



**Omico Mining Corp.** 

**Omitiomire Copper Project (Namibia)** 

Q1 2023

## **Introduction: Omitiomire Copper Project**



- Omico Copper owns 95% of Craton Mining, which, in conjunction with the Craton Foundation, owns 100% of the Omitiomire Project in central Namibia
- Omitiomire has the potential to be a long life, low capital intensive copper development



### Significant leachable copper resource, and growing

- 96mt @ 0.59% (M&I)
- 618kt contained Cu



#### Mining friendly jurisdiction Project permitted with mining license in place Namibia has a long and proud mining

# (2)

#### Simple open pit mining and hydrometallurgical processing Low capital intensive heap leach SX-EW development.

• Targeting <\$9,000/t



#### Scale and life of mine

- In-pit resource supports 30kt cathode
- 15 years life of mine
- Bankable feasibility study underway



#### ESG friendly development

route

history

- Low water consumption
- Solar power integration
- Eliminates smelting process
- ESG initiatives via local trust

Identified near mine exploration upside

• Extensive geochemical anomalies in exploration license





- Stable mining jurisdiction with democratic government and an independent, strong legal system with favourable fiscal terms
- Long history in mining, translating into a well trained work force and mining accounting for 25% of Namibia's economy in terms of revenue
  - Ranked 2nd among African jurisdictions in the Fraser Institute's 2021 Policy Perception Index
- Low population density: Population of 2.5m across 825,000km<sup>2</sup> concentrated around major population centres and key infrastructure
- Well-connected and functional infrastructure including power generation and transmission, key road, rail, and shipping access
- Newly upgraded deep water port at Walvis Bay has direct access to international shipping routes and global trade



### **Craton:** Namibian senior management & board of directors





#### Elia Shikongo Chairman

Legal practitioner for over 20 years and notary of the High and Supreme Court of Namibia. Currently the Chairperson of the Minerals Ancillary Rights Commission. Active in the energy, mining and telecommunications industries



#### Primus Hango Board Member

Former Chairman of the Namibian Stock Exchange. Mr Hango served as both Principal Officer and CEO of the Government Institutions Pension Fund. Chairman of Alpha Namibia Industries Renewable Power (ANIREP)



#### Purvance Heuer Board Member

Managing Director and Chief Investment Officer of Arysteq Asset Management. Mr Heuer has over 10 years of investment management experience and over 15 years in the Namibian financial services sector.



#### Ingo Hofmaier CEO & director

More than 20 years' general management, corporate finance, and investment banking experience in the mining industry globally. Previously CFO of SolGold plc., worked at Rio Tinto, Cap Gemini and Wienerberger AG.



#### Mike Stuart \_\_\_\_\_ Project Manager & director

Mike Stuart is a geologist with over 25 years' experience exploring for, and developing, copper deposits in Africa including 9 years with First Quantum Minerals; and was previously Mine Manager at Weatherly Mining's heap leach SXEW Tschudi Mine in Namibia

#### Omico operates via a local Namibian subsidiary:



### **Omico Investment Case**

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Well-advanced copper project in central Namibia with a mining licence Currently at BFS Stage, due for completion H2 2023

- All environmental clearances in place for current work Currently progressing ESIA
- 5

Simple open pit and proven SX/EW processing resulting in competitive capital intensity

- 30,000t copper cathode per year
- 15 year LOM
- 600 kt contained Cu in pit constrained resource

Experienced management team with proven track record

- Building strong community relationships and an environmental friendly mining operation
- Established mining jurisdiction: well-connected and functional infrastructure with key road, rail, and shipping access

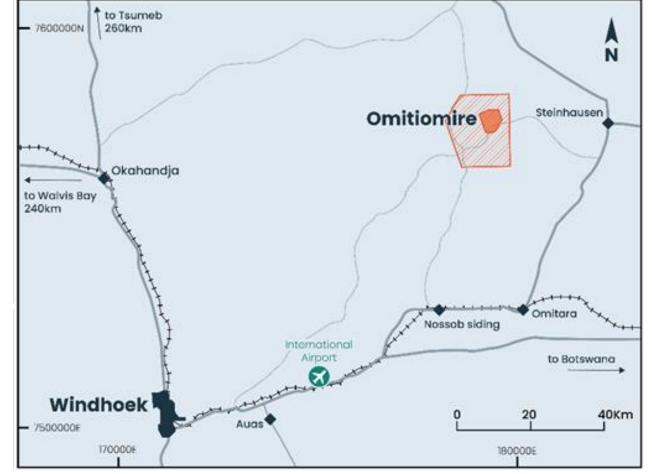


## **Omitiomire Project – ownership and location**



- > Omitiomire deposit located situated northeast of Namibia's capital, Windhoek, accessible by ~140km of road
- > Project is fully funded for 2023 / BFS completion
- > 5% held by a Namibian incorporated ESG trust

