

From junior to mid-tier, a de-risked growth story

Tony Polglase & Nick Bias London May 2017





## We have the experience and projects to grow

## **Confidence and clarity**

#### **PAST**

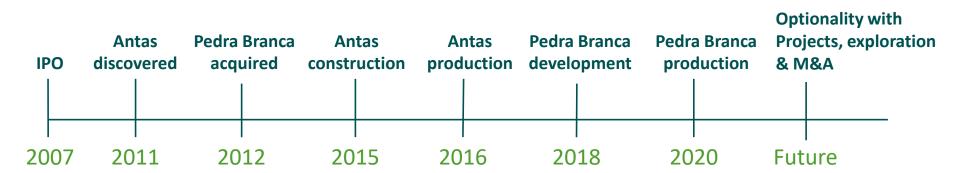
We discovered, built and are now established in the Carajás: land of the giants"
The right place for a growing copper company

#### **PRESENT**

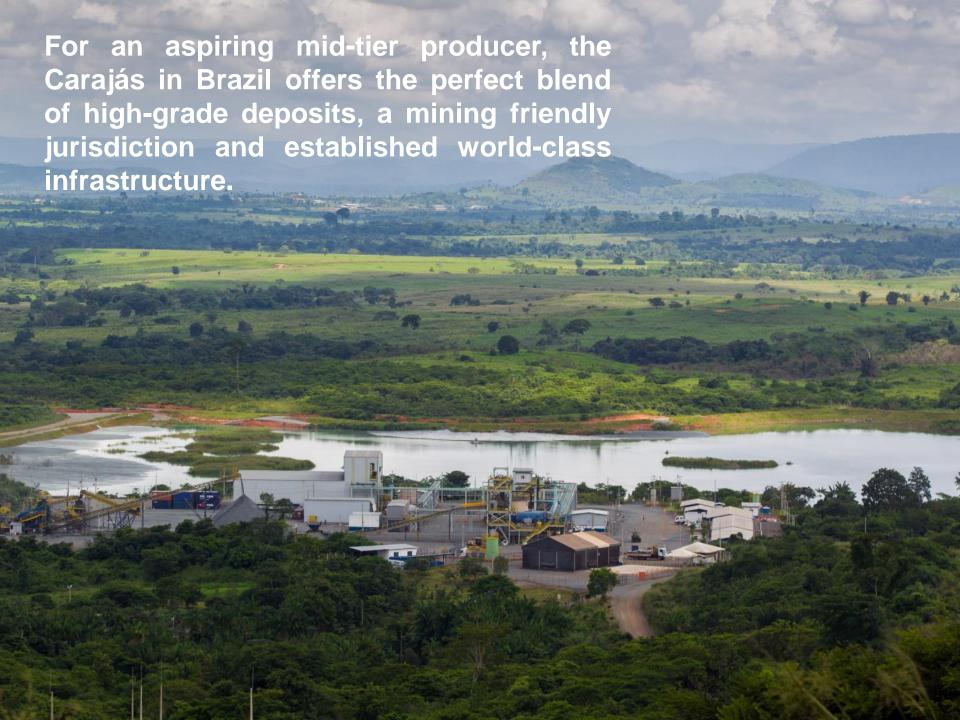
Operating our first mine. Generating free cash flow with no debt.

#### **FUTURE**

With the second largest development and exploration portfolio we have learned the skills and earned the right to grow







## **Established and Successful in Brazil**

## Proven track record in a mining friendly region and country

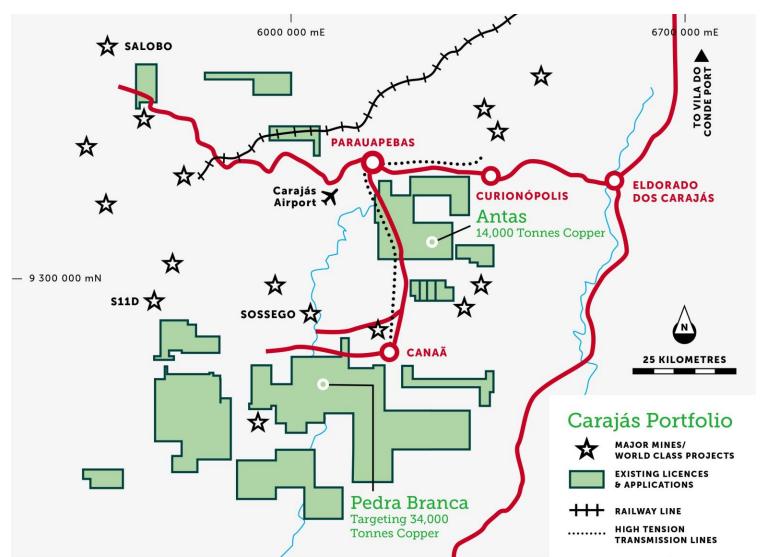
We are building a copper company in the Carajás. A premier mineral province hosting the largest concentration of quality large tonnage IOCG deposits in the world.





