

Ardea rests easy on nickel credentials

Ardea Resources Ltd has made substantial progress into an infill resource definition drill programme for the Goongarrie Hub portion of its Kalgoorlie nickel project (KNP) in Western Australia.

Ardea is ahead of schedule on the programme, completing about 300m of drilling a day in the past two weeks on a single drill rig, as it aims to provide the metres required to upgrade the resource from indicated to measured and into five years of proven reserves for its ongoing feasibility study. Ardea chief executive Andrew Penkethman told **Paydirt** the company was on track to demonstrate an “extra level of confidence” to underpin the project’s payback period.

That could become crucial as Ardea looks to bring the KNP on during a period when most Australian nickel players are purely focused on survival. Penkethman said Goongarrie Hub was well placed because of its bottom cost quartile position defined in last year’s PFS.

“If we were in production today, we would still be able to operate profitably at current nickel prices,” Penkethman said. “We are very much cost-competitive with our C1 operating costs, allowing for the cobalt byproduct credit it is still less than \$US6,000/t. We look at some of our peers

suspend operations.”

Penkethman believes the “unique attributes” of Goongarrie Hub will keep costs low compared with other nickel operations.

“Every project is different, and [with] Goongarrie, it comes down to the geology and type of deposits,” he said. “It’s an oxide laterite deposit, it’s shallow and near surface so its amenable to low-cost, low-risk conventional open pit mining. It has a very low strip ratio over the life of mine at 1:1.8. Most of the ore is free dig and is soft and friable so you don’t

need the added complexity and cost of drill-and-blast for the majority of the mine plan, meaning the energy requirement to crush and grind that material for the downstream process is low. And, because it’s goethite, it’s very high in iron which can be extracted from the downstream ore process with minimal acid consumption.”

Ardea also added an “A” rating for the project’s ESG credentials from independent assessment firm, Digbee ESG. Penkethman said Ardea would continue to integrate ESG into the DFS with the rating integral to maintaining a high standing with Japanese project partners Sumitomo Metal Mining Co Ltd and Mitsubishi Corporation.

“They’ll be very keen to see high ESG credentials integrated into the project development,” he said. “Australian nickel products tend to be purchased in preference to other nickel products produced elsewhere in the world.

“[This is] because of the higher ESG standards in Australia and we see that trend continuing. There’s been a lot of discussion about a potential future green premium that may or may not come into play.

“At the very least Australia’s high ESG standards would be very much reflected in the development of Goongarrie. We know our product will be highly sought after, particularly by Australia’s key allies and trading partners like the US, Japan, Korea, EU, UK and India.”



Ardea continues to firm up the potential of the Kalgoorlie nickel project as a future low-cost mining operation

Ardea’s collaboration with the Japanese consortium could be viewed as a lifeline for a nickel industry that is predicted to travel down a bumpy road for quite some time. Penkethman conceded that negative sentiment would outweigh positive stories like Ardea’s for the foreseeable future.

“We know we’re in the midst of a challenging time for the Australian nickel sector and unfortunately that’s tended to dominate the media headlines,” he said. “[But] we will be developing Australia’s next significant nickel-cobalt project, and it is a low-cost operation so we can compete throughout the commodity price cycle. With our partners we will be able to develop and secure the most essential project development capital.

“We are moving forward whereas most of our peers are forced to tread water or in the worst-case scenario, suspend operations, which we hate to see. They will be able to move forward [eventually] even in this challenging period because the fundamentals for nickel haven’t changed.”

– Rhonda Malkin



Andrew Penkethman

in jurisdictions like Indonesia and independent research groups like Fastmarkets and Benchmark Mineral Intelligence which suggest their operating costs are between \$US5,000/t and \$US15,000/t for a range of nickel products. So, I think we’re very much cost competitive, and I think that it’s the most important point despite the unfortunate fact that a number of operators in Australia have been forced to move into care-and-maintenance and