All eyes on the prize

With the collective appetite of the world’s steel makers likely only to increase, there has never been a better time to be the hand that feeds them, as Becky Done finds out in discussion with Michael Jones and Victoria Sherwood of African Minerals.
Steel mills across the globe gobble up a massive 98 per cent of the world’s total iron ore output—little wonder, then, that both demand and prices are currently experiencing record highs. For African Minerals, the company developing the largest magnetite iron ore project on the African continent, these are exciting times indeed.

Founded in 1996, the company was originally known as the Sierra Leone Diamond Company, with a focus on the prolific alluvial diamonds that had previously been exploited within the West African country. In 2005, following years of civil war, the company funded exploration of possible targets within a number of mineral licences it had amassed; but no significant sources of diamonds were revealed. What did come to light, however, were some gold, nickel and uranium showings and—crucially—iron ore showings.

As a result, in 2008 the company’s focus turned towards the major anomalies of iron ore discovered at Tonkolili, in Sierra Leone’s Northern Province. Late that year, the discovery hole for the magnetite resource was established, and the company’s name was changed to African Minerals, to reflect the broad-based nature of the mineral activity during the exploration of the previous three years.

From then to now, development at Tonkolili has been rapid, to say the least. The company expects to have its first ore on ship by quarter four of 2011—a timeframe of just three short years since discovery.
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So in November 2008 African Minerals secured a 99-year lease on the rail and port infrastructure surrounding the project. Fortunately, there was some pre-existing infrastructure from a previous mine operation which enabled the company to fast-track the development of the port operation at Pepel, as well as the first 74 kilometres of the railway—essentially a rehabilitation of what had previously existed.

The company was still exploring at the same time that it had actually started construction; but in terms of risk, it was a fairly safe bet. “We had enough data to know we had a quality asset in Tonkolili, the magnetite being of significant quality,” explains Sherwood. “There was still a lot more exploration and validation that needed to be done on that, but whatever that amounted to, it was certainly going to be a saleable product—and if you’ve got a saleable product you need a rail and a port operation to ship it through.”

By this time, of course, a serious amount of money had already been spent. “Our Phase..."
One and Phase Two ore resource was really only defined in December of last year,” explains head of Corporate Development and Investor Relations, Michael Jones. “But we’d already committed almost $1 billion by then on development. It’s a completely different way of working from the other mining players, who want everything engineered to the nth degree before they put their first penny in.”

Fortunately, the company’s investors were willing to back both chairman Frank Timis, who had invested an amount of his own money into the project, and African Minerals’ senior management team. No doubt it was a comfort to know that a significant proportion of the leadership team hailed from Australia-based Fortescue Metals Group, which itself managed to achieve a 35 million tonne per annum start-up iron ore operation within a 22-month timeframe.

Tonkolili is divided into three phases, corresponding to the three different layers of ore that have been identified. Phase One is 126 million tonnes of direct shipping ore (DSO), which will support the company’s planned production rate on a standalone basis for about nine years. Phase Two is 1.1 billion tonnes of saprolite, which at the planned production rate of 23 million tonnes a year of product will support a mine life of between 18 and 19 years. Phase Three, at 11.6 billion tonnes of magnetite iron ore (90 per cent of the resource), will support over 60 years of production.

The first two phases in themselves
African Minerals

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With these advantages in hand, the company is seeking to access the Chinese market, other Asian markets such as Japan, Thailand and Korea, and Europe. “We are certainly aiming to set ourselves up as a proper, strategic alternative to the typical Australian feed to China,” asserts Jones.

“Australia has its own pressures in that the deleterious elements are growing in the deposits being mined and that are going to be mined. And labour cost is a major inflation factor in Australia. On the Brazilian side, they are getting fewer lumps, more fines, and higher phosphorus levels.

Towards West Africa, meanwhile, there are some huge deposits that are going to be represent something of an environmentally conscious decision, says Sherwood. “The magnetite is really the prize—the significant component and the premium quality product. Most other organisations would go straight for that product, and anything above it would be waste and would have to be stored in a tailings dam. Fortunately, there were people within our organisation who were smart enough to suggest that if the lower product of the magnetite was of such good quality, then maybe we should have a look at what was above it. Those two products may not be as premium grade quality as the magnetite, but they’re certainly saleable. We could have been just storing them in a tailings dam.”

So the magnetite is something special—but so is its location. “The quality of our magnetite product will be comparable to that of Vale,” asserts Sherwood, “and from a geographical perspective, we’re equidistant to the Asian market and we’re closer to Europe [than Vale]. We also have the ability to deliver a lower cost operation as a result of where we’re operating in Sierra Leone; and that certainly puts us at a huge advantage against Australia-based BHP and Rio as well.”
developed over the next five or six years. So what we have is almost a shift in the critical mass of where the major iron ore assets are.”