## **#2 Regional copper company**

100% owned copper portfolio covering over 1,800km<sup>2</sup>







### **#1 forward looking**

#### Our vision is to be a mid-tier copper company

- We continue to create value at every stage: exploration through to production
- First operation in production, targeting 14,000 tonnes copper in 2017
- Portfolio of new project and exploration properties under investigation
- Favourable copper market outlook

We are on our way to producing 50,000 tonnes of annual copper production, plus 35,000 ounces of gold credits









## **#2** the right philosophy

# 24

## We operate a Brazilian model, with added Aussie mining know-how

- We think Brazilian and we are known locally as a Brazilian company.
- We integrate Aussie skills for rapid development of our projects.
- Avanco Board is majority Brazilian resident and Portuguese speaking
- Over 99% of Brazilian employees live locally
- Tried and tested experience with the Brazilian regulatory and administrative processes







## **#3 first mover advantage**

# 2

## As the original Carajás pioneer, Avanco is ahead of its peers in this premier region

- A decade in the Carajás region
- We have pegged some of the best ground, amounting to the second largest holding in the region
- 100% ownership of over 1,800 km²
- Developed good local relationships; solid reputation as a company that does what it says
- Locked in some of the best technical, administrative and support service people and providers







### **#4 building momentum**

A proven track record has earned us the right to develop new assets and achieve our target of being a 50,000 tonne copper producer

- We built our first copper mine, from discovery to production in under 5 years
- Business largely de-risked
- Today production above design
- Generating free cash flows, with no debt
- \$10.6 million project development and exploration budget announced March 2017
- Focus on building Pedra Branca, our second and larger operation
- Confidence; we are one third of the way to our 50,000tpa target













## **Pedra Branca East**

## First phase development targeting 24,000 tonnes annual copper production

#### Location

- 40km from Antas
- Access to power, water and transport infrastructure

#### Geology

- · Good ground conditions in granite
- Pedra Branca West delivers further potential
- On-strike option through Codelco purchase

#### **High Productivity Mining**

- Steep dipping orebody
- Cost-efficient large-tonnage sub-level stoping
- · High-grade orebody averages 15m wide

#### **Financing**

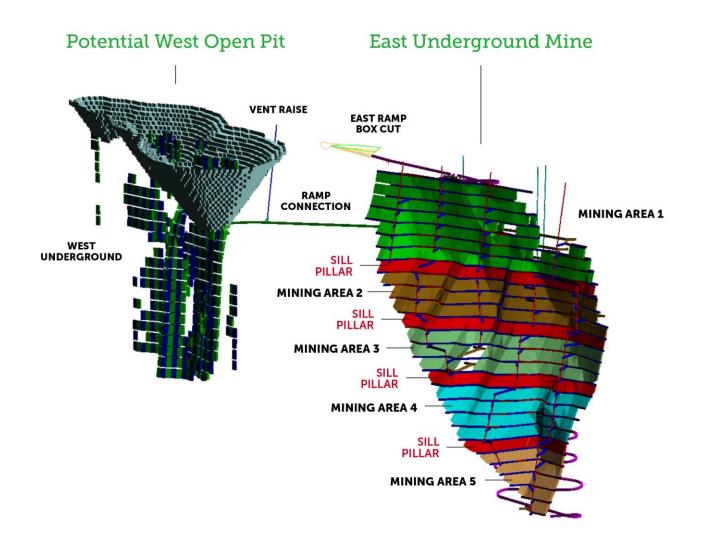
- Estimated \$150m capex (including contingency)
- · Debt and equity financing options
- · Discussions underway

(Phase 2 development of Pedra Branca West targeting a further 10,000 tonnes of annual copper production)



