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India's Critical Mineral Processing Scheme

Strengthening Domestic Capacity and Supply Chain Security

Critical Mineral Processing Scheme – Latest News

The Union Cabinet has approved the Critical Mineral Processing Scheme — a ₹2,814-crore Capital Expenditure (Capex) Support Scheme to develop domestic processing capacity for critical minerals, particularly lithium and nickel.

The initiative seeks to address India's dependence on imported refined materials, reduce strategic vulnerability arising from China's dominance and strengthen the domestic critical mineral value chain.

Key Features of the Scheme

Financial Assistance and Capacity Targets

Total outlay: ₹2,814 crore.

Duration: Five years, from FY 2026-27 to FY 2030-31.

Capital subsidy: 30% of eligible capital investment.

Processing facilities: Four plants — two for lithium and two for nickel.

Capacity and financial support: For lithium, minimum capacity per plant will be 30,000 tonnes, while maximum capital support per beneficiary will be ₹500 crore. For nickel, the corresponding figures are 50,000 tonnes and ₹900 crore.

Selection and Disbursement

Beneficiaries will be selected through a two-stage process: technical qualification followed by financial bidding.

Two beneficiaries will be selected for each mineral based on the least-cost criterion, prioritising bidders seeking the lowest government support.

Incentives will be disbursed in three tranches linked to the achievement of specified milestones.

Processing Objectives

The scheme aims to convert lithium and nickel ores and intermediate products into high-purity compounds.

Nickel processing is also expected to facilitate the recovery of cobalt as a by-product.

Industry Perspective

Industry stakeholders have welcomed the scheme as a significant step towards addressing India's processing-capacity gap.

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For example, Attero emphasised that domestic processing is as important as securing access to mineral resources.

Significance of the Scheme

Reducing Import Dependence

India has limited domestic processing capacity and relies heavily on imports of refined critical minerals, including lithium, nickel, cobalt, rare earth elements (REEs) and silicon.

Promote domestic beneficiation and processing infrastructure.

Reduce dependence on imported refined intermediates and high-purity materials.

Enhance domestic value addition and strengthen supply chain resilience.

Addressing China's Strategic Dominance

China controls approximately 90% of global critical mineral processing capacity and can use this dominance as leverage during trade tensions.

India's limited processing capabilities expose it to supply disruptions, price volatility and geopolitical risks.

Developing indigenous processing capacity is essential for economic security, technological self-reliance and strategic autonomy.

Supporting Strategic Industries

Domestic processing facilities are expected to strengthen mineral supplies for:

Electric mobility and electric vehicle batteries.

Battery Energy Storage Systems (BESS).

Electronics and semiconductor-related industries.

Defence and speciality steel.

Chemicals, catalysts and pharmaceuticals.

Overcoming Structural Challenges

India's commercial-scale processing projects face several constraints:

High capital investment requirements.

Limited availability of suitable processing technologies.

Constrained access to raw materials.

Nascent domestic beneficiation and processing infrastructure.

The capital subsidy seeks to reduce investment risks and encourage private-sector participation.

Critical Mineral Processing Parks

The government is developing mineral-specific processing parks in four states to establish integrated ecosystems.

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Gujarat: Availability of heavy REEs and existing processing capabilities.

Andhra Pradesh: Development of a rare earth corridor.

Maharashtra: Proposed lithium processing ecosystem.

Odisha: Domestic nickel reserves and access to imported nickel from Indonesia and other countries.

The parks aim to integrate mineral processing, infrastructure and associated industrial activities.

Complementary Government Initiatives

National Critical Minerals Mission (NCMM)

It seeks to strengthen India's critical mineral supply chain through exploration, mining, processing, recycling and international partnerships.

It proposes a National Critical Mineral Stockpile Programme to maintain strategic reserves and protect against supply disruptions.

National Critical Mineral Stockpile Programme

Allocation: ₹500 crore for the development of reserves.

Mission period: 2024-25 to 2030-31.

Objective: Ensure uninterrupted availability of critical and strategic minerals during supply shocks.

Critical Mineral Recycling

The processing scheme complements existing government support for recycling critical minerals from used batteries and electronic waste.

Together, primary mineral processing and recycling can create a more dependable domestic supply chain.

Way Forward

India must combine capital incentives with technology development, reliable raw-material access, skilled manpower, sustainable processing practices and international mineral partnerships.

Developing domestic processing capacity alongside recycling and strategic stockpiling will be crucial to reducing import dependence and ensuring long-term supply chain security.

Conclusion

The scheme represents an important step towards transforming India from a predominantly import-dependent consumer of critical mineral compounds into a competitive domestic processing and value-addition hub.