

# BUILDING THE ANTAS COPPER MINE AGM Presentation 26 June 2015 – Sydney



#### 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.

Additional Information - All project costs in US\$

# CORPORATE

ASX Code	AVB
Issued Shares	2.475b
Options	84.5m
52 week range	6<12c
Market Cap @ \$0.07	172
Cash	72
Enterprise Value	100
Major Shareholders	~%
Glencore	9
BlackRock	14
<b>Appian Natural Resources</b>	17
Greenstone Resources	17

57



Colin Jones Tony Polglase Simon Mottram Wayne Phillips Luis Azevedo Scott Funston

# **INVESTMEMENT OUTLOOK**



Aiming for mid-tier status by production and exploration

- > Avanco is the only aspiring copper producer in construction on the ASX
- The Company's institutional investors are specialists in the sector & have positive views on copper
- > Antas C1 & C3 costs expected to be in lower quartile
- Being debt and covenant free reduces costs & exposure to financial risk
- 2<sup>nd</sup> largest tenure in the region behind ValeSA, Avanco continues to seek greater value for shareholders by pursuing new discoveries



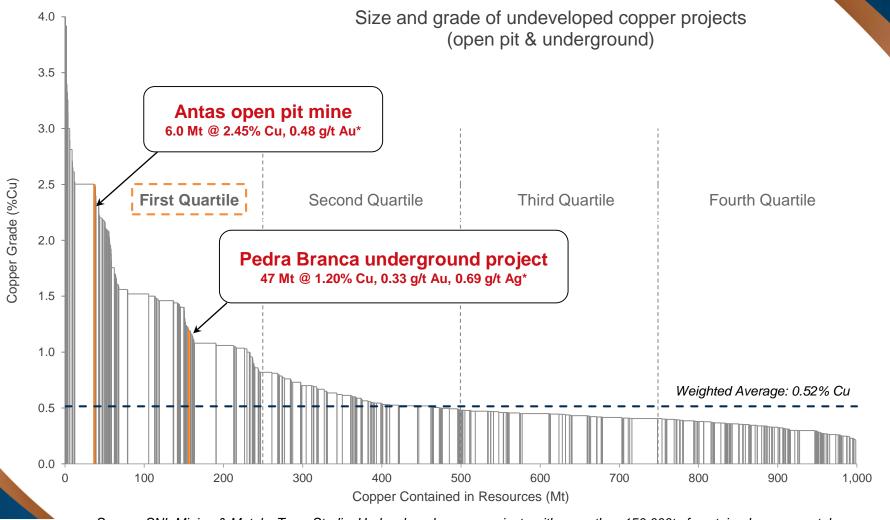
# **OVERVIEW**

- An emerging mid-tier copper company focussed on the mining friendly and world class Carajás Mineral Province in Brazil
- The Company is potentially well positioned to develop and operate a number of high grade, low cost copper-gold mines in the region, which will establish Avanco as a profitable long life copper producer
- > Avanco's first (Stage 1) project is under construction

## **PROJECTS BENCHMARKING**

#### Antas (OP) & Pedra Branca (UG) both in 1<sup>st</sup> quartile

AVB | 6



Source: SNL Mining & Metals, Terra Studio. Undeveloped copper projects with more then 150,000t of contained copper metal \* Please refer to Appendix for complete mineral resource and ore reserve tables

