



IAS PARLIAMENT

Information is Empowering
A Shankar IAS Academy Initiative

India in Mineral Security Partnership

Why in news?

India joined the elite critical minerals club, Mineral Security Partnership to secure critical mineral supply chains.

What is Minerals Security Partnership (MSP)?

- [Minerals Security Partnership](#) (MSP) is a US-led alliance of 14 developed countries launched in June 2022.
- The elite critical minerals club is also known as the '[Critical Minerals Alliance](#)'.
- It was set up to ensure that critical minerals are produced, processed and recycled in a way that it secures critical mineral supply chains.
- It also aims to weaken China's grip on supplies of critical minerals worldwide.
- **Members** - The US, Australia, Canada, Finland, France, Germany, Japan, the Republic of Korea, Sweden, UK, the European Commission, Italy and India.
- India is the only developing country to become a part of the MSP.

India's status of critical minerals?

- India is endowed with and produces over 85 minerals.
- Some of the required critical mineral assets are not yet ready to be mined.
- India is dependent on China and other countries to meet its requirement of critical minerals including Rare Earth Elements (REE)
- Currently, Khanij Bidesh India Ltd. (KABIL), is taking charge of ensuring mineral security through facilitating supply chains, mine asset acquisitions, and G2G collaborations.
- Click here to know about [Status of Critical Minerals in India](#)

What does MSP mean to India?

- India is the first major developing country to join the group, giving it a greater ***international balance***.
- **Knowledge sharing** - MSP membership will help India engage with countries using advanced exploration and extraction technologies and learning from their experience.

Only about 10-20% of India's critical minerals has been explored.

- It will encourage India to make better use of its great geological potential.
- **Strengthening India** - MSP and the critical mineral list could ensure India in ensuring **self-reliance** and addressing **vulnerability** in the supply chain of minerals.
- Getting into alliances like MSP, along with policy initiatives like critical minerals list is so crucial for India's **energy security**.
- Help in India's ambitious shift towards **e-vehicles** and its associated **battery** requirements.
- India's late attempts to enter the **lithium value chain** as India found large [reserves of Lithium](#).
- **China's dominance** - China produces 60% of the world's rare earth elements.
- It has also become a dominant player in refining and processing critical minerals that it does not produce.
- It should enhance efforts for supply chain security, at the time of China's dominance over mining, processing, and refining of many key critical minerals.

What should India do further?

- **Critical Mineral List** - Individual countries identified critical minerals according to their national priorities and future requirements.
- India came up with such a list of [30 critical minerals](#) that it considers essential for its economic development and national security.
- The list is based on the '[Report of the Committee on Identification of Critical Minerals](#)' constituted by the Ministry of Mines.
- **Specialised agency** - The committee also called for a need for establishing a National Institute or Centre of Excellence on critical minerals.
- **Partnerships** - India needs to go beyond MSP and build critical mineral partnerships with key countries such as Japan, the US and Australia.
- India already entered into a partnership with Australia, jointly investing in 5 critical minerals exploration projects in Australia.

Australia produces almost half of the world's lithium, is the second-largest producer of cobalt and the fourth-largest producer of rare earths elements.

- **Utilise geological potential** - India needs to double down on prospecting and exploration efforts to find critical minerals in India.
- **Private players** - India should encourage private sector participation in exploration of minerals.

Quick Facts

Critical minerals - A critical mineral is a metallic or non-metallic element that is essential for the functioning of our modern technologies, economies or national security and there is a risk that its supply chains could be disrupted.

Rare earth minerals - Rare earth minerals comprises 17 elements which are classified as light RE elements (LREE) and heavy RE elements (HREE).

Critical Mineral List (30)

| | | | |
|----------------|-------------------|------------------|---------------|
| 1. Antimony | 15. Nickel | iv. Neodymium | 20. Rhenium |
| 2. Beryllium | 16. PGE | v. Promethium | 21. Selenium |
| 3. Bismuth | i. Platinum | vi. Samarium | 22. Silicon |
| 4. Cadmium | ii. Palladium | vii. Europium | 23. Strontium |
| 5. Cobalt | iii. Rhodium | viii. Gadolinium | 24. Tantalum |
| 6. Copper | iv. Ruthenium | ix. Terbium | 25. Tellurium |
| 7. Gallium | v. Iridium | x. Dysprosium | 26. Tin |
| 8. Germanium | vi. Osmium | xi. Holmium | 27. Titanium |
| 9. Graphite | 17. Phosphorous | xii. Erbium | 28. Tungsten |
| 10. Hafnium | 18. Potash | xiii. Thulium | 29. Vanadium |
| 11. Indium | 19. REE | xiv. Ytterbium | 30. Zirconium |
| 12. Lithium | i. Lanthanum | xv. Lutetium | |
| 13. Molybdenum | ii. Cerium | xvi. Scandium | |
| 14. Niobium | iii. Praseodymium | xvii. Yttrium | |

Activate Windows
Go to Settings to activate

References

1. [The Print - How MSP can help India harness critical minerals potential](#)
2. [IE - India joins US-led critical mineral club](#)
3. [Business Standard - Minerals Security Partnership: why is it important?](#)



IAS PARLIAMENT
Information is Empowering
A Shankar IAS Academy Initiative