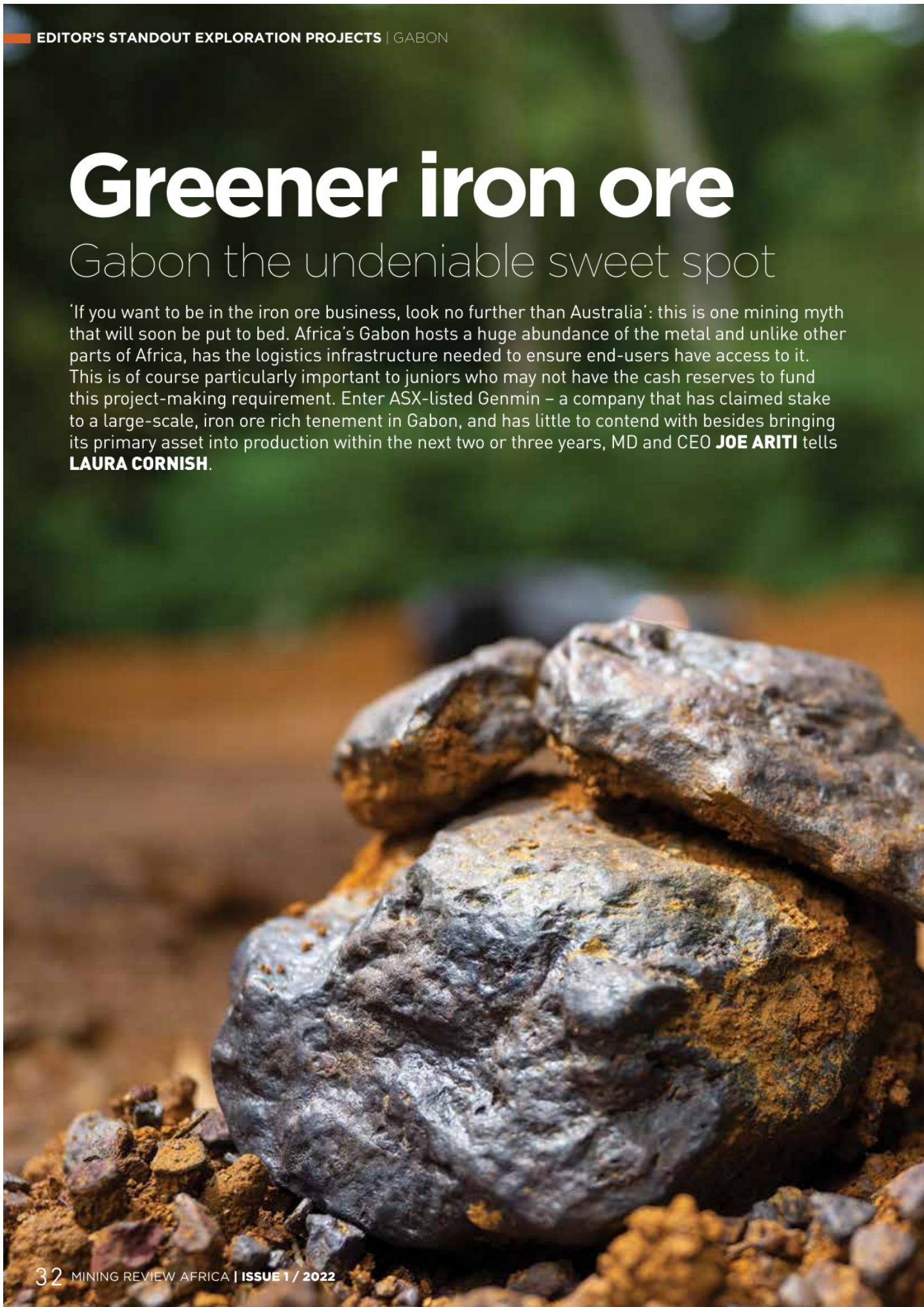


Greener iron ore

Gabon the undeniable sweet spot

'If you want to be in the iron ore business, look no further than Australia': this is one mining myth that will soon be put to bed. Africa's Gabon hosts a huge abundance of the metal and unlike other parts of Africa, has the logistics infrastructure needed to ensure end-users have access to it. This is of course particularly important to juniors who may not have the cash reserves to fund this project-making requirement. Enter ASX-listed Genmin – a company that has claimed stake to a large-scale, iron ore rich tenement in Gabon, and has little to contend with besides bringing its primary asset into production within the next two or three years, MD and CEO **JOE ARITI** tells **LAURA CORNISH**.



IN SHORT

Iron ore exploration and development is on the map - thanks to Genmin and its plans to produce and export iron ore from Gabon in the next three years.

There is not much to Africa's iron ore story outside of

South Africa. Multiple companies have looked at iron ore deposits across the continent, but one constraint

has disabled any potential project from getting off the ground - transport infrastructure. This is a non-negotiable requirement for a bulk commodity that relies on moving large volumes, usually long distances, to be economically viable.

But one African country is telling its own unique iron ore story - Gabon. With a well-established manganese sector already in play, the transport infrastructure to support the introduction of iron ore metal already exists, and this bodes well for potential iron ore mines. Interestingly, the country hosts some world-class iron ore land and Genmin is looking to exploit these riches, export them and in turn build a profitable business.

"Our main focus lies in south-east Gabon where we've tied up all the prospective ground for high grade DSO iron ore. Thanks to the Trans-Gabon Railway, which runs 670 km east from the Owendo port station in the



capital city Libreville to Franceville in the south-east, we are well positioned to move our iron ore product once it has been mined and washed," Ariti starts.

With its 5 270 km² of property, Genmin is focused on three projects. "Our main project is Baniaka, which is currently undergoing a feasibility study due out in May or June this year. In close proximity to Baniaka lies Bakoumba, which represents regional exploration upside. The third project – an iron ore, copper and gold prospect – is situated almost on the border lines of Cameroon, Equatorial Guinea and Gabon. It is highly unexplored, but represents elephant country," Ariti outlines.

