

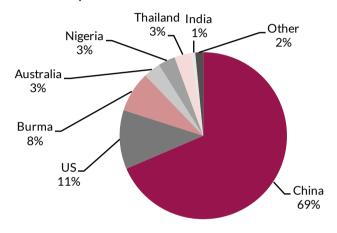
India Metals & Mining

Rare Earth Elements - Where does India stand?

Metals & Mining | Sector Flash Note | June 18, 2025

Imposition of export restrictions by China on seven key rare earth elements (REEs) - samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium - has created a global concern for user industries (automotive, clean energy, electronic devices, medical devices etc) (refer note from our automotive team). China controls ~70% of global rare earth mining and ~90% of processing (an environmentally sensitive activity), giving it immense leverage over global supply chains. While India possesses the third largest deposit of REEs in the world, its production share is less than 1% (Exhibits 1-3).

Exhibit 1: 2024 REEs production between countries



Source: Axis Capital, USGS

What is India doing to develop REEs and other critical minerals?

REEs are a group of 17 elements (15 lanthanides plus scandium and yttrium) which are crucial for clean energy, digital technology, medical devices and defense. While REEs are amply available in earth's crust, they are tough to mine in usable concentrations. Indian Rare Earths Ltd, a government-owned company, is currently mining and processing beach sand minerals from its plants in Kerala (Chavara) and Odisha (Chatrapur).

India has launched the <u>National Critical Mineral Mission</u> (NCMM) in 2025 in order to enhance India's self-reliance in the critical minerals sector (including REEs). It aims to strengthen the entire value chain of critical minerals, including mining, processing, and recycling, while fostering international partnerships and private sector participation. NCMM will have a budget of Rs 343 bn to be spent over seven years (FY25-31) – Rs 163 expenditure from the Central Government and Rs 180 bn to be invested by PSUs.

Companies collaborating with NCMM

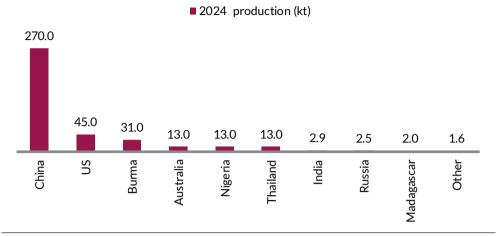
- GMDC is setting up a rare earth processing facility at Ambadongar in Gujarat, focusing on key elements like neodymium and praseodymium used in EVs and electronics. It is conducting viability studies to build a full value chain from mining to oxide production.
- NMDC has signed a MoU with Indian Rare Earths Limited (IREL) to jointly explore and develop rare earth opportunities both in India and abroad which also includes setting up a downstream value chain for rare earth products.
- Coal India Ltd (CIL) has also <u>signed</u> a MoU with Indian Rare Earths Limited (IREL) to explore and develop REEs and other critical minerals. It is also scouting for overseas assets in countries like Australia and Chile to strengthen India's mineral security.

Amit Murarka amit.murarka@axiscap.in Darshan Mehta darshan.mehta@axiscap.in

Atishay Santhalia atishay.santhalia@axiscap.in

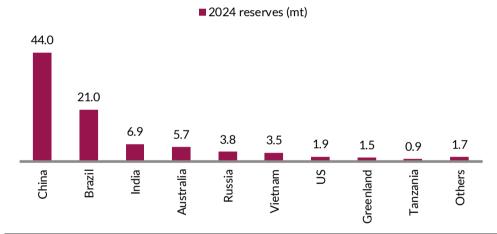


Exhibit 2: REE production - China is the largest supplier by a long distance



Source: Axis Capital, USGS

Exhibit 3: REE reserves - India has the third largest deposit of REEs in the world



Source: Axis Capital, USGS



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