

Riding iron from Mauritania to the Middle East

Five years ago, Sphere forecast the current iron ore boom and established a joint venture with a 12 million tonne per annum iron ore producer in Mauritania.

By Chris Cann

It's wonderful when a plan comes together. Just ask Sphere Investments managing director Alex Burns, who is at the helm of what is shaping up as a major iron ore play in Africa.

Five years ago, Burns came across an opportunity to invest in the West African nation of Mauritania — a place that, at that time, was scarcely mentioned in resources circles.

His father Alan Burns is the chairman of oil and gas success story Hardman Resources, which in partnership with Woodside and other partners discovered oil and gas riches off the Mauritanian coast.

In October 2001, Sphere negotiated a joint venture deal with 87% government-owned Mauritanian iron ore producer SociÉTÉ Nationale Industrielle et MiniÈre (SNIM) over the Guelb el Aouj iron ore project, an undeveloped magnetite deposit next to SNIM's existing mining operations, where the partners now plan to develop a 7Mtpa direct reduced iron (DR) pellet project.

SNIM produces 12Mt of iron ore per annum, making it the seventh largest supplier into the international trading market and a significant player with which to be in partnership.

A year of plane trips by Burns and executive director John Bylsma — himself an 18-year veteran with Hamersley Iron — to and from Mauritania, to assess the project and negotiate terms, secured Sphere a 50:50 joint venture over Guelb el Aouj in return for expenditure of \$US11 million on a three-stage bankable feasibility study.

The costs of project assessments have since doubled the cost of the BFS, but in that time the scope of the project and iron ore prices have also increased significantly.

After several years of solid hard work, Burns is now discussing offtake and investment options with major steel mills and reflecting on a 2005 that saw the stock appreciate by more than 100%.

The share price was around 95c at the time of writing, after recovering from an early August hiccup when a short bloodless coup ousted the incumbent government and briefly sent Sphere shares below 60c.

Burns said the new Mauritanian Government had confirmed its support of Sphere and the project.

He said a market with an improving awareness of African opportunities meant the political scare was a minor issue from which Sphere's share price recovered quickly.

Capping off a superb 2005 was an initial resource estimate for the project's East deposit of 450 million tonnes grading 36.4% iron.

That figure took the total resource from both the Centre and East deposits to 675Mt grading 36.4% iron — three times the previous estimate from the Centre deposit alone — which has prompted Burns to predict a mine life eclipsing 50 years in anticipation of further tonnages from the partially explored project.

"At the moment, the East deposit alone has a 30-year mine life," Burns said.

"If you include Centre and the potential of the other deposits within the JV area, there may be over a billion tonnes."

Of particular importance to Sphere is the high 70% iron grade that the ore emerges at after beneficiation, which allows the production of DR pellets that can be sold as direct feed into cost-effective electric arc furnaces in the Middle East. DR pellets are the highest quality of iron available to the market.

Sphere has completed Stage 1 of the BFS, earning a 20% interest in the process, and what the company describes as stage 2A, and has recently embarked on stage 2B.

Stage 1 saw a scoping study, including a review of historical data and an eight-hole drill program on the Centre deposit to delineate an inferred resource. Metallurgical work followed.



Sphere Investments managing director Alex Burns: "Given our position in the market and scope of our project, I see no reason why we shouldn't be producing iron ore at generous margins within a few years".

"We did that work to see if the fundamentals of the project were there — the size of the resource and determining if it can make a product," Burns said.

That work delineated a resource at the Centre deposit of 225Mt at 36% iron, and confirmed Guelb el Aouj as a viable economic project.

Sphere set its sights on at least a 30-year mine life, and during Stage 2A repeated the Stage 1 process on the East deposit, which the geological team, led by their exploration manager, had correctly predicted to be even better than Centre.

Burns said the East deposit had been only partially drilled, and his team believed the deposit was capable of hosting at least 300Mt of ore in addition to Centre's 225Mt.

"During Stage 2B, we'll look at four or five project configuration options before choosing the optimum scenario for final engineering and development," he said.

"We've made the decision to focus on the East deposit, which we believe has enough ore to support at least a 30-year operation, so we're not even looking at the Centre deposit for the time being while we concentrate on bringing East into production."