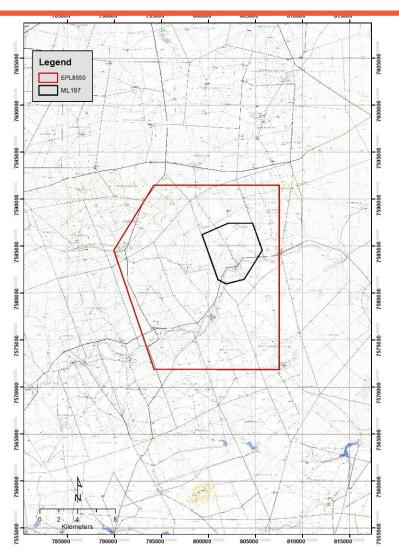




### **Licence Overview**



- Mining Licence (ML197) was granted in March 2016 for a period of 20 years (renewable) 2,890Ha
- Exploration licence (EPL8550) was granted in late 2022 and is valid for 3 years 30,365Ha
- The exploration licence is renewable for up to 7 years in total (with further renewals possible with ministerial discretion)
- The Company holds Environmental Clearance Certificates to undertake mineral exploration on both the ML and EPL – valid for 3 years (renewable)
- Access agreement for Omitiomire farm signed until October 2024
- Negotiating exploration access agreement with further farms covering the EPL



### **Omitiomire Copper Resource**



Unsliced cross

- > Resource update expected in Q2 2023, with the aim to convert inferred resource to M&I category
- > All required drilling was completed in December 2022
- > Project has an CIM Definitions Standard compliant resource estimate containing over 600kt copper
- Strike length of 3.5km, open at depth Surface section to the NE showing upwards BT lens convex lens shape of the mineralisation. OS1 and OS2 show high grade shoots. BT is disconnected hanging wall 0.25% cut-off @ 31/05/22 **Tonnes (millions)** Grade (Cu%) **Contained Cu Kt** mineralised zone Measured 15.4 0.61 94.4 Red: >0.5% Cu Indicated 80.4 0.58 468.9 Yellow 0.1% to **Total Measured and Indicated** 95.8 0.59 563.3 0.5% Cu 250 m Blue: <0.15Cu Inferred 9.7 0.57 55.1

All tabulated data have been rounded and as a result minor computational errors may occur

Notes 1. Mineral Resources, which are not mineral reserves, have no demonstrated economic viability

2. The Mineral Resource is reported for mineralisation contained within a Whittle optimised pit shell above a cut-off grade of 0.25% Cu, which is based on a copper price of USD 4.0/lb, mining costs of USD 2.25/t ore and USD 2.05/t waste at pit rim (escalated USD 0.03 with each 10 m bench), treatment costs to cathode of USD 13.0/t ROM ore (including G&A), 3% royalty, 1.25% sales cost, pit slope 37° oxide and 50° fresh, mining dilution 5%, mining recovery 95%, copper recovery 85%.

## **Omitiomire development and drilling history**



#### > early 1990s: Asset discovered by Anglo American

- 2008: IBML acquired Craton and funded >US\$15m of exploration:
  - > 85,000m new drilling
  - > Initial DMS and floatation metallurgical test work
  - > Mill-floatation PFS in 2010, small oxide DFS in 2013

#### IBML development concept not compelling:

- Combination of leaching tons and grade did not support capitally intensive milling & floatation development
- > Project has not been advanced for 10 years
- > 2008 bottle roll test work suggested ability to leach entire ore body, not just small amount of oxide at surface.

