



# **BUILDING COPPER MINES IN BRAZIL**

**DIGGERS AND DEALERS PRESENTATION** 

AUGUST 2016

#### THE COMPANY



# ENHANCING SHAREHOLDER VALUE THROUGH PRODUCTION, DISCOVERIES & ACQUISITIONS

- ► Focus on high grade and low capex / opex projects in Brazil
- ➤ 100%-ownership of large holding in mining friendly jurisdiction in proximity to large copper and iron ore mines
- First open pit operation commissioned in April 2016 with initial production forecast at 12,000 tpa copper with 7,000oz gold credits
- Underground project has potential to increase Avanco's production to ~50,000 tpa copper in 4 - 5 years\*
- Well positioned to execute growth strategy and establish Avanco as a profitable long life producer

<sup>\*</sup> Refer to Cautionary Statement on slide 22

#### CORPORATE

#### EMERGING MID-TIER COPPER COMPANY



- Avanco is well supported by respected institutional shareholders – currently holding 57% of the issued capital
- Strong balance sheet with US\$21m
   cash at the end of June 2016 quarter
   (before receipt of provisional sales)
- Fully funded to commercial production
- Debt and covenant free

Analyst Coverage	Recommendation
Hartleys	Buy
Numis	Buy

Major Shareholders	~%
Appian Natural Resources Fund	18
Greenstone Resources Fund	17
BlackRock World Mining Find	14
Glencore Plc	8

ASX Code	AVB
Issued shares	2,457m
Options	162m
52 week range	AU\$0.05 - \$0.09
Market cap at \$0.06	~AU\$148m
Cash (30 June 2016)	~AU\$28m
Enterprise value	~AU\$120m

## THE BOARD

#### EXTENSIVE GLOBAL MINING INDUSTRY EXPERIENCE



- International and Brazilian mining professionals
- Majority of Board Portuguese speaking and reside in Brazil
- ► Experience in copper production across all levels / disciplines

BOARD		Discipline	Portuguese Speaking	Resident in Brazil	Brazilian National
Colin Jones	Independent Chairman	Mining Engineer	•	•	
Tony Polglase	Managing Director	Metallurgist	•	•	
Luis Azevedo	Director Legal / Regulatory	Mining Lawyer	•	•	•
Simon Mottram	Director Exploration	Geologist	•	60%	
Wayne Phillips	Director Operations	Chemical Engineer	•	•	•
Scott Funston	Director & CoSec	Chartered Accountant		40%	
Vernon Tidy	Independent Director	Chartered Accountant			
Luis Ferraz	Independent Director	Finance	•	•	•

## DEVELOPMENT STRATEGY





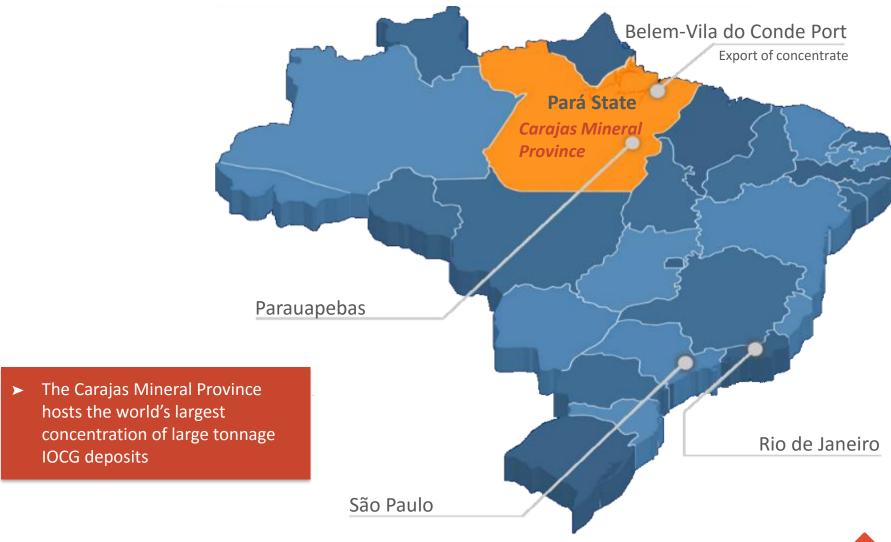
- ➤ Commissioned Stage 1 Antas open pit mine during April 2016 to produce ~12,000 tpa of copper in concentrate with ~7,000 ozpa of gold credits
- ➤ Increase Antas production to 15,000 tpa copper by 2018
- Develop Stage 2 Pedra Branca underground project
- ➤ Combined Stage 1 and 2 production target of ~50,000 tpa of copper in 4 5 years\*
- Develop "upside" through exploration and pursuing acquisitions and partnerships in Brazil
  - Refer to Cautionary Statement on slide 22



