Hindustan Zinc plans 10-mtpa tailings recycling plant

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Hindustan Zinc plans to set up a 10 million tonne per annum (mtpa) tailings recycling plant to extract zinc and critical minerals, including germanium, from mining waste, with the project expected to become operational in about two years, said Amarendu Prakash, CEO. The company has completed conceptual designs and engineering work and is in the implementation phase. However, the investment outlay has not been finalised, as Hindustan Zinc is evaluating technologies for processing mining waste and extracting metals through metallurgical and chemical processes.



Prakash told *businessline* that the project involved two components: Handling and processing the tailings, including through hydro-mining, and recovering metals from the mineral-rich material. The company expects the project to become operational in about two years.

Prakash described it as a new technology with limited applications globally, adding that the company was assessing the potential costs as it moves ahead with implementation. "Yesterday's waste is becoming today's ore," he said, explaining that higher metal prices and advances in extraction technology were making previously discarded material economically viable.

COST REDUCTION

Amit Gupta, Chief Financial Officer, said the company expects its cost of production (CoP) for zinc to average $825-850 per tonne for the full year, against an earlier target of about $1,000 or slightly lower. Hindustan Zinc is retaining its production-volume guidance and expects to achieve the targeted volumes in the second half of the financial year.

For silver, the company is targeting production of 680 tonnes for the full year. It produced more than 320 tonne in the first half, apart from around 20 tonnes sold in concentrate, and remains confident of meeting its annual guidance.

Prakash said persistent global silver supply shortages and rising demand offered opportunities to expand capacity and sustain margins.

Hindustan Zinc is exploring plans to increase its silver production capacity to capitalise on the market outlook.

MINING CAPACITY

Hindustan Zinc plans to increase its mining capacity from 18 mt to 35 mt over the next two-five years.

Prakash said ageing mines and declining ore grades could constrain global zinc mine supply even as demand increases.

The company is developing value-added zinc alloys and other products to absorb additional output. It has promoted a zinc park in Rajasthan to encourage downstream players to establish facilities near its operations.

Prakash said the company was progressing with exploration across four critical mineral blocks in India.

On the global zinc market, Prakash cited projected 2026 refined zinc demand of 13.87 million tonnes against supply of 13.69 mt, indicating a deficit of about 180,000 tonnes.

He said the Vedanta Group's investment in a South African zinc mine reflected expectations of sustained demand growth.