# **STRATEGY & VISION**



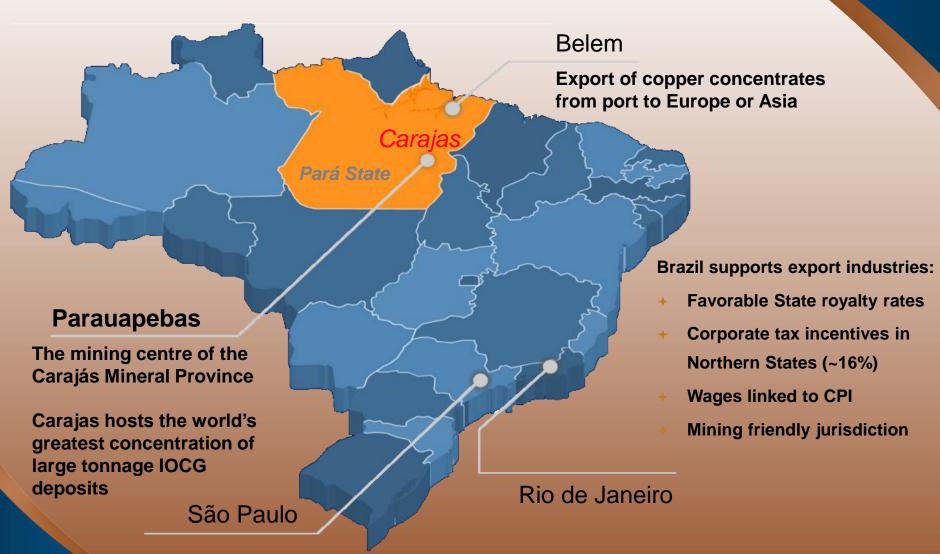
A staged approach to building a copper company

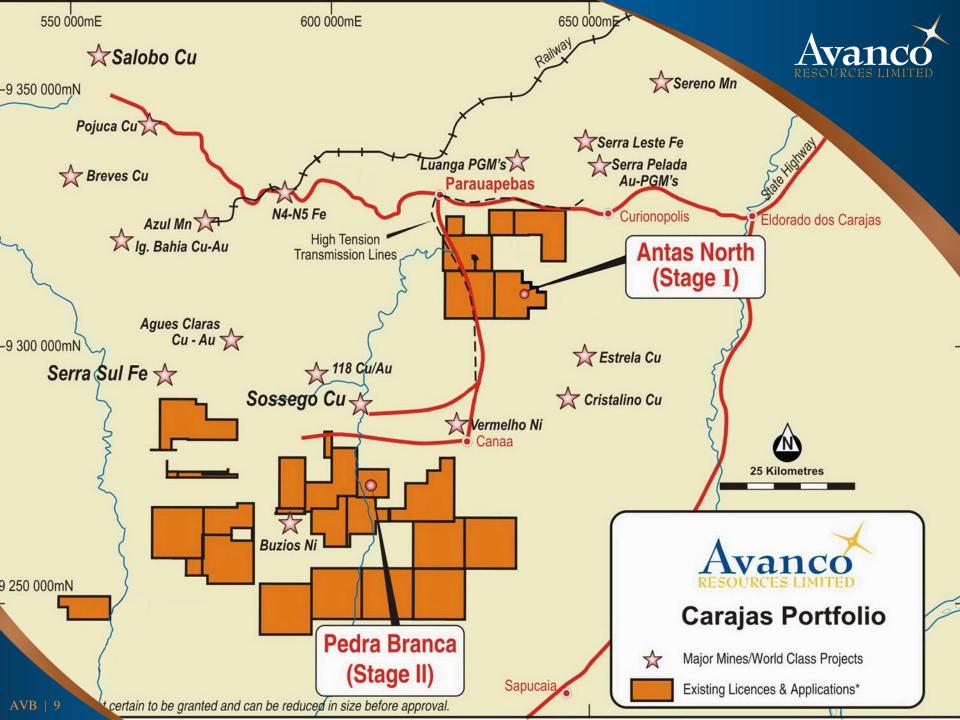
- 1. Building the Antas Mine (Stage 1) and produce 2016:
  - + ~12,000 tpa copper in concentrate, and
  - + ~7,000 ozpa gold credits
- 2. Develop the Pedra Branca Project (Stage 2)
- 3. Discover / Acquire additional projects

