

Australian Rare Earths Limited

Focused on energy transition metals in South Australia

Australian Rare Earths Limited (ASX:AR3) is developing the Koppamurra rare earths project in south-east South Australia and is expanding into other energy transition metals via uranium exploration, with the option to acquire the highly prospective Overland project in South Australia. Koppamurra is a prospective ionic clay-hosted rare earth deposit, rich in critical magnet rare earths including neodymium (Nd), praseodymium (Pr), dysprosium (Dy) and terbium (Tb), which are essential components in electric vehicles, wind turbines and domestic appliances. AR3 has recently completed an 8,750m drilling programme at Koppamurra to extend the known mineralisation for resource definition upgrades in an area previously drill-tested. The results were similar to the existing mineral resource estimate and provides some confidence in the widespread nature of a high-grade mineral resource (ASX release 17 April). The next steps for the company are to finalise assay results, advance the metallurgical test work to support a progressive heap leach development pathway and progress water treatment and recycling test work.

Portfolio description

Australian Rare Earths owns the Koppamurra rare earths project in SA and holds an option to acquire 100% of Valrico Resources Pty Ltd which owns 100% of the Overland uranium project. AR3 also holds rare earth tenements in north Queensland, on which field work commenced in the last quarter. Of the projects, Koppamurra is the most advanced, with a mineral resource estimate of 186Mt at 712ppm (parts per million) total rare earth oxide (TREO). Recently, additional drilling has been undertaken to extend the resource in previously untested areas and provide resource definition upgrades. Drilling results delivered high-grade mineralisation intersections in the existing Koppamurra resource including 2m at 1,387ppm TREO from 3m with 18.5% NdPr and 1.6% Dy, and 5m at 1,828 TREO from 4m with 22.4% NdPr and 1.9% Dy. On the previously undrilled southern end of the resource, high-grade mineralisation was intersected including 3m at 4,995ppm TREO from 3m with 21.1% NdPr and 1.7% Dy, and 3m at 2,180ppm TREO from 9m with 27.2% NdPr and 3.0% Dy.

Metallurgical testwork points to a low capital and costs pathway

The company recently announced (ASX release 2 April) that metallurgical test work conducted at Koppamurra has identified an improved approach for efficient extraction of rare earths through a progressive heap leach and rapid rehabilitation approach. This approach offers lower capital and operating costs compared to the alternative tank leach process, with improved environmental sustainability from very low water consumption, reduced power consumption and faster rehabilitation of the mine. Next steps for the current quarter include further test work to support the progressive heap leach pathway and progress on water treatment and recycling test work.

Several ASX-listed peers

There are several ASX-listed critical minerals and REE producers and explorers of similar market capitalisation to AR3 including Enova Mining (ASX:ENV), Globe Metals and Mining (ASX:GBE), Rarex (ASX:REE) and Venus Metals Corporation (ASX:VMC). Interest in the sector appears to have been reignited following recent investments by Gina Rinehart's Hancock Prospecting in Lynas, MP Minerals, Arafura Rare Earths and Brazilian Rare Earths (<https://www.hancockprospecting.com.au/australia-to-benefit-from-rineharts-rare-earths-battle-with-china/>).

Share Details

ASX code	AR3
Share price (26-Apr)	\$0.115
Market capitalisation	\$17.9M
Number of shares	155.9M
Unlisted options	36.0M
Net cash at 31-Mar-2024	\$9.125M

Share Price Performance (12 months)



Upside Case

- Significant upgrade to Koppamurra mineral resource
- US, Australia, Canada, UK and EU have all designated REE as critical due to supply risk and economic importance
- Overland project delivers a significant uranium resource

Downside Case

- Valrico fails to secure exploration permits
- Investor appetite for REE projects wanes
- REE commodity prices decline, demand reduces

Catalysts

- Additional assay results from Koppamurra
- Exploration permits for Overland
- Completion of metallurgical test-work on progressive heap leach pathway

Comparative Companies (Australia & NZ)

ENV, GBE, REE, VMC

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FINANCIAL SERVICES GUIDE

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