Guelb el Aouj is close to SNIM's established iron ore railway, which runs directly to their 160,000DWT capacity port.

Sphere will build a beneficiation plant and pelletising plant at the mine or at the port, depending on availability of water, to produce 7Mtpa of high-grade pellets for export.

Final engineering studies and costings are scheduled for completion in the first quarter of 2007, with a decision to mine to follow soon thereafter.

Burns anticipates few problems securing project finance, with organisations as large and influential as the European Investment Bank already on



Sphere expects its Mauritanian iron ore project to continue to grow as more drilling is carried out.

board, but said finance had not always been seen as a non-issue for Sphere.

“We struggled in the early days to attract any interest from financial backers,” he said.

“Iron ore was seen as the great sleeping commodity of the past three decades, and was not something people wanted to know about or understood five years ago. We took a big strategic decision to pursue the project based on our view of the market, SNIM’s existing iron ore infrastructure and experience, and the merits of the project,” he said.

“All of a sudden everyone wants to be an iron ore producer, now that the supply and demand fundamentals have changed structurally and, in our view, for the long term.”

ASX-listed investment company Lion Selection Group was the first of several institutions to come on board in March 2004, when it provided seed capital for Stage 1.

Burns said attracting investment from the European Investment Bank in November 2004 was both vital for the project and instrumental in procuring other institutional backers.

“When the EIB stood up and said it was prepared to back the project, that gave us a strong degree of credibility in a wide range of circles,” he said.

“Other financiers saw we had Lion Selection and the EIB prepared to back Sphere, and were therefore convinced that the project must be of interest.”

Like so many Australian companies developing large-scale mining projects in countries better understood by European markets, Sphere plans to list on London’s AIM during 2006.

Start-up capital for the project is estimated at \$US850 million.

“Sphere’s responsibility is to carry out the BFS and provide half of the equity required to develop the project, which, based on a 60 percent debt level, would be \$US170 million,” Burns said.

The prize is a 50% share of a 30-year operation producing 7Mt of DR-grade pellets a year and generating over \$US650 million annually, based on current DR pellet prices.

Burns expects the long-range price of iron ore, including DR pellets, to remain strong, although the economic robustness of the project has been tested using historic pricing.

He said recent iron ore price increases were the result of a structural, fundamental and permanent change in the iron ore business on both the supply and demand side of the equation.

Based on the incredible appetite for iron ore from China and other emerging economies, and the consolidation on the supply side, Burns believes that iron ore prices will follow cycles as before, but based around a new “price axis”.

Also in the company’s favour is the proximity of Guelb el Aouj to its target markets in the Middle East and North Africa. The main DR pellet producers are Brazilian iron giant CVRD and Sweden’s government-owned producer LKAB. The shorter shipping distance from Guelb el Aouj to market will mean freight savings for DR pellets from Mauritania, one of the major ongoing costs of iron ore operations.

Importantly, SNIM is the only member of the Arab Iron and Steel Union (AISU) that produces iron ore. The other

members from Saudi Arabia, Qatar, Kuwait and the other Arab nations are all steel producers that mostly produce Direct Reduced Iron (DRI). DRI is produced in most cases from DR pellets and natural gas (plentiful in the target markets).

Due to the growth in DRI production and a lack of availability of DR pellets, the benchmark price of DR pellets increased by a whopping 90% last year alone.

“Given our position in the market and scope of our project, I see no reason why we shouldn’t be producing iron ore at generous margins within a few years,” he said.

“In light of the level of interest we have received from steel producers in sourcing DR pellets from Mauritania, we are assessing the potential of our other deposits.”

Sphere has just announced that one of the deposits has recently been reviewed for its potential and has a target of 450-600Mt, potentially making it larger than East & pushing the joint venture’s scope well beyond the 1 billion tonne level if proven up by drilling.

Burns said Sphere would continue to move forward in the development of Guelb el Aouj using the same professional and thorough methodology that had made them one of the clear favourites among the host of emerging iron ore producers. **RS**

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... at a glance

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MARKET CAPITALISATION
\$66 million (at print time)

MAJOR SHAREHOLDERS
ANZ 12.64%
African Lion/African Lion 2 10.49%
A Burns & related holdings 8.49%
National Nominees 7.59%
T King & related holdings 7.07%