



MINERALS SECURITY FINANCE NETWORK - ECONOMY

News: India has recently formalized its membership in the Minerals Security Finance Network (MSFN), a collaborative effort led by the United States to bolster international cooperation and secure supply chains for critical minerals.

What's in the news?

The announcement came from the US State Department during the UN General Assembly and included a pact signed by 14 countries along with the European Union. The MSFN is a continuation of the Minerals Security Partnership (MSP), which the US initiated in 2022 and India joined in June 2023. This strategic alliance aims to enhance the stability and security of mineral resources crucial for global economic and technological development.

What are Critical Minerals?

- Critical minerals are elements that are the building blocks of essential modern-day technologies, and are at risk of supply chain disruptions.
- These minerals are now used everywhere from making mobile phones, computers to batteries, electric vehicles and green technologies like solar panels and wind turbines.
- Based on their individual needs and strategic considerations, different countries create their own lists.

CRITICAL MINERALS

OUR GROWING DEPENDENCE ON CRITICAL MINERALS

WHAT ARE CRITICAL MINERALS?

Minerals deemed critical vary by country. The United States classifies **35 minerals** as critical because they are:

- essential to economic and national security,
- from vulnerable supply chains, or
- a key part of the manufacturing of a product.

TOP INDUSTRIES THAT RELY ON CRITICAL MINERALS

- 1 Telecommunications and electronics
- 2 Energy
- 3 Defence
- 4 Aerospace
- 5 Transportation

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CRITICAL MINERALS ARE EVERYWHERE



Lithium is used to create batteries.



Potash is used in fertilizer.



Helium is used in MRIs.



Indium is used to make LCD screens.



Uranium is used in radiation therapy.



Strontium is used in fireworks.

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- However, such lists mostly include graphite, lithium and cobalt, which are used for making EV batteries; rare earths that are used for making magnets and silicon which is a key mineral for making computer chips and solar panels.
- Aerospace, communications and defence industries also rely on several such minerals as they are used in manufacturing fighter jets, drones, radio sets and other critical equipment.

Why is this resource critical?

- As countries around the world scale up their transition towards clean energy and digital economy, these critical resources are key to the ecosystem that fuels this change.
- Any supply shock can severely imperil the economy and strategic autonomy of a country over-dependent on others to procure critical minerals.
- But these supply risks exist due to rare availability, growing demand and complex processing value chain.
- Many times the complex supply chain can be disrupted by hostile regimes, or due to politically unstable regions.
- They are critical as the world is fast shifting from a fossil fuel-intensive to a mineral-intensive energy system.

China's Strategy for Controlling Access to Critical Minerals

Blocking Critical Mineral Exports:

- On August 15, 2023, China restricted antimony exports, a vital mineral for military use, citing "national security."
- These restrictions, effective from September 15, reflect China's broader strategy to counter efforts by other nations to reduce dependence on Chinese minerals.

Dominating Global Supply Chains:

- China controls around **60% of global rare earth and critical mineral production** and **80% of processing**, making several countries, such as the U.S., EU, India, and Japan, vulnerable.

Weaponizing Its Position:

- In 2010, China halted rare earth exports to Japan following a maritime dispute.
- In 2023, China further restricted exports of gallium, germanium, and graphite in retaliation against U.S. technology export controls.
- This demonstrates China's willingness to use its dominant position to disrupt supply chains and hinder Western efforts to reduce reliance on its resources.