# PROJECT LOCATION



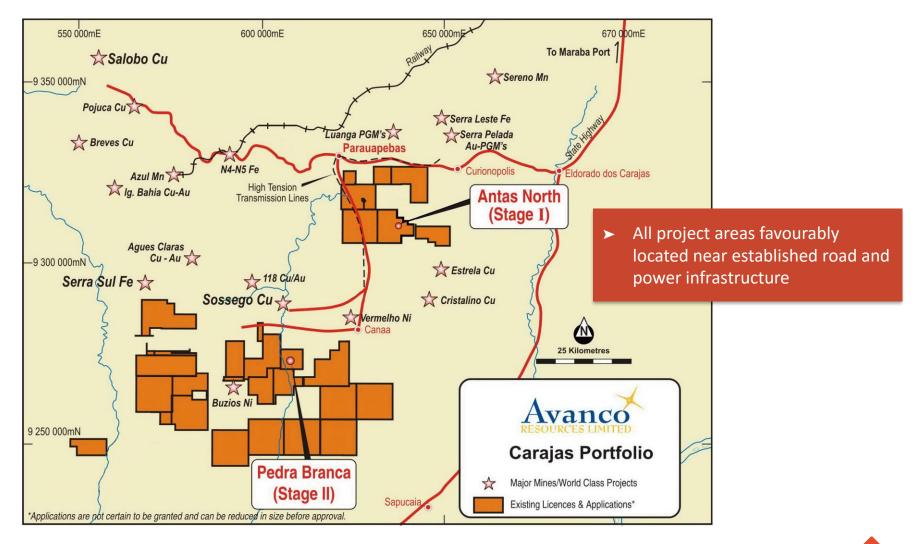




### PROJECT HOLDING

100%-OWNED PORTFOLIO COVERING 1,800km<sup>2</sup>





#### ANTAS STAGE 1 LOM PHYSICALS





- Proved & Probable Ore Reserve: 3.63 million tonnes at 2.53% copper and 0.55g/t gold\*
- ➤ 800,000tpa plant capacity not fully utilised provides redundancy and opportunities to increase production
- Ore will be stockpiled as a contingency against interruptions such as weather
- Significant additional Mineral Resources are situated at depth and nearby at Antas South.\* The economics of exploiting these are being investigated

Parameter	
Mining	Conventional open pit: drill & blast, load & haul
Mine Plan	~500,000tpa ROM ore, 7.1 LOM waste: ore ratio
Mine Grade	Year 1 − 3: ~2.1% Cu, LOM (7 years): 2.4% Cu
Plant Design	800,000tpa, crush, grind, float and filter
Recoveries	94 - 97% for Cu, ~ 90% for Au into a 28% concentrate at 8% moisture

<sup>\*</sup> Refer Mineral Resources & Ore Reserves on slide 21

# ANTAS NOW IN PRODUCTION







### ANTAS QUARTERLY PERFORMANCE





- ➤ 11,146 tonnes of concentrate sold with provisional copper and gold sales of US\$16.20 million before costs
- Over 1,187,000 man-hours without a lost time injury
- ➤ C1 cash cost of US\$1.03/lb payable copper produced during ramp-up phase
- September quarter production guidance of 3,000t of copper and 1,750oz of gold with costs remaining in line as reported in Brazilian Real terms

	June 16 Quarter	March 16 Quarter
Copper in concentrate produced (t)	3,246	602
Gold in concentrate produced (oz)	2,343	351
Copper in concentrate sold (t)	6,426	-
Gold in concentrate sold (oz)	1,951	-
C1 Cash Cost (US\$/lb)	1.03	-