#### 2019: Greenstone investment

- Chloride heap leaching is a fundamentally different development approach to previous BFS
- Focus on lower capital intensive heap leach SX-EW
- Comprehensive met test work program covering the entire ore body

#### 2022: Formation of Omico Mining Corp.

- > New senior management team reinvigorating the project
- Infill and geotech drilling
- > BFS kick-off

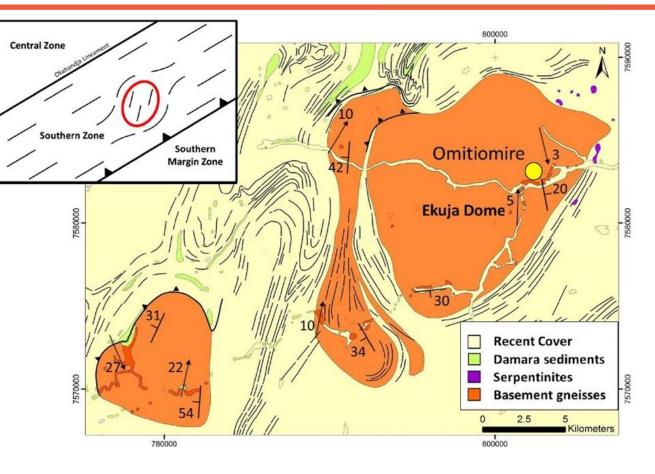
Year	Drill Campaign	DD (m)	RC (m)	RAB (m)	PERC (m)	Total (m)
1976	Pre-IBML				889	889
1992	Pre-IBML	1,336			755	2,091
1993	Pre-IBML	224			986	1,210
1998	Pre-IBML		991			991
2007	IBML	737	9,485			10,222
2008	IBML	2,063	21,258			23,321
2009	IBML	1,484	6,868	832		9,184
2010	IBML: Oxide Infill		2,094			2,094
2010	IBML: Prospectus		4,294			4,294
2011	IBML: Resource Extension	5,753	6,114		1,676	13,543
2012	IBML: Resource Extension	4,478	4,729			9,207
2012	IBML: Metallurgical	1,117	1,058			2,175
2013	IBML: Oxide Infill		4,449			4,449
2014	IBML: Resource Extension		12,102			12,102
2022	Omico: Resource Infill		7,192			7,192
		17,192	80,634	832	4,306	102,964



## **Regional Geology**



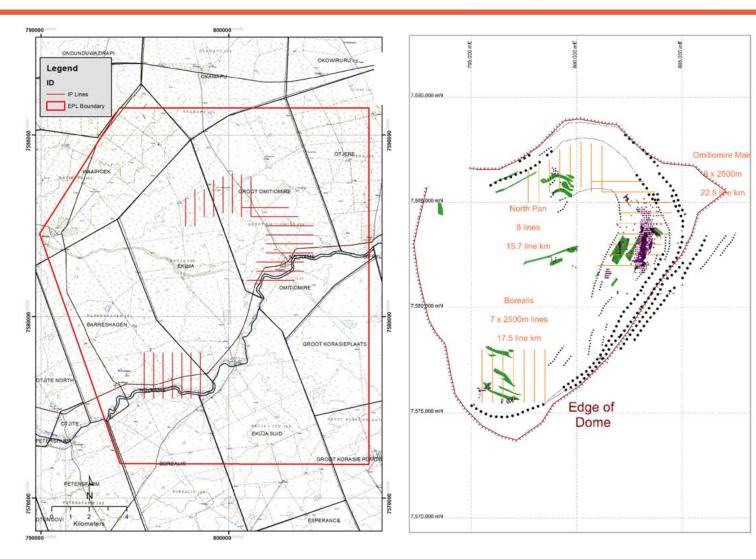
- Mineralisation occurs as part of the Ekuja dome inlier which covers an area of approximately 15km x 12km
- The Ekuja Dome is one of three round to oval dome-like gneisses that pierce through the overlying high grade metasediments
- The Ekuja Dome rocks comprise mainly of felsic gneiss (metadacite and tonalite intrusions) and subordinate amphibolite and mafic schists (probably mafic volcanics)
- > The Omitiomire deposit is developed in an imbricated shear plan system on the eastern margin of the dome
- > The deposit geology comprises two main rock packages:
  - mafic rocks, which host the copper mineralisation, consist mainly of quartz, plagioclase, dark biotite, and amphibole. Epidote and, to a lesser extent, magnetite are associated with the copper mineralisation, with mineralised banding up to 100m thick
  - the surrounding leuco-gneisses are usually unmineralized, and carry quartz, plagioclase, variable amounts of biotite, and trace amounts of garnet and sphene. Intrusive tonalite and minor late-stage pegmatite also occur