## **Pedra Branca**

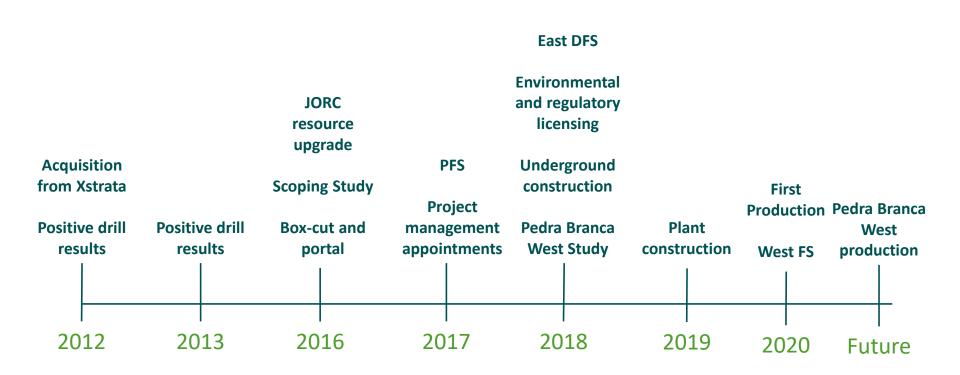
## **Underground design and plan**



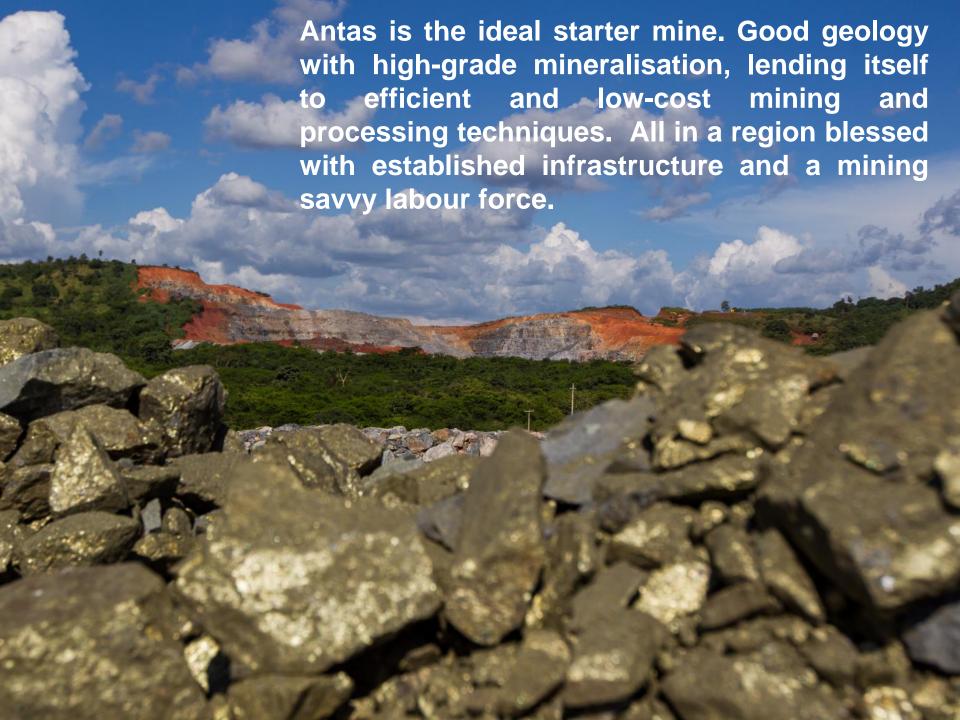


## Pedra Branca

## Phased development targeting 34,000 tonnes annual copper production







## **Antas**

#### Only new copper discovery-development in Brazil in the last decade

- 5-years discovery to production
- Construction completed on time and under budget
- March 2017, \$4.6m budget for improvements and reserve drilling announced

















## **Antas Mine**

## Potential to expand and extend production following current drill programme

#### **Good Geology**

- Part of Itacaiúnas supergroup belt which hosts all Carajás IOCG deposits
- Orebody oriented northeast with mineralisation concentrated within steeply dipping body containing massive, breccia and disseminated copper sulphides