### ANTAS LOM ECONOMICS





- ➤ The high copper grade + gold by-product credits provides for a financially robust project
- Antas is forecast to be a low cost copper producer
- C1 costs anticipated to fall within the 1st Quartile
- Expectations from current economic modelling\* include:

Parameter	
Mine gate cost	US\$0.48/lb Cu
C1	US\$0.93/lb Cu
C3	US\$1.46/lb Cu
AISC	US\$1.61/lb Cu
LOM EBITDA	US\$330 million

<sup>\*</sup> Results are based on copper prices of US\$2/lb for 2016, US\$2.5/lb for 2017, US\$3.20 for 2018 onwards, gold US\$1,100oz, FX USD:BRL 4.0 LOM, NIL discount rate





- Measured, Indicated & Inferred Resource: 17.67 million tonnes at 2.44% copper and 0.65g/t gold\*
- Comprises "East" and "West" zones
- East: higher grade, wider and well understood.
   West: requires further drilling
- Significant upside along strike and at depth on both East and West

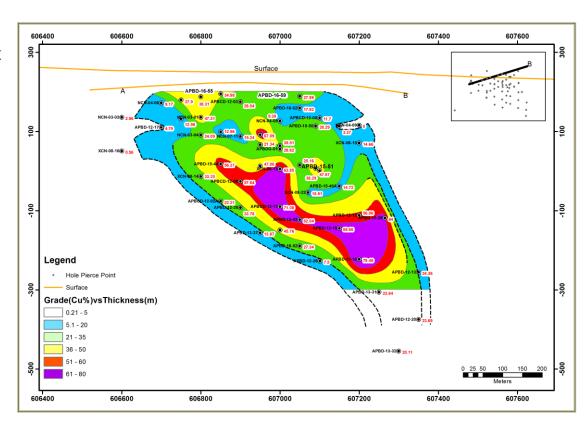
Look Out East Zone Company West Zone Mineralization >=0.9% Coppe Tectonically Interdigitated Granite/Diorite 607250 Pedra Branca Deposit Geological Map \* Datum: SAD69/22S

<sup>\*</sup> Refer Mineral Resources on slide 21





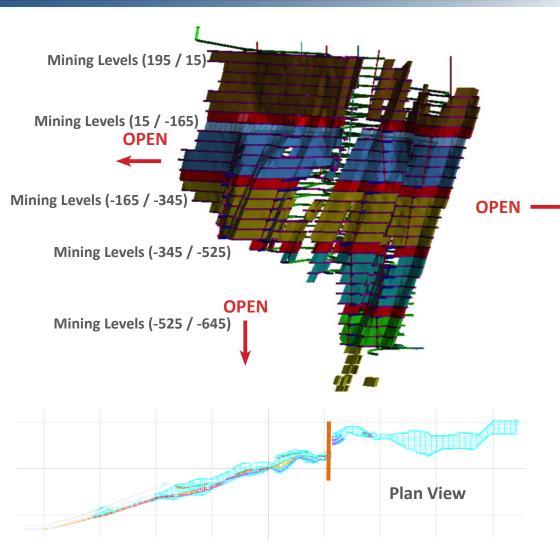
- East averages ~15m in width. Ideal for high grade, low-capex "starter mine" that can be expanded into a larger scale underground operation targeting ~35,000tpa copper + gold credits
- Steep dip and competent wall rocks suitable for large tonnage, cost efficient sublevel open stoping operation
- Evaluation Study in progress targeting low capex, initial development of high grade hangingwall lode in East as first step towards full scale commercial production as market conditions improve







- Hangingwall lode is the largest and most continuous high grade zone in East. Averages
   7m in width
- Measured & Indicated
   Resource: 4.5 million tonnes at
   2.8% copper and 0.7g/t gold\*
- Mine development (portal, ramp etc) will be the same as required for full scale operation
- Metallurgical testwork shows Pedra Branca to be similar to Antas



<sup>\*</sup> Refer Mineral Resources on slide 21

FAVOURABLY LOCATED TO EXISTING INFRASTRUCTURE





### EXPLORATION

#### LARGE FOOTPRINT IN WORLD CLASS PROVINCE



- Carajas Mineral Province has the highest concentration of large tonnage IOCG deposits in the world
- Avanco has secured 1,800km² of exploration ground\* – second only to Vale
- High probability of further exploration success for copper, gold, nickel & PGE's from ongoing regional program over several targets
- Actively pursuing new acquisitions or partnerships with neighbouring majors
- \* Tenure in various stages of approval or under application