### **2023 Exploration Programme**



- The only significant sulphide mineralisation at Omitiomire is chalcocite with very minor chalcopyrite and some bornite
- Pyrite is essentially absent, therefore any IP anomaly should reflect copper mineralization
- Good chargeability anomaly present over the Omitiomire deposit
- Other chargeability highs not properly followed up in the past
- RH plan shows the magnetic highs around edge of dome with proposed IP lines
- Revised proposal for 55.7km of IP over the most prospective areas around the Ekuja Dome
- Will require access agreements for Farms Ekuja and Barreshagen



### **Benefits of HL and SX-EW recovery method**





Copper conventionally mined through an owner-operator mining operation (drill & blast).

3-stage crushing

No energy intensive milling and floatation operations



Leach and solvent extractionelectrowinning process with a focus on water preservation

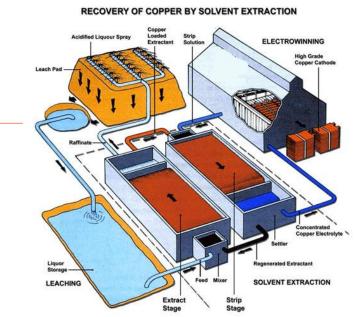
Comparable concentrate production uses 2.5x the water



Hydrometallurgical process operating at ambient temperatures



Recovery from diverse complex of oxide and sulphide ores and by-products possible



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Hydrometallurgical recovery requires less equipment, energy and other material inputs, translating into lower capital and operating costs and energy use

Significantly lower capital intensity, usually below USD10,000 / ton





Low environmental impact, no effluent Sulphuric acid neutralised by geology and stays in circular flow

Operations don't require tailings storage facilities

Production of high purity copper cathode

### Key technical and environmental consultants

Internationally recognised experts with a strong track record in copper hydrometallurgy





	BFS Study Manager	Process plant and infrastructure design Cost estimating
BARA	Mining	Pit optimisation, design & scheduling Cost estimating
	Geology and Mineral Resources	Drill planning and Supervision Resource Estimation
	Metallurgical Consultants	Metallurgical programme design and implementation Process development
ECC ENVIRONMENTAL COMPLIANCE COMBULTANGY	Environmental & Social	Monthly monitoring, ESIA Baseline, specialist & closure studies
Knight Piésold	Geotechnical	River and road diversion design Leach pad and process plant geotechnical studies
CREO ENGINEERING SOLUTIONS	Engineering	Water supply Power supply and solar

### 2022 Achievements & 2023 timeline



2022

- Environmental Clearance Certificates granted for drilling, exploration and prospecting activities in EPL and ML
- > Extension of land access rights across the Mining Licence area
- Completion of an RC Drilling Programme in December and samples delivered to lab
- > Commencement of geotechnical drilling completion
- Key contractors appointed with Bankable Feasibility Study kick-off and site-visit
- > Phase II metallurgical testing near completion
- Progress on environmental permitting process
- Craton Foundation & CSR: base line studies and key meetings held with stakeholders
- Power and water supply study updates
- > Appointment of Ingo Hofmaier as CEO of Omico Mining Corp.

- > Completion of geotechnical drilling programme
- > Completion of Phase II metallurgical testing
- > Phase III metallurgical optimisation
- Public participation meetings to present the project to audience in Namibia, as required by Namibian environmental regulations