#### **Conservative Mine Plan**

- 3-stage open pit development
- Competent rocks: 80° pit wall, 10-20m benches overall 55°slope, 15° ramps
- · Conventional mining method: drill, blast, load and haul

#### **Efficient Mining**

- Contracted to MACA with Avanco management and geological support
- Modern Liebherr, Volvo and Caterpillar fleet
- Three shifts, 24 hours, 365 days a year
- Average monthly production 210,000 banked cubic metres

#### **Production & Guidance**

		2016A	2017E
Production	Copper/t	11,188	13,500-14,000
	Gold/oz	7,779	9,750-10,500
Costs	C1/lb Cu	1.10	\$1.35-\$1.50
	AISCC/lb Cu	1.42	\$1.65-\$1.80



The processing plant at Antas is a lean machine. It was constructed under budget and ahead of schedule. Today it operates at above capacity, exceeding every expected KPI metric.



## **Antas Processing Plant**

## Fit-for-purpose operation achieving above planned capacity

#### **Construction ingenuity**

- Major components, e.g. Mill, second hand, but unused: lowering costs and reducing delivery lead times
- Taking advantage of specialist skills in Belo Horizonte and São Paolo, some sections designed trailer-mobile, trucked to site, and bolted in place, thereby limiting on site installation time
- Plant comprises some of the best equipment (Metso Mills, Outotec floatation cells, Denver cleaner cells) procured at lower cost and assembled quicker than industry norms

#### **Operating above capacity since day 1**

- Plant continues to beat expectations:
  - Throughput capacity +20% at 100/tph
  - Copper production 17% at 14,000 annual copper tonnes
  - Copper recoveries +2% at +97%
- Plant design flexible, opportunity for doubling in capacity for under approximate \$20 million
- Clean concentrate benefiting from TC and RC discounts









## CentroGold

## Optionality to realise value through a low capex and opex gold operation

- Also located in Northern Brazil, favourable infrastructure and supportive state administration
- Rights acquired 2016 through exploration and development earn in structure; up to 100% for a total consideration US\$8.25m
- Project comprises two adjacent deposits: Cipoeiro (comprises two sub-zones called Blanket and Contact), and Chega Tudo
- Avanco redesigning project as a focused high-grade open pit project
- Scoping Study Q2 2017; resolution of licensing issues ongoing







## **Exploration portfolio / opportunities**

Carajás: "land of the giants" 6700 000 mE 6000 000 mE SALOBO **PARAUAPEBAS**  $\Rightarrow$ **ELDORADO** Carajás Airport **CURIONÓPOLIS** DOS CARAJÁS  $\Rightarrow$ **Antas** 14,000 Tonnes Copper 9 300 000 mN 众 \$11D ☆ SOSSEGO 🛣 **25 KILOMETRES** Carajás Portfolio MAJOR MINES/ **WORLD CLASS PROJECTS EXISTING LICENCES** & APPLICATIONS Pedra Branca +++ RAILWAY LINE Targeting 34,000 **HIGH TENSION Tonnes Copper** TRANSMISSION LINES





## **Corporate**

## Building liquidity and widening the shareholder base

#### **Share Price**



2,457m / 162m	
AU\$0.048 - \$0.135	
A\$243m	
\$23.1m	

Appian	18%
Greenstone	17%
BlackRock	13%

8%

**Major Shareholders** 

**Glencore** 



## **Independent Board and Experienced Management**

Broad global mining, finance and legal experience, with complementary Brazilian and Australian backgrounds

#### **Board of Directors**

Chairman
Colin Jones

Senior NED
Vern Tidy

Luiz Ferraz

NED

NED **Paul Chapman** 

CEO
Tony Polglase

Exec, Legal **Luis Azevedo** 

Exec, Exploration
Simon Mottram











An authority on underground mine development. Distinguished career with Rio Tinto. MBA

Financial and audit skills as former senior partner for resources at E&Y in Australia Chartered Accountant BA Business Brazilian mining and finance skills.
Formerly CEO & CFO of Paranapanema, the largest copper smelter in Brazil.