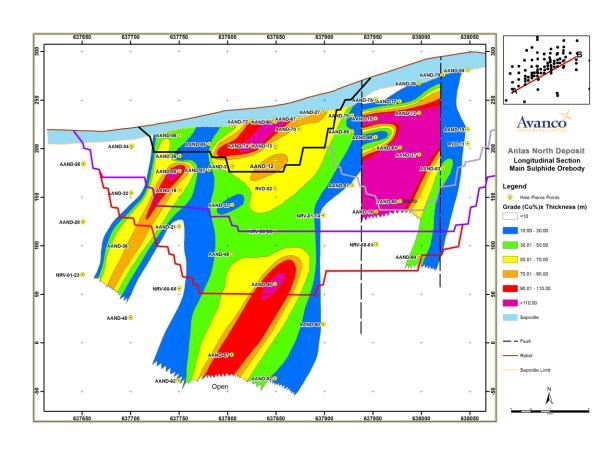


#### ANTAS - NEAR MINE TARGETS

DEPTH POTENTIAL CONSTRAINED BY DRILLING



- Significant copper sulphide mineralisation extending from base of planned open pit intersected in wide spaced drilling
  - 79.75m at 1.42% Cu and
     0.20g/t Au from 223m
  - 19.85m at 1.84% Cu and 0.41g/t Au from 306m
  - 35.75m at 1.88% Cu and 0.42g/t gold from 337m
  - 6.10m at 6.37% Cu and
     0.33g/t gold from 223.70m
- High grade, south-west plunging shoots targeted for future underground development



# ANTAS - NEAR MINE TARGETS

MULTIPLE EARLY STAGE COPPER SULPHIDE TARGETS



- Copper sulphides intersected below large copper oxide resource at Antas South\* including 8.5m at 2.63% Cu and 31m at 1.4% Cu
- Other copper sulphide intersections from limited drilling include:
  - Lazinho 26m at 0.71% Cu
  - Paulinho 126m at 0.21% Cu
  - Clovis 17m at 2.2% Cu
- Numerous magnetic anomalies remain untested
- New ground EM equipment to target sulphides

**Antas North** Antas South 2km

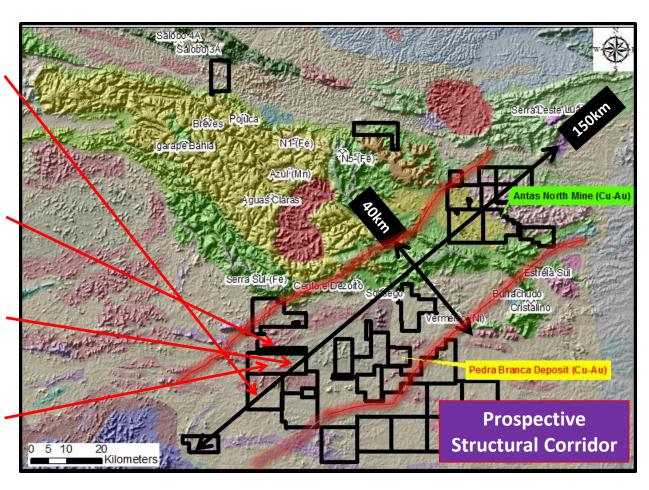
<sup>\*</sup> Refer Mineral Resources on slide 21

## REGIONAL TARGETS





- ➤ São Pedro Licence:
  - Medalha & Vanderlan IOCG targets
  - Macacos Ni targets
- Nova Esperança IOCG target 9km of strike
  - 17.1m at 1.02% Cu s from 150m
- ➤ São Jorge IOCG target
  - 17.4m at 1.21% Cu from 158m
- ➤ União IOCG target
  - 0.4m at 3.25% Cu from 117m



#### SUMMARY



- Avanco is an aspiring mid-tier mining company
- Avanco is now the second copper producer in the Carajas behind Vale
- The high grade / low cost Antas open pit operation is financially robust in low copper price environment
- Avanco has signed an offtake agreement for the sought after clean Antas concentrate on very attractive terms
- Planning underway to develop the significantly larger Pedra Branca underground project and establish Avanco as a profitable, long life mining company producing ~50,000tpa copper
- Evaluation Study well advanced on start-up operation for Pedra Branca underground mine
- Well supported by respected institutional shareholders
- Actively pursuing new opportunities to enhance shareholder value