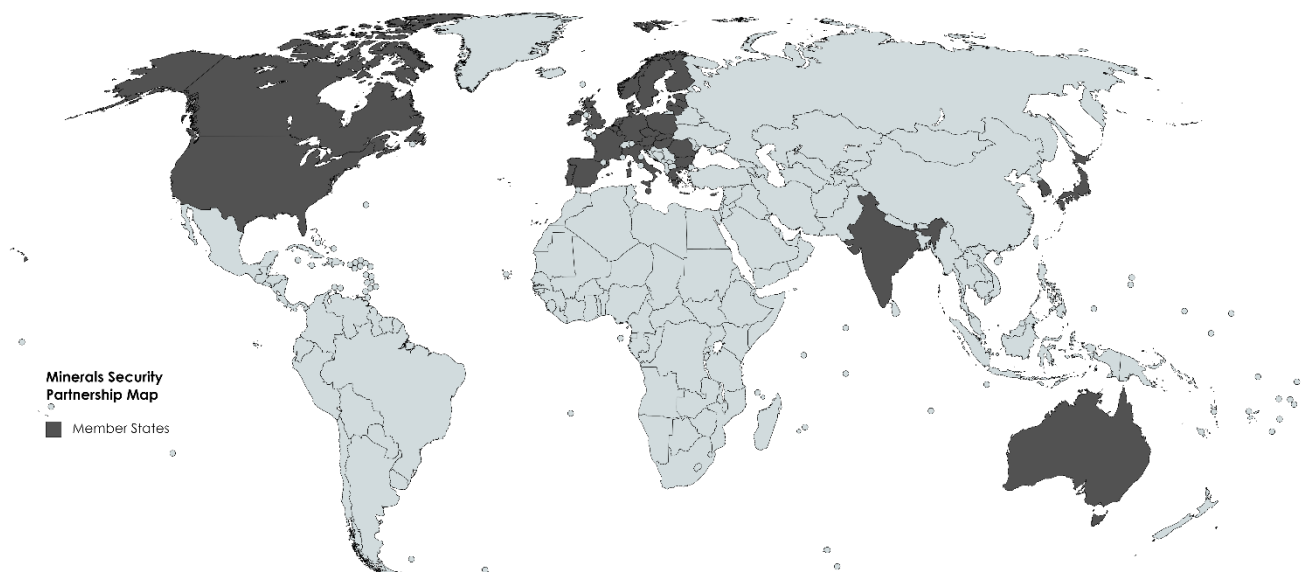
- China's actions indicate a shift from cooperation to coercion in its foreign policy.

Minerals Security Partnership (MSP)

Overview:	Goals:
<ul style="list-style-type: none">• Established in August 2022, the MSP is an alliance including the U.S. and 10 other nations.• It aims to secure a stable supply of critical minerals essential for a clean energy transition.• Focuses on minerals like lithium, cobalt, nickel, manganese, graphite, and rare earth elements required for clean energy technologies.	<ul style="list-style-type: none">• Sustainable Supply Chains: Build diverse and responsible supply chains for critical minerals.• Economic Development: Ensure that mineral production, processing, and recycling promote economic growth.• Environmental and Social Governance (ESG): Commit to high ESG standards.• Shared Prosperity: Promote prosperity for all involved nations.

Members:

- Countries in the alliance include **Australia, Canada, Estonia, Finland, France, Germany, India, Italy, Japan, Norway, Republic of Korea, Sweden, the U.S., and the European Union.**



Created with mapchart



Minerals Security Finance Network (MSFN)

Reducing Dependence on China for Critical Minerals:

- MSFN was created to reduce reliance on countries like China for essential minerals, especially rare earth elements.
- Global demand for these minerals, crucial for clean energy transitions, necessitates cooperation between the public and private sectors.

Initiative Origin:

- MSFN is an extension of the Minerals Security Partnership (MSP), a framework initiated by the US in 2022.
- The goal is to bring institutions from the Indo-Pacific region and Europe together, fostering cooperation, information exchange, and co-financing.
- Development finance institutions (DFIs) and export credit agencies (ECAs) from member countries collaborate to improve production capacity and resilience in mineral supply chains.

Countries Participating in MSFN:

- The initiative includes 14 countries along with the European Commission.
- The participating nations are: USA, Australia, Canada, Estonia, Finland, France, Germany, India, Italy, Japan, Republic of Korea, Norway, Sweden, UK, and the European Union.

India's Participation in MSFN:

- **Objective:** India aims to diversify its supply of critical minerals by collaborating with countries like Argentina, Chile, Australia, and select African nations.
- **Exploration in Central Asia:** India is also looking at Kazakhstan as a potential source for these essential minerals.
- India seeks to establish itself in the lithium value chain, while China currently dominates 70% of rare earth production.

India's Dependence on Imports:

- India relies heavily on importing minerals like lithium, nickel, cobalt, and copper, with a reported import cost of around ₹34,000 crore in FY23.
- As India's demand for these minerals continues to grow, the import cost is expected to rise, increasing the country's vulnerability.