Commercial, market and financial skills across diverse mix of ASX resource companies. Chartered Accountant BA Commerce Engineer with 40 years of development, operational and commercial experience globally. BEng Metallurgy

Leading authority on mineral law in Brazil, with broad company and operating experience. Qualified Lawyer BSc Geology MA Law Qualified geologist with over 20 years experience globally in base and precious metals. Accredited with several discoveries. BSc Geology AusIMM Fellow



Brazilian resident & Portuguese speaking

#### **Executive**

The executive team comprises Tony Polglase, Luis Azevedo and Simon Mottram as above, in addition to Scott Funston (CFO) Wayne Phillips (Metallurgy), Otávio Monteiro (Projects) and Nick Bias (Corporate Affairs)



C

## Copper Market

**Positive Outlook for Demand and Prices** 



## The right time to invest in copper

A lack of capital investment by industry majors, supply constraints in Chile and steadily growing copper demand is likely to result in a significant market deficit by 2019/2020

- Industry capital investment has halved since 2013
- New major greenfield projects are not being built
- Chile, the world's largest copper supplier, faces challenges
- Demand is growing steadily, driven by electric vehicles and India

Avanco's copper portfolio is very well positioned to take advantage of this market opportunity with Antas in production and early works already underway at the larger, high grade Pedra Branca project

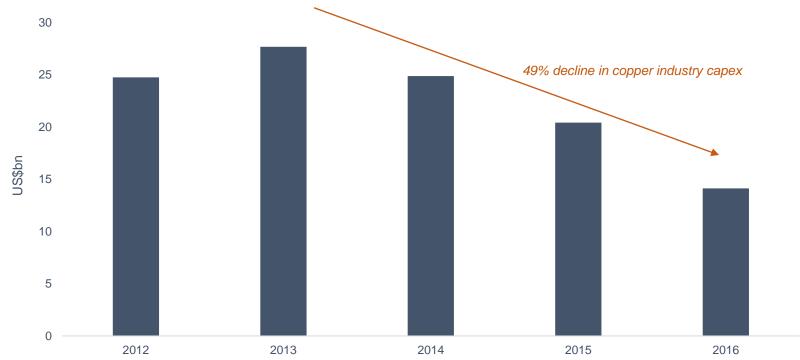


## **Industry Capex Has Halved**

#### Copper industry majors have cut investment in both growth and maintenance

Between 2013 and 2016, capital investment in copper projects by industry majors fell 49% from just under \$28bn to \$14bn. The lagged impact of the reduction in capex, combined with supply disruptions means that after growing by more than 3% for the past two years, copper mine production is now expected to fall in 2017

#### **Total copper capex of industry majors:**



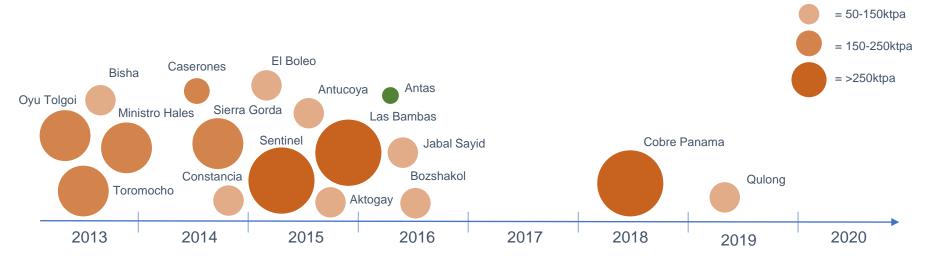


## **Lack of Greenfield Projects**

## After a growth phase, few new mines are now being built

Over the past four years, fourteen greenfield copper projects larger than 50ktpa were commissioned. In contrast, there are just two large greenfield projects currently under construction, and long lead times mean that major greenfield projects approved now will not start production before 2020. By starting early works at Pedra Branca in parallel with the PFS, Avanco has positioned its portfolio to take advantage of this opportunity





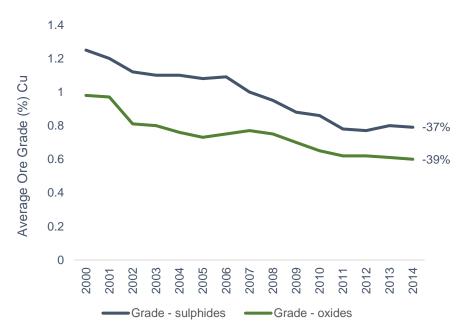
Source: Broadhurst Mining Research analysis, based on companies and other industry sources.