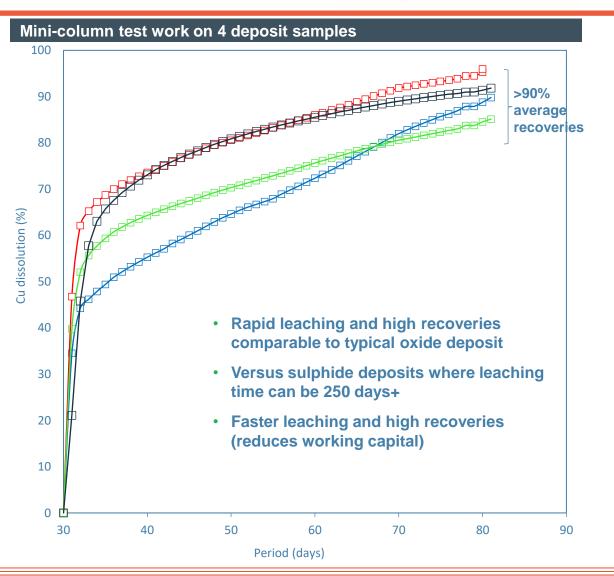
2023

- Subsequent government submission of EISA report
- > Release of mineral resource following CIM standard (update)
- Geophysical water exploration and drilling to demonstrate the sustainability of the aquifer
- > Start exploration work on the prospecting licence
- Commence negotiations with NamPower for grid power supply
- > BOM, vendor lists and tender for long lead items
- Completion of BFS

### **2021 Metallurgical test work results**



- First-phase testwork comprised staged programme of sequential assaying, geo-metallurgical classification and mini column testing
- Results from the first stage of assay results demonstrated excellent total soluble copper of more than 90% of material above cut-off grade (approx. 0.25% Cu)
- A programme of eight mini-columns (4kg, 30 cm height) started in Q2 2021
- Results from the columns demonstrated excellent performance with rapid dissolution of copper in acid (shown right)
- > The mini column tests confirms that the deposit is primary chalcocite and performed extremely well under leaching
- Second-phase metallurgical programme included full height column tests to confirm commercial scale recoveries and acid consumption



## **2022 mineralogical testwork**

- Copper mineralisation occurs primarily as hypogene chalcocite hosted by the mafic schist and amphibolite
- QEMSCAN Mineralogical report completed on column composite samples: copper ore mineralogy is chalcocite/digenite (~90%), subordinate bornite (~8%) and trace chalcopyrite
- Demonstrates that sulphide mineralisation across the deposit is very homogeneous, whatever the grade
- This reduces the need for any blending and shows that leach testwork is applicable across the deposit and down dip
- About 10% of the copper occurs as oxides. Copper oxides dominate in the upper parts of the deposit
- Oxide sample is partly transitional but still leaches well with acid

#### Copper deportment from QEMSCAN composites

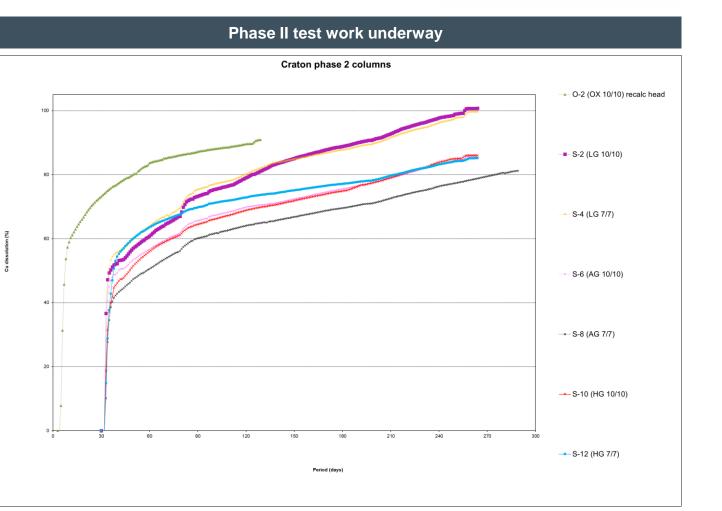
Mineral	HG Comp	AG Comp	LG Comp	Ox Comp
Chalcopyrite	1.1	1.2	0.7	0.2
Cubanite	0.4	0.3	0.2	< 0.1
Bornite	6.1	4.3	2.5	0.2
Chalcocite/Digenite	90.1	91.4	92.6	20.4
Cuprite	0.1	0.2	0.2	6.3
Chrysocolla/Shattuckite	0.6	1.0	1.6	47.3
Malachite	0.4	0.5	0.7	18.1
Other Cu Minerals	0.4	0.5	0.1	0.7
Mica	0.6	0.6	1.3	6.1
Chlorite	0.1	0.0	0.3	0.7
Total	100.0	100.0	100.0	100.0