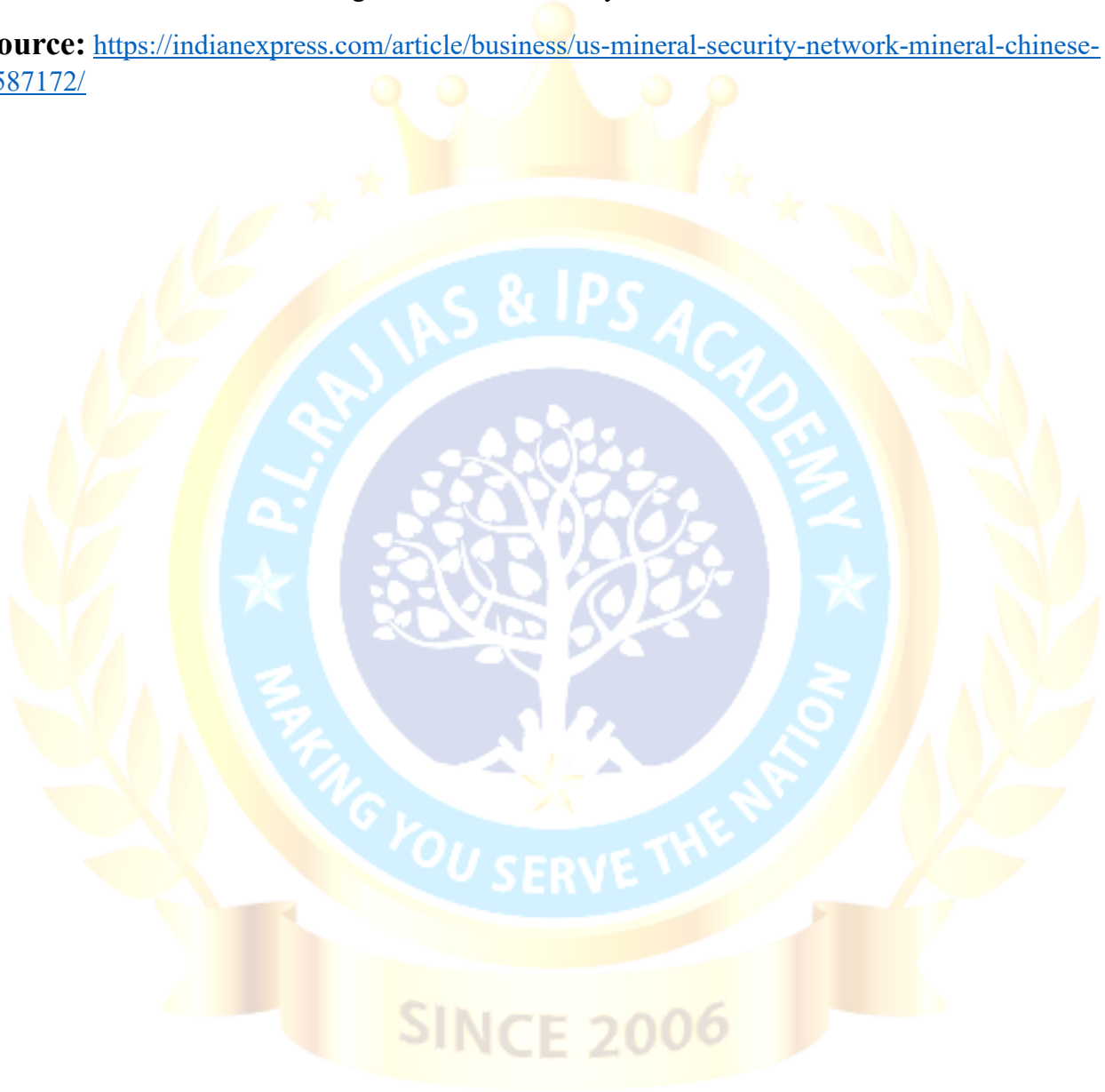
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Strategic Importance:

- This collaboration with the US-led MSFN is a crucial move for India to reduce its reliance on China.
- The goal is to establish a sustainable supply chain to support India's green energy initiatives and long-term mineral security.

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