Clearly, with an opportunity of this magnitude and a projected mine life of more than 60 years, the prospect of making a positive impact in Sierra Leone that could endure for generations is significant. “Our strategy is to build an international iron ore company run by Sierra Leoneans,” explains Sherwood. “It makes commercial sense as well as being the right thing for the country.”

This is a big commitment and an ever bigger challenge, especially in a third world country where there is a distinct lack of qualified and skilled professionals. So the company embarked upon a number of strategies to help redress the expatriate/local balance. “Wherever we have an expatriate within the business, we have at least one Sierra Leonean working alongside them, and then a tailored training programme and a strategy to work out how we will transition that expatriate position into one for a Sierra Leonean,” says Sherwood.

Where there have been local people not qualified to carry out the job they applied for, the company has brought in an expatriate and paired them up. Meanwhile, every single unskilled role is filled by a Sierra Leonean, with African Minerals enforcing that policy among all of its subcontractors as well.

The company also set out to attract the Sierra Leonean diaspora with international mining experience—typically gained from working in the UK, the US and Australia—to bring their skills to the Tonkolili project. “We’ve been able to find them, entice them back and leverage their international experience,” comments Sherwood.

It’s been a massive undertaking—a total of over 5,000 people are now working on the Tonkolili project. One thousand of these are direct employees of African Minerals, 85 per cent of whom are Sierra Leonean. The remaining 4,000 personnel are subcontractors working on the construction, and within those organisations, roughly 65 per cent are Sierra Leonean nationals.

An important facet of the social upliftment in progress is to create a workforce that can sustain itself throughout the decades during which the mine will be in operation. This means, among other things,
embedding a strong work ethic, “Just two weeks ago, we promoted 10 people at the mine into supervisor roles. They completed their basic training and proved that they can manage people within a team, and those 10 people now have 15 people each underneath them. It sends a really strong message to the rest of the organisation, and visibly demonstrates our commitment to replacing that expatriate leadership layer with locals,” asserts Sherwood. “It helps our employees understand that a good work ethic, performance, achieving, doing your job well, learning and acquiring knowledge is how you will further and better yourself. And the fact that these promotions came with an increase in remuneration really brings to life that progression for the local people—and then word starts to disseminate through the workforce.”

Direct employment is only part of the equation, however. “We’ve taken a very different, grass-roots approach involving ‘business incubators’ which is certainly something that organisations such as the World Bank had not seen before,” reveals Sherwood. Instead of simply helping out larger organisations locally, African Minerals is actually going into the local communities and carrying out skills assessments to identify what roles people could already perform in the local vicinity. “Around the area of the mine, in the heart of Sierra Leone, there’s very few people who have actually worked before—yet there were a lot of expectations that because our operation is in their local community, we would provide them with jobs,” explains Sherwood. “What we’ve been able to do is talk to them about an alternative to what may be a 12-year career path
to become a mine engineer. There’s quite a lot of agriculture in the region; but it’s only agriculture to support the local communities. So what we’ve done is provide people with resources that can help them commercialise, for example, the production of rice, bananas, and other fruit and vegetables."

Across the footprint of the Tonkolili project, there are now 12 small ‘business incubators’ working in this way, around 80 per cent of which are food suppliers providing fruit, vegetables and rice to the various sites within the project. In addition, the company has supported businesses operating in tailoring and brick-making, which are now also supplying certain services and products.

This positive social impact goes hand-in-hand with what African Minerals envisages as becoming its net positive impact on the environment. The company is working with the UK’s Kew Gardens, who have assisted in understanding and identifying indigenous species of flora and fauna that have disappeared from the surrounding area, and assisting with their rehabilitation. It is also in partnership with Tacugama Chimpanzee Sanctuary, the baseline environmental audit for Tonkolili's environmental licence having identified a small population of monkeys that neither the local communities nor the Sierra Leone Environmental Protection Agency even knew existed. This partnership will now rehabilitate and protect the

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chimpanzees, with community education and institutional strengthening having been undertaken in order to ensure that locals are on board with the protection effort.

African Minerals’ involvement in and commitment to Sierra Leone has now begun to inspire others to bring their own foreign direct investment to the country, says Jones. “There are now another four public mining companies in Sierra Leone and a major oil company, as well as increased investment from biofuel companies. It’s not solely because of us; but we have certainly paved the way and shown that Sierra Leone is a safe and simple place in which to operate.”

Being 100 per cent focused on getting its first ore on ship later this year, there is little time for African Minerals to sit back and bask in the warm glow of its achievements to date. But there are certain milestones that undoubtedly create a sense of pride. “Taking an asset from a standing start to being in production within such a short space of time is something that no other iron ore producer has done—and we have done so with the full support of the people and the government of Sierra Leone,” says Jones.

“Tonkolili is very important for African Minerals; but similarly, Tonkolili is very important for Sierra Leone. It has the ability to double the country’s GDP as Phase Two hits production,” he concludes. www.african-minerals.com

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