### 2022 test work nearing completion



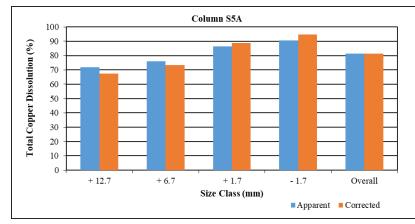
- February 2022 irrigation of 1m sequential and 4m columns started after 30 day curing for sulphides and 3 day curing for oxides
- For sulphide columns acid concentration was either 10g/l or 7g/l and irrigation rates of either 10l/m2/h or 7l/m2/h
- Oxide material leached as expected and achieved 85% recovery after 120 days
- Final recoveries for 4m columns awaiting residual assay for 7 columns
- Remaining column continued under irrigation until the end
- Additional optimisation metallurgical testwork to be planned for 2023 once all data received from Mintek in late February 2023

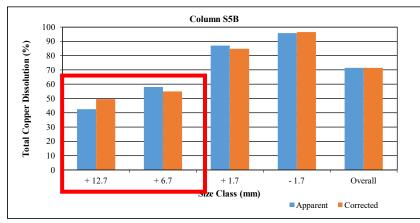


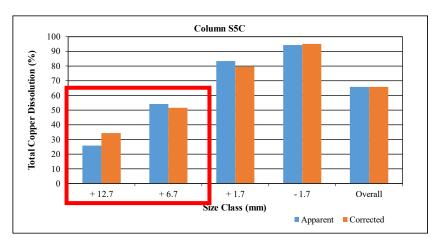
### **2022 Preliminary test work**

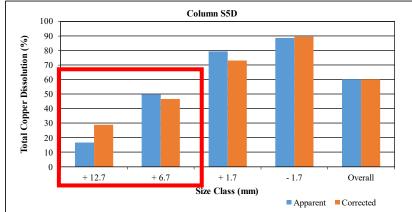


- > Initial analysis of the 1m column size-by-size residual data indicates that crush size may be critical to enhance recovery
- > Will impact on the final design criteria for the crushing circuit and the heal leach design (height)
- > Lower crush size should increase the speed of recovery





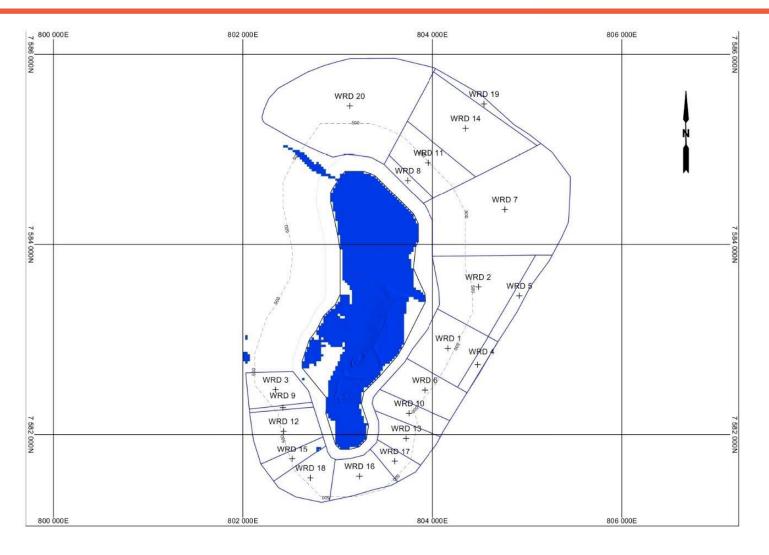




## Pit and dump design



- USD4/lb pit-shell and 0.3% cut-off
- Dump design options being optimised based on number of factors including:
  - Minimising waste haulage
  - Minimise haul distance to crusher
  - Minimise river and road diversions

