



Blue Sky

Metallica's potential fuels US interest

Readers could be forgiven for never having heard of scandium, one of the more obscure members of the rare earth family.

But if the positioning seen over the past couple of weeks is anything to go by, the explorers touting the scandium demand growth story may just be worth taking a look at.

Scandium has two major applications – aluminium alloys and fuel-cell electricity generation. Both are high-tech applications that bring cost benefits from greater efficiency.

Aluminium-scandium alloys have significant strength-to-weight, weldability, durability and corrosion-resistance advantages, and are mostly used in the aerospace industry.

Scandium hopefuls think the metal can be used more broadly in alloys if there is a reliable global source of supply, as just 10 tonnes of the metal is now produced globally (from secondary sources) each year.

But it's the fuel-cell side of the demand story that is generating huge excitement.

There's a complex explanation for why using scandium to build these is good, but Blue Sky thinks you'd stop reading and get back to something else if we went there.

Put simply, companies such as Apple use fuel cells to power things we can all understand (sort of) such as the servers supporting the iCloud. It's cleaner, more efficient base-load power, and private US-based group Bloom Energy, which counts former US secretary of state Colin Powell as an independent director, is an emerging leader in the industry due to the efficiency of its technology.

Bloom has a long list of blue-chip clients, including Google, Wal-Mart, Coca-Cola, FedEx, eBay and Bank of America.

On Thursday, tiddler Jervois Mining raised a few eyebrows when it disclosed that Bloom had made an unsuccessful \$4 million offer to buy its Nyngan scandium project in NSW.

It came little over a week after Bloom signed a heads of agreement with the bigger and more advanced Metallica Minerals, for the supply of 30-60 tonnes of scandium a year – which equates to more than three times current global supply. Metallica also signed a memorandum of understanding with leading alloy producer KBM Affilips.

Metallica's Sconi project in Queensland is the most advanced scandium project anywhere and the Brisbane-based explorer believes it may produce up to 100 tonnes a year. The group is about to kick off a bankable feasibility study for Sconi (which stands for scandium, cobalt, nickel) and has already produced pure scandium oxide from the project with its proprietary extraction process.

Metallica is capped at \$42 million only and its top 20 shareholders control a nearly 55 per cent stake. It's looking at a \$600 million build cost but with rising interest in securing supply, project financing may be forthcoming from one of the big offtake partners.

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Watchers of the junior oil and gas space will recall Advent Energy's now-stalled bid to firm up large gas resources off the Sydney coast, but the private explorer's focus has shifted firmly northwards.

Advent, whose major shareholder is ASX-listed MEC Resources, has a dominant acreage position in the onshore Bonaparte Basin, straddling the West Australia/Northern

Territory border, which has more recently attracted the attention of unconventional gas expert Beach Energy.

The investment arm of the late mining magnate Ken Talbot still retains a 10 per cent holding in Advent, providing something of a stamp of approval, while listed BPH Energy and Grandbridge also have stakes, offering investors a few options to get in on the action.

While the onshore Bonaparte region has no producing fields now, Advent estimates it has about one-third of a trillion cubic feet (tcf) of conventional gas resources in several deposits, which MEC executive director David Breeze believes are about to come of age with the second phase of the Ord River irrigation scheme.

The road and transport infrastructure to be built in the area will open up at least 30 potential customers within a realistic radius who may be in the market for gas to replace expensive diesel.

Providing the blue sky is the shale gas potential, which Advent on Friday updated to 9.6 tcf within its permits. Advent can tap into data from about \$100 million worth of previous seismic and drilling work within its acreage, giving it a useful head start on the technical front.

Talks are under way with a number of industry majors and private equity players to work up the shale gas prospects.

The Blacktip and proposed Ichthys pipelines lie not too far north of the permits, while interest from liquefied natural gas projects in Darwin is keen, offering lots of upside should it come off.

Edited by Ayesha de Kretser





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