# The Control of the Co of progras

The Marimaca Copper Project, recognised as one of the most important copper discoveries globally in recent years, is progressing towards production. Romana Moares spoke to Chief Sustainability Officer Laura Rich about the unique features of the project; not only in terms of its production potential, but also regarding its reduced impact on the environment.

opper was one of the first metals to replace existing, depleted copper ever extracted and used by humans, and it has made vital contributions to sustaining and improving society since the dawn of civilization. Today, copper is prized more than ever as an essential material for the energy transition and electric future.

As the planet moves toward net zero energy production, the demand for copper is expected to rise sharply. On the supply side, a deficit is forecast in the coming years due to declining production, a lack of new mine development, and a lack of large-scale exploration successes

reserves. Hence new copper discoveries are critical.

# One of a kind

Marimaca Copper is a TSX-listed copper company focusing on developing its flagship asset, the Marimaca Copper Project in Chile's Antofagasta region. The mine location itself presents a significant advantage - Marimaca will be developed as an open-pit copper mining project located in the coastal belt at low elevation, approximately 45km north of Antofagasta and 25km east of the port of Mejillones.

The project is an all-oxide copper deposit with straightforward and established processing requirements, that should only require relatively low capital investment for development. The project benefits from first-class existing infrastructure, logistics and utilities nearby, further reducing execution risk.

The project also benefits from certain unusual considerations from the environmental point of view, according to Chief Sustainability Officer Laura Rich: "As envisaged, the Marimaca project

does not require a tailings storage facility, which is a significant benefit - not only from an environmental perspective, but also from health and safety and risk management perspectives."

But that is not the only environmental benefit of the project, she explained: "Over the past couple of years, one of our key focus areas has been to secure access to a long-term water supply for future operations. In Chile, water scarcity is a big issue in a water management context, and there are certain key v

restrictions that will increase over time. As a result, we have been looking at processing techniques that essentially use untreated seawater, (as opposed to groundwater or desalinated water), for processing within future operations."

To this end, in November last year, the company entered into a water option agreement with a major electricity supplier based in Mejillones. The arrangement provides Marimaca with access to recycled seawater used in the utility's cooling plant, which Marimaca will reutilise for processing activities over the projected life of the mine. This arrangement also provides access to green power for at least 10% of long-term operational needs. "This has significant operating cost benefits and is completely in line with our sustainability objectives and our aim to build a sustainable copper mine," said Ms Rich.

# Strong ESG position

In March 2023, Marimaca's second independent ESG performance assessment via the Digbee ESG reporting framework was completed, highlighting that significant progress has been made by the company over the past 12 months regarding both ESG governance and operational sustainability milestones.

The assessment resulted in an overall score of BBB for the company and the Marimaca Project; an improvement from the BB score rating in 2021. It highlighted the appointment of a Chief Sustainability Officer and the restructuring of Board Committees to provide a stand-alone ESG committee and stated that no Scope 3 emissions were expected to be generated in the future, given the expected production of copper cathode, which does not require smelting and refining.

Ms Rich mentioned another significant advantage of the project: "Unlike some other mining operations, specifically in Africa, due to our location, we have no immediate local populations that would require resettlement for development.

# The nearest town is 25km away and is already an established logistics hub. This means that we have a great pool of local contractors available for a variety of services, with whom we can partner for future needs. Antofagasta is slightly further away and is a world-renowned location for mining skills for the purposes of recruiting our future operational workforce.

"Suppliers are very important to building our long-term success, and we appreciate their invaluable experience in the region. Our core suppliers are currently related to our exploration drilling campaigns, project engineering, mine planning and s

processing reviews. Many of our suppliers have worked on the development needs of Marimaca for some years now. They form part of our project review and development teams and play a critical role in our development planning."

#### New discovery

So far, the Marimaca project has exceeded all expectations. Last year, the company published a significant upgrade in the scale of the resource, doubling the former resource estimate. This marks an important step-change in the scale of the project, supporting a potential production rate higher than that proposed in the 2020 Preliminary Economic Assessment (PEA).

Commenting on the new discovery, the company's management reflected that it establishes the Marimaca project as one of the most significant greenfield copper oxide discoveries of the last 20 years, and confirms its potential to host over one million tonnes of contained copper in a single pit.

"Over the past year or so, conducting additional exploration programmes has established that the prospective project is far larger than we anticipated two years ago," explained Ms Rich. "However, although larger, the actual complexity hasn't changed. It doesn't require additional means of processing; it simply means extending the mine life, as opposed to changing the structure that we envisaged."

### Dual strategy

Speaking about the next steps, Ms Rich highlighted that the company is working on a dual-track strategy: regional and near mine exploration that could further expand the resource or lead to a discovery of a new Marimaca and, progress permitting, a definitive feasibility study for the Marimaca project itself.

"We are now de-risking our permitting strategy and undertaking the relevant environmental and technical studies,"



she continued. "We are also progressing and finalising work required for a definitive feasibility study that should allow us to assess options for construction in 2025."

From an industry perspective, the continuing development of green or sustainable mining is a core focus for all operators and for the industry's wider stakeholders – be they investors or governments.

"The need for critical raw materials will only increase," concluded Ms Rich, "and there now appears to be an increasing realisation that mining is indispensable, given its importance for the transition to a net zero economy. So, it is imperative to discover new mines and to develop them in a sustainable manner."