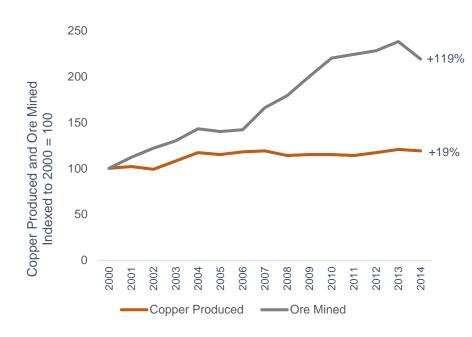
## **Key Producer Faces Challenges**

## Decreasing grade in Chile impacts production and costs

Between 2000 and 2014 the average grade of oxide ore mined in Chile fell by 39% and sulphide ore grade by 37%.

Coupled with lower recovery rates, that meant a 119% increase in ore mined in Chile for just 19% more copper





Source: Chilean Comision Nacional de Productividad

Together with increasing strip ratios at older mines and decreasing labour productivity this has pushed up the average cost of production in Chile.

Increasingly, as Chile grapples with these challenges, the copper market must look elsewhere for new supply, and Avanco's Brazilian projects are well positioned for this

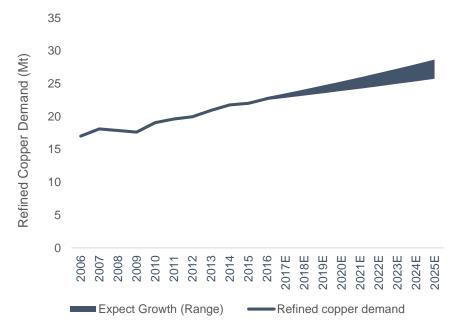


## **Steady Demand Growth**

## Electric vehicles and India will be key growth drivers

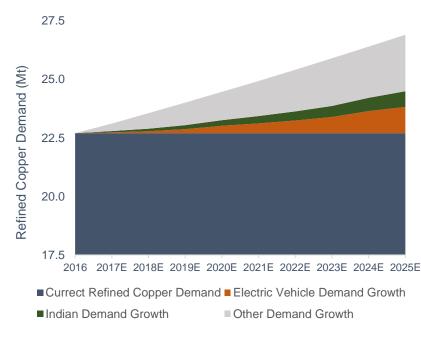
Refined copper demand is expected to grow by 1.5-2.5% per annum through to 2025 with more than 40% of the growth driven by electric vehicles and India. Plug in electric vehicles use four times as much copper as traditional cars, and global sales are growing at over 40% a year (over 80% in China). Indian copper demand is expected to grow by as much as 8% per annum driven by economic reform, infrastructure development and urbanisation

#### Refined Copper Demand (2006-2025E)



Source: Broadhurst Mining Research analysis, based on various industry sources including ICSG, USGS, market analysts and company presentations

#### Refined Copper Demand Growth Drivers (2016-2025E)



Source: Broadhurst Mining Research analysis, based on various industry sources including ICSG, USGS, market analysts and company presentations

Given the lack of capital investment and Chilean industry challenges, mine supply growth is unlikely to be able to match this pace of demand growth over the next five years

## Cautionary and forward looking statements

The announcement may contain certain forward-looking statements. Words 'anticipate', 'believe', 'expect', 'forecast', 'estimate', 'likely', 'intend', 'should', 'could', 'may', 'target', 'plan', 'potential' and other similar expressions are intended to identify forward-looking statements. Indication of, and guidance on, future costings, earnings and financial position and performance are also forward-looking statements.

Such forward looking statements are not guarantees of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Avanco Resources Ltd, its officers, employees, agents and associates, which may cause actual results to differ materially from those expressed of implied in such forward-looking statements. Actual results, performance, or outcomes may differ materially from any projections or forward-looking statements or the assumptions on which those statements are based.

You should not place any undue reliance on forward-looking statements and neither. Avanco nor its directors, officers, employees, servants or agents assume any responsibility to update such information. The stated Production Targets are based on the Company's current expectations of future results or events and should not be relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

Financial numbers, unless stated as final, are provisional and subject to change when final grades, weight and pricing are agreed under the terms of the offtake agreement. Figures in this announcement may not sum due to rounding. All dollar amounts in this report refer to United States Dollar unless otherwise stated.

Copper market data is produced with Broadhurst Mining Research analysis, and is based on company reports and industry sources.





# Advance with us avancoresources.com