Rare earth supply pinch puts India's EV makers on a six-week clock

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China's new export restrictions on rare earth metals (REM), which took effect on April 4, are already causing delays in supply to Indian automotive manufacturers and are expected to disrupt production — especially of electric vehicles (EVs) — as original equipment manufacturers (OEMs) in the country have inventories sufficient for only six to eight weeks, say industry experts.

However, sources reveal that the request by a joint delegation comprising representatives from the Society of Indian Automobile Manufacturers (Siam) and the Automotive Component Manufacturers Association of India (Acma) to meet senior Chinese government officials to raise concerns over the situation is yet to be cleared by the authorities on both sides. The regulations have created procedural bottlenecks, in addition to shipment delays, threatening to hit production and result in price increases in the coming weeks.

Under the hood

- China's REM curbs slowing supplies to Indian OEMs
- Production halts likely by July
- Backup from Japan, Vietnam not an option
- Key magnets (NdFeB) have no viable short-term alternatives
- India makes 1,500 tonnes versus 15,400-tonne demand by 2032
- Delegation to China awaiting clearance

China controls 92 per cent of global REM magnet production, with other players like Japan (7 per cent) and Vietnam (1 per cent) contributing marginally. "This is vital for the industry, and we cannot even tap alternative markets. Japan and Vietnam are producing for their domestic consumption only, while Ukrainian units are shut due to the war," said an industry source, revealing that the request by Siam and Acma to go to China is yet to get a go-ahead.

"Most OEMs hold REM inventories sufficient for only six to eight weeks, after which production lines risk disruption. Bajaj Auto's warning about a July slowdown reflects this thin buffer," said Nikhil Dhaka, vice-president, Primus Partners.

With demand for EVs growing rapidly, India's REM consumption — particularly of neodymium-iron-boron (NdFeB) magnets — is expected to rise multifold to 15,400 tonnes by 2032, with a value of ₹15,678 crore, up from around 1,700 tonnes worth ₹1,255 crore in 2022, according to industry estimates.

Despite having the fifth-largest rare earth reserves, India currently produces only 1,500 tonnes of neodymium-praseodymium (NdPr) annually through IREL (India) — formerly Indian Rare Earths — with limited downstream magnet manufacturing capacity.

"The impact is potentially significant, especially for electric two-wheelers, which are the fastest-growing EV category in India. REMs, particularly NdFeB magnets, are indispensable in EV motors due to their high power-to-weight ratio and compact size. On average, 600 grams of these magnets are used per two-wheeler," said Dhaka. The applications of REMs span electric motors, power electronics, battery cooling and assembly modules, and sensor-based systems.

Industry experts highlight that any break in the supply chain can trigger production halts for EV models, increased costs due to reliance on more expensive non-Chinese or spot-market magnet sources, delays in deliveries and shrinking dealer inventories, and reduced margins or price hikes — potentially dampening consumer demand during a critical market expansion phase in India.

"What compounds this challenge is the exploding demand outlook. In 2024, REM demand in the two-wheeler segment was estimated at 600 tonnes. By 2030, this is projected to rise nearly tenfold to 5,538.3 tonnes. This growth trajectory reflects India's broader EV transition and its deepening vulnerability if supply chains remain externally dependent," Dhaka added.