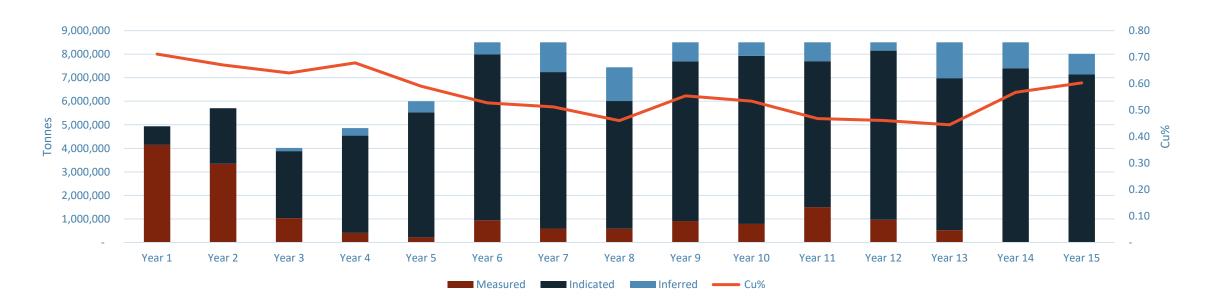


### 2022 in-pit resource & mine plan



- > 2022 updated resource was based on key assumptions from analogous operations in Namibia
- > Incorporated latest metallurgical test-work and using prevailing copper prices
- > 100mt in-pit resource @ 0.57% copper 30kt copper cathode production (0.3% cut-off grade)
- > 15 year life of mine with deeper Inferred material leaving further upside
- > Majority of mine plan already Measured & Indicated
- > Comprehensive drilling program to increase confidence in inferred material completed in late 2022

#### Ore mined by classification



### **Omitiomire Project Infrastructure**



#### **Omitiomire infrastructure**

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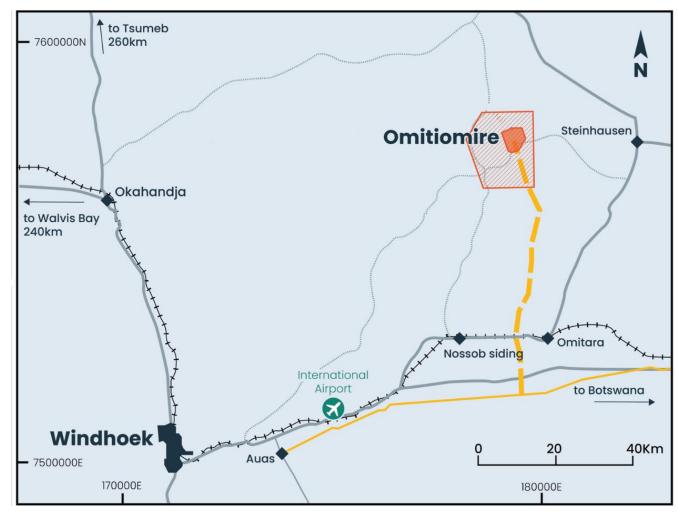
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Rail

**Power** 

- Power requirement ~20 MW for 30ktpa cathode
- Option to connect to the grid from the Auas substation ~70 km away
- Proposal received from NamPower and in line with earlier cost estimates
- Prospective use of Solar discussions commenced with a number of prospective providers
- The existing Eastern National Water Carrier ("ENWC"), supplies water to the Windhoek region
- Water > Discussions with Namwater ongoing to secure sufficient and permanent water in the ENWC to supply the project including a new 90km pipeline
  - Rail access passes the site is approximately 60 km to the south at the Nossob siding and runs to Walvis Bay a newly expanded deep water port supplying Southern Africa



## **ESG approach & Craton Foundation Trust**



- Integration of all work into an ESG framework following EP and SDG
- > ESG reporting is being rolled out by Greenstone
- Craton Foundation Trust (CFT), chaired by Primus Hango, owns 5% of Craton Mining and Exploration
- The CFT was founded in 2010 to address the social needs within the area of influence of the project
- Community consultations have recently been conducted in the Summerdown and Steinhausen area, including attending a recent meeting of the Steinhausen Farmers Association
- > 2023 Projects being considered include:
  - working with local landowners on crime prevention initiatives
  - working with the Ministry of Health to resume regular clinics in Summerdown



**PIPIES** 

### **Copper market fundamentals**



#### Powering the Green Agenda



Electric Vehicle requires 3-4 x copper vs ICE



Requirement for infrastructure of green transition

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Clean tech and renewable energies – vital metal for sustainable future



Powerful demand drivers in population growth, urbanisation, decarbonization, and rising global standard of living



Modelled demand pathways cannot occur without critical materials

#### Long-cycle Commodity

Takes 2-3 years to extend an existing mine and usually more than a decade to establish a new greenfield project

Copper demand is projected to grow from 25m mt to 50 m mt by 2035\*

A growing market deficit could underpin a copper price rally to >US\$11,000/t within five years.\*\*

\* S&P Global Market Insights, 2022 \*\*WoodMackenzie, October 2022