Why Gabon?

Gabon is a small country and formed part of French Equatorial Africa until 1960 when it gained independence. It is also a wealthy country – most likely because it has only seen three presidents since gaining independence (the second president died 12 years ago) which equates to social and civil stability and consequently economic prospectivity. Gabon is also the eighth largest crude oil producer and the second largest manganese ore producer (by volume) in the world.

The country's roughly two million people are mostly urbanised – the majority based in Libreville.

It also offers substantial clean hydropower energy, which translates to an investor-friendly status for Genmin – as an emerging greener iron ore producer – which no other African iron ore producer can boast.

With other mining players – including Fortescue Metals Group, Apollo Minerals and Amada Mineral Corporation – looking to add Gabon to their footprint portfolio, Genmin is not alone in building a new mining hub in the country: one that sits outside of the traditional oil and gas and manganese sectors that currently exist.

Understanding Baniaka

Baniaka currently has 260 Mt of JORC-compliant mineral resources, averaging about 65% lump and fines iron ore product, as well as a pellet feed material. "We are also doing a lot of value-in-use work at China's Central South University which has focused primarily on the benefit of using this product in the steelmaking or ironmaking process in China," Ariti explains. The ore body also contains magnetite content but this is below the shallower oxide material and is not Genmin's focus at present.

The company is underway with its social and environmental impact assessment (SEIA), being run in conjunction with the feasibility study, and notice of this has been given to the environmental administration which oversees the SEIA. This is an important step in attaining the full environmental licence which Genmin is targeting for early 2023.

The company owns 100% of the projects housed within its tenement area which includes 85 km of mineralised strike, of which only 23% has been drilled and tested. "If the rest of that strike contains similar iron ore, we could be sitting on a 1 Bt iron ore property," Ariti highlights.

As of 31 October 2021, Genmin had done 16 000 m of auger drilling and another 13 000 m of diamond drilling.

