Figure 2-Source: IPRI- Islamabad Policy Research Institute

Key Challenges & Solutions Ahead

While the announcement is significant, several structural and governance challenges remain:

Category	Key Issues	Strategic & Analytical Solutions
Policy & Regulation	Lack of a unified national mineral strategy; fragmented federal-provincial regulations; inconsistent legal framework deterring investors.	Update the National Mineral Policy-2013 harmonizing federal and provincial jurisdictions. Introduce fiscal incentives and tax credits for exploration, processing, and R&D in critical minerals.
Security & Governance	Insurgency and militant attacks in Balochistan and Khyber Pakhtunkhwa; illegal mining causing revenue loss; weak contract enforcement and transparency issues.	Implement digital tracking systems for mining output to curb illegal extraction and revenue leakages.
Infrastructure & Logistics	Poor transport connectivity; unreliable power supply; severe water scarcity; high operational and logistics costs.	Invest in renewable-powered microgrids and desalination plants to overcome energy and water shortages. Introduce logistics cost-sharing schemes with private operators to improve mineral transport efficiency.
Technical & Industrial Capacity	Absence of large-scale refining and processing facilities; dependence on foreign toll-processing; lack of advanced metallurgical expertise.	Incentivize joint ventures for midstream processing (REEs, copper, lithium) via technology transfer agreements.
Environmental & Social Risks	Mining in ecologically fragile and water-scarce regions; insufficient community engagement; risk of local resentment.	Promote green mining certifications to attract ESG-conscious investors.
Geopolitical & Strategic Risks	Balancing partnerships between U.S. and China under CPEC; risk of political tension and investor uncertainty.	Develop strategic stockpiles of critical minerals for supply-chain resilience.

The government has launched initiatives such as the Pakistan Mineral Investment Forum and the National Mineral Harmonization Framework to attract investors and streamline regulations. Projects under CPEC and the growing interest from Saudi Arabia reflect increasing international engagement in the sector. However, policy inconsistency, weak regulation, and infrastructure gaps remain major obstacles, as underscored by the USD 5.84 billion Reko Diq arbitration case. To unlock its full potential, Pakistan must adopt a transparent and coordinated mineral policy focused on provincial collaboration, institutional reform, and sustainable governance, turning its vast mineral endowment into long-term national prosperity.

Conclusion

Pakistan stands at the threshold of a mineral-driven transformation, with vast deposits of copper, gold, lithium, cobalt, and rare earth elements offering significant potential for industrial growth and the green energy transition. Realizing this potential requires a

harmonized national mineral policy, transparent regulations, strengthened provincial coordination, and technology-enabled, ESG-aligned refining. With effective institutional reform and strategic partnerships, Pakistan can transform its mineral wealth into a long-term pillar of economic growth, industrial diversification, and global competitiveness.

Building on this domestic potential, the strategic partnership with the United States provides a framework for sustainable exploration, processing, and refining, leveraging technical expertise and market access. By prioritizing minerals with the highest strategic and economic value, this collaboration strengthens bilateral ties and positions Pakistan as a responsible contributor to global mineral supply chains and the clean energy transition. This model also sets a benchmark for equitable and sustainable resource development that can guide future international cooperation.

This article is prepared by Maiyra Ahmed, Assistant Director, R&P, under the guidance of Shahid Anwar, Senior Director R&P.