

ASIA

A visit to Oman's first tailings plant

The Arjaa Tailing Processing Calibration Plant will focus on copper cathode recovery

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On the three-and-a-half-hour drive from Muscat to Sohar, there's a point where the highway slips between sheer, sun-battered mountain ranges that look like they were hewn together by an ancient chisel.

If you're lucky, the light catches the strata just right and you see veins of pink and white marble cut into the rock - remnants of old quarries.

Elsewhere in the country, entire mountains are made of pale limestone, folded together like layers in a book. The most prominent are the Al Hajar mountains, not far from Muscat.

Oman's landscape is a study in sediment and stone, layered and exposed, as if the earth itself were offering up its minerals.

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This was once a mining country. It had been for over 5,000 years, long before oil made the <u>Gulf</u> rich.

Critical push

Now, as the world moves away from fossil fuels and towards 'critical minerals', Oman is once again turning its eyes to the earth - this time, not for oil, but for copper. And with renewed mining activity comes the challenge, and opportunity, of <u>managing waste</u>.

At the centre of this renewed focus is a quiet, remote facility nestled among the dusty hills outside Sohar: the Arjaa Tailing Processing Calibration Plant, built by Green Tech Mining & Services (GTMS).

Though small, the plant marks the start of something far more ambitious—a full-scale tailings reprocessing operation that will turn waste into resources, in <u>Oman and beyond.</u>



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Redirecting funds

"Oman has really done an enormous, great effort in making the investment possibilities into mining very transparent," Ernst Grissemann, executive director of BPG Group, said during an interview after the plant's launch on Monday.

GTMS, a joint venture between Oman Mining Company (a subsidiary of Minerals Development Oman MDO) and Austria's BPG Group, is an unusual fusion of state and international private-sector capital.

Backed by €100 million in green bond financing, which is certified by Austria's Ministry of Climate Action under one of Europe's most stringent environmental standards, the project is one of the first to use a natural restoration related financial instrument to <u>fund a mining-related operation</u>.



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Grey area

The plant will mostly process legacy tailings, residuals from decades-old copper mining, through agitation leaching followed by solvent extraction and electrowinning (SX/EW). From this slurry of oxidised rock, GTMS will extract high-purity copper cathodes. In time, they hope to pull out silver and gold as well.

GTMS hopes to treat 10,000 t of tailings per day at full operation. With 90% uptime, that's 3.3 Mt annually.

From this, the company expects to recover 17,000 tonnes of copper per year, positioning Oman as a miner, recycler and restorer.

Operations at the site will begin in earnest after Eid al-Adha.



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Operational considerations

Like elsewhere in the Gulf, much of the labour time consists of expatriate workers from South Asia, who live at an accommodation 20 minutes from the remote site.

Site director Abdul Kader, an expatriate from Turkey, explained the plant's structure and safeguards while leading a quiet, dusty tour, on Monday (June 2).

To reduce risk, every processing unit is double-contained, Kader said. If acid or solvent leaks, the system automatically isolates the breach.

The plant's technology is fairly standard for a tailings operation, but the financing model and focus on generating copper cathodes as the end result, gives it a commercial edge.

"Nobody in this world tries to do what we are doing. Some think of ESG, but nobody leads with it," Grissemann said.



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International eyes

The launch event was also attended by Sami Dimassi, regional director at the UN Environment Programme for West Asia, who noted that the project has not yet been approved by UNEP, but said the agency is following its progress with interest.

"The emphasis on green copper aligns [with our focus]," Dimassi said during the long drive to the site.

GTMS is also exploring similar projects in Europe and Central Asia, where legacy mining waste poses both an environmental threat and a potential economic opportunity. "Our goal is to replicate what we've done here," said GTMS managing director Imran Shaikh

Copper revival

The Arjaa launch comes amid a broader revival of copper production in Oman. MDO restarted operations at the Lasail Mine in Sohar last year, marking the first shipment of copper concentrates from the country in nearly three decades.

Another mine, Al-Baydha in Liwa, is set to begin production by 2026. Altogether, these efforts underscore the Sultanate's goal to diversify its oil-heavy economy by 2040 - similar to Saudi's Vision 2030.

While hopeful optimism filled speeches at the launch, the desert location itself told a quieter story. The mountains near Sohar are shaped by decades of extractive activity, pits, piles, rusted drums, and now by the possibility of repair.

As the sun slipped behind the ridges and guests loaded onto SUVs en route to Muscat, the sharp geometry of pipes and tanks caught the orange light. Whether GTMS's launch signals a turning point for tailings in Oman, or the start of a broader model for green mining elsewhere, it seems overall a good first step.

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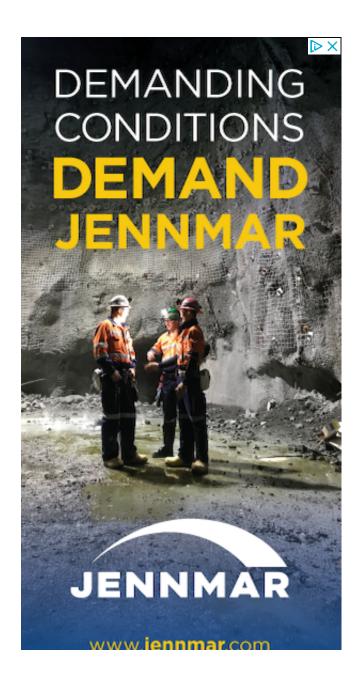
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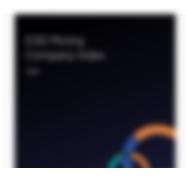
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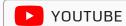
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