# MINERAL RESOURCES & ORE RESERVES



CARAJAS - TOTAL JORC Reported Mineral Resources,1,2,3,4								
DEPOSIT	Category	Million Tonnes	Cu (%)	Au (g/t)	Copper Metal (T	) M	Gold etal (Oz)	
PB East⁵	Measured	1.98	2.7	0.7	53,000	4	13,000	
	Indicated	5.72	2.8	0.7	161,000	1	123,000	
PD EdSt	Inferred	2.78	2.7	0.6	75,000	1	55,000	
	Total	10.48	2.8	0.7	289,000	2	21,000	
	Indicated	4.46	2.04	0.61	91,000	8	37,000	
PB West <sup>5</sup>	Inferred	2.74	1.72	0.56	47,000	4	19,000	
	Total	7.19	1.92	0.59	138,000	1	36,000	
PEDRA BRANCA	Total	17.67	2.44	0.65	427,000	3	57,000	
	Measured	2.83	3.01	0.72	85,000	(	66,000	
ANTAS NORTH⁵	Indicated	1.65	2.20	0.42	36,000	2	22,000	
ANTAS NORTH	Inferred	1.9	1.59	0.23	30,000	:	14,000	
	Total	6.38	2.38	0.50	152,000	1	102,000	
	Measured	0.59	1.34	0.18	8,000		3,000	
ANTAS SOUTH <sup>6</sup>	Indicated	7.5	0.7	0.2	53,000	4	19,000	
ANTAS SOUTH	Inferred	1.99	1.18	0.2	24,000	:	L3,000	
	Total	10.08	0.83	0.2	85,000	85,000 6		
TOTAL		34.13	1.95	0.49	664,000 524		24,000	
	ANTAS NORTH – JORC Reported Ore Reserves <sup>7,8</sup>							
CLASSIFICATION	Туре	Economic Cut-Off Cu%	Tonnes (Mt)	Copper (%)	Gold (g/t)	Copper Metal (T)	Gold (Oz)	
PROVED	ROM Ore	0.90	1.385	3.62	0.74	50,137	33,046	
PROBABLE	ROM Ore	0.90	1.264	2.72	0.57	34,381	23,231	
PROVEN + PROBABLE ROM ORE			2.649	3.19	0.66	84,518	56,277	
PROVED	Low Grade	0.65	0.342	0.74	0.30	2,531	3,308	

0.65

0.635

3.63

0.72

2.53

0.23

0.55

4,572

91,621

4,709

64,294

**PROBABLE** 

Low Grade

**TOTAL PROVEN + PROBABLE** 



#### **JORC COMPLIANCE NOTES**

- 1. Refer ASX Announcement "Resource Upgrade Advances Pedra Branca Development Strategy", 26 May 2016, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Pedra Branca resource estimates
- 2. See ASX Announcement "Stage 1 set to excel on new high grade Copper Resource", 7 May 2014, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Antas North resource estimate.
- 3. See ASX announcement "Major Resource Upgrade for Rio Verde", 8 February 2012, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Antas South resource estimate.
- 4. The Antas South JORC compliant resource was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012, on the basis that the information has not materially changed since it was last reported.
- 5. Grade Tonnage Reported above a Cut-off Grade of 0.9% Copper.
- 6. Grade Tonnage Reported above a Cut-off Grade of 0.3% Cu for Oxide Resources.
- 7. See ASX Announcement "Maiden Reserves Exceed Expectations for Antas Copper", 17 September 2014, for Competent Person's Consent, material assumptions, and technical parameters underpinning the Antas North JORC (2012) Reported Reserve estimate.
- 8. Measured and Indicated Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.
- 9. The information in this presentation that relates to Exploration Results is based on information compiled by Mr Simon Mottram who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Mottram is an Executive Director of Avanco Resources Limited, in which he is also a shareholder. Mr Mottram has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (CP) as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Mottram consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### 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 Target is 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.
- All project costs are in US\$



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