

METALLICA MINERALS

RESOURCESTOCKS

TRI-METAL DEVELOPER A MUST BUY

Undervalued is a term used by all exploration company executives to spruik their stock. Rarely is it as true and blatantly obvious as in the case of Metallica Minerals.

ON THE VALUE OF ITS cash holdings and listed investments alone, the company is running at a massive discount.

This is before taking into account its flagship tri-metal NORNICO project, which has the potential to be a significant long term producer of nickel and cobalt plus become the major world supplier of rare earth metal scandium.

NORNICO, in north Queensland, has a shallow nickel-cobalt laterite resource of 49 million tonnes at 0.81% nickel and 0.09% cobalt, for 400,000t of contained nickel and 42,000t cobalt.

As Metallica managing director Andrew Gillies explained, the deposit has been extensively drilled, with 90% of the resource in the measured and indicated category.

On top of the considerable laterite or oxide nickel-cobalt resource there is a separate high-grade scandium resource.

Scandium is a rare metal used to enhance aluminium alloys for a variety of industrial and commercial applications, particularly for strong, lightweight frames.

The Lucknow and Kokomo deposits at NORNICO contain a resource of 15.1Mt at 133 grams per

tonne of scandium (using a 70gpt cut-off grade) for more than 3,000t of scandium oxide.

This brings the tri-metal resource tonnage at the project to about 65Mt.

"We have effectively completed the exploration phase and are entering in to more detailed metallurgy, mining studies, feasibility studies, environmental and permitting," Gillies said.

"Metallica will obviously be focusing on the higher grade portions, the best 10 million tonnes or so, for at least the first 15 to 20 years, assuming at least 500,000 tonnes per annum throughput."

This 500,000tpa base-case scenario would support a high-pressure acid leach (HPAL) operation at the Greenvale mine site.

The initial plan would be to blend nickel-cobalt laterite ore from Greenvale with scandium-cobalt laterites from Lucknow. Ore from Kokomo would be added to the mine plan in later years and trucked 55km to the Greenvale HPAL processing facility.

"Metal production would be in the order of 6000 tonnes per annum of nickel metal, 700 tonnes per annum of cobalt as cobalt sulphide and at least 40,000 kilograms of scandium oxide [99.9% purity], with the potential

to produce 150,000 kilograms per annum of scandium oxide," Gillies said. "We only recently started our cost estimation studies for the HPAL operation, however we expect to total capital cost to be around \$450-500 million."

Mining would be from a series of shallow open pits to a maximum depth of 55m, with most areas being mined shallower than 30m.

"Compared to most other nickel laterite operations, either on tropical islands or inland on continents, NORNICO is excellently located on the Greenvale mine site [in operation 1974-1992] only two and a half hours on a sealed road from Townsville, close to the Greenvale township, water, power and limestone," Gillies said.

The decision to focus on a HPAL process instead of atmospheric leaching, as originally intended, was due to factors including economies of scale, certainty of process, lower operating expenses and the ability to treat the high-value, scandium-rich high iron ore types.

Initial HPAL test work returned excellent metal extraction results on Greenvale and Lucknow ores.

Metallica expects average nickel-cobalt extraction to be greater than 90%. The company achieved a 96% extraction of scandium metal using 265kg/t of acid in 60 minutes which Gillies said was "extremely encouraging".

"We do expect lower extractions for scandium on the nickel-cobalt ores, where scandium levels are below about 50 grams per tonne," he said.

"Although the capital cost will have increased substantially from around \$140 million for the 200,000

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ANDREW GILLIES
METALLICA MINERALS



tonne per annum AAL operation to now, say, \$450 million, the actual capital and operating cost per unit of metal production will be reduced significantly – making for a more robust project.”

The presence of high grade scandium mineralisation provides Metallica with a strong competitive advantage.

“There are currently only three scandium resources in the world and Metallica has two of them with Lucknow and Kokomo,” Gillies said.

“Although it’s fairly abundant in the earth’s crust, due to their geochemical properties scandium is typically dispersed and only very rarely concentrated in economically exploitable deposits.

“Metallica is fortunate that not only does NORNICO have high grade scandium ores but that they are concentrated in iron oxides in the laterite oxide zone and are readily amenable to acid leaching and easily recoverable.”

The world market for scandium has been severely restricted on scandium supply but NORNICO can change this by providing a long-term reliable supply for end users to commence confident development of products using scandium-aluminium alloys, scandium solid oxide fuel cells and metal halide lighting.

“We believe it’s literally a case of significant demand awaiting reliable supply to give birth to a new metal market,” Gillies said.

“The trend the world over is the endless pursuit of high-quality, ever more efficient devices.”

The focus now, to get NORNICO closer to development, is to complete the mining and metallurgical studies and firm up operating and capital cost estimates.

“We are currently completing the mining studies to work out what portions of the Greenvale, Lucknow and Kokomo resources are mineable using various cost and metal price assumptions, which we will then use to produce a mining ore schedule to use as plant feed for the feasibility studies and financial analysis,” Gillies said.

“We are looking at building up our NORNICO project team in coming months with professionals experienced in feasibility, HPAL metallurgy, engineering, and project delivery.”

As a secondary strategy, Metallica’s 100%-owned subsidiary Oresome Australia Pty Ltd is developing the Weipa mineral sands



project on the west coast of Cape York.

The project is centred on the Urquhart Point zircon-rutile rich heavy mineral sand (HMS) deposit, which contains a modest resource of 2.8Mt at 7% HMS with a high proportion of zircon and rutile to a maximum depth of only 3m.

A further 9km of coastline strike to the south is yet to be tested.

“Metallurgically the sand is excellent, as it is coarse grained with practically no slimes, and the zircon has low levels of uranium-thorium which should provide for it receiving a premium zircon price,” Gillies said.

“We are undertaking dry and wet season environmental studies and at this stage there are no major issues identified of concern.

“Our target for first zircon-rutile concentrate production is early 2013.

“Most importantly we have an excellent rapport with the traditional land owners, who after many meetings and site visits to date are behind supporting the project’s development.”

Then there is the ever-important point about undervaluation of Metallica shares.

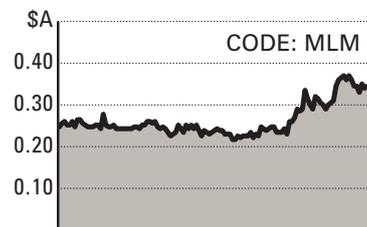
The company holds listed investments worth more than \$50 million. Its cash balance will be \$8.5 million, after a soon to be completed fully-underwritten rights issue raising \$4.9 million.

As *RESOURCESTOCKS* went to print, the company’s market capitalisation was hovering around the \$45 million mark. Its 80 million shares in Surat Basin coal explorer MetroCoal alone was worth more than \$40 million.

So the opportunity for gains from investing in Metallica is huge, particularly as it advances its plans to be a long-life nickel-cobalt and scandium producer. – **Blake Wilshaw**

The Greenvale mine site with visible laterite exposure

METALLICA MINERALS AT A GLANCE



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MARKET CAPITALISATION

\$A45.14 million (at press time)

QUOTED SHARES ON ISSUE

117,070,645

MAJOR SHAREHOLDERS

Jien Mining Pty Ltd 19.5%
Golden Breed Pty Ltd 7.5%
Resource Capital Funds III and IV LP 6.1%