The fully funded feasibility study for Baniaka is targeting an initial 5 Mtpa of iron ore production which will be delivered in two parts: first 2-3 Mtpa and then moving to 5 Mtpa. "We then want to expand to 10 Mtpa with a second 5 Mtpa processing module. This



↑ Joe Ariti (left) with non-executive director Brian van Rooyen at Baniaka in October 2021



↑ The Ogooué River: the source of hydroelectric power for Baniaka



↑ Sample work preparation for Baniaka

requires upgrading the Owendo mineral port into a fully mechanised facility with a rail tippler and a jetty capable of handling large-scale vessels. The port owners have confirmed their consideration to do so. At volumes of around 10 Mtpa we are comfortable with an initial 10-year lifespan, although the ore body as mentioned will support something far greater – which we'll only evaluate once we have cashflow in the business," Ariti notes.

Genmin has to date elected to work with a range of globally recognised consultants, many of whom are based in South Africa, which speaks to the expertise the company recognises is housed within the country. Golder Associates (in Australia and South Africa) are responsible for the mineral resource estimation, mining study and mine schedule as well as the mine waste and tailings management. South Africa's Klerksdorp-based

engineering house, Bond Equipment, has conducted the process flowsheet development and process plant engineering design, capital and operating cost estimates. The company's consulting port and coastal engineers, Cape Town-based PRDW, is reviewing the current Owendo Mineral Port capacity, expansion potential and automation options as well. Ariti said that "this is all made easier by the fact that Gabon and South Africa



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↑ Grand Poubara Hydro Electric Scheme has 200 MW of installed capacity

don't require visa entry for local citizens."

With a production start-up timeframe that sits within the next two or three years, Ariti says the project is tracking well. The process plant, the most time-consuming element, is already in engineering design phase. It will be manufactured at Bond Equipment's facility and then transported to site for reassembly.

Project funding is also unlikely to pose any difficulties. In addition to the green power element already mentioned, Genmin in December partially confirmed

offtake partners for its product to assist in securing finance. Ariti explains that the company has entered into two non-binding MoUs with Minmetals and CDSS for potential offtake agreements for iron ore products from Baniaka.

Founded in 1950, Minmetals is one of China's largest multinational state-owned enterprises. It is a major global organisation involved in the development, production, trading and value chain of metals and minerals. A key direction of Minmetals is to ensure security of resources. In 2021, Minmetals ranked number 65 on

the Fortune Global 500 (No 1 in the materials sector) and its annual iron ore trading volume is estimated at 40 Mt.

CDSS is a privately-owned, leading specialist steel producer in China with an annual production of 3.5 Mt. Its steel mills are located near Changzhou City, approximately 180 km west of Shanghai. CDSS specialises in supplying steel to both the auto industry and lift and escalator manufacturers.

Genmin will use all reasonable endeavours to enter into legally binding offtake agreements by 30 June 2023 under which the company will sell and deliver a total of 3 Mtpa of fines product and 1 Mtpa of lump product; and the purchasers will each buy and take delivery of 1.5 Mtpa of fines product and 0.5 Mtpa of lump product from Baniaka for a term of three years.

"From Baniaka's point of view, we tick all the boxes: we are high grade, we have infrastructure, we have interested offtakers, we have a green project powered solution and we've got scalability whether that be through our large geological endowment or the general footprint we have – all together substantially derisking the business," Ariti concludes. **MRA**

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Gabon's electricity is generated from hydropower sources – of which there is available capacity to feed into Baniaka, making it a 'green' project. The Grand Poubara Hydro Electric Scheme, situated on the Ogooué River and only eight years old, is situated just 30 km from the project. It has a 200 MW generating capacity (all year round), of which about 70 MW is currently available.

"All of the iron ore we produce will be powered from Grand Poubara, adding to the value of this iron ore project," Ariti highlights. "This has been well received by potential Chinese customers who are also striving to decarbonise."