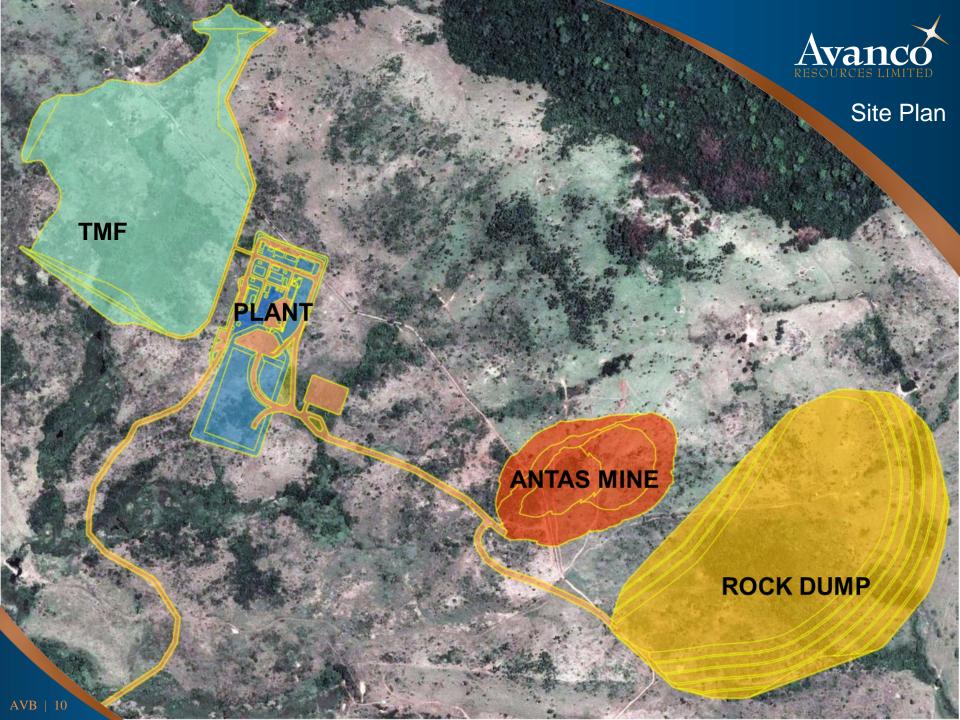
# **PROJECTS LOCATION**



In one of the best endowed mineral district in the world







# FINANCING UPDATE



High market capital value of AVB provided opportunity to secure funds & negate debt delay which jeopardised construction in the dry

Stage 1 funding \$78m or (US\$60m)	P
\$2m potentially available for Stage 2	La Do
\$2m allocation for exploration	NTAS

Antas takes precedence

SOURCE OF FUNDS	\$M
Placement	20
<b>Entitlement</b>	17
Shortfall	26
New Funds Receieved	63
Expected Royalty Funds	15
Total Funding for Antas	78
Cash at Bank	~72*

dL

Ddl

AVB | 11

# **DEVELOPMENT BUDGET**



- Construction forecast US\$53m including contingency
- 2.5 months (US\$7m) Working Capital
- ~US\$3m spent to date
- ~US\$5m committed to date
- Early days but costs are in budget & contingency not drawn

AREA	~US\$
Mine	5.0
Infrastructure	7.4
Plant	25.0
TMF	3.4
Engineering	5.0
Contingency	7.0
Working Capital	7.0
Tatal	~ ( 0 0

Total ~60.0

### **HEALTH & SAFETY**

AMBULÂNCIA

QDC 0304

The Board believes all harm is preventable



A fully equipped ambulance on site

Avanco

# **MINING - UPDATE**



- Manager Mining for Stage 1 identified
- Contract mining elected, reduces Capex & mitigates risk
- Avanco management free to focus on: planning, grade control & extraction optimisation
- Tendering process completed, LOI issued to international group with local experience
- Mobilisation of contractor planned for July
- Mining schedules to be finalised / agreed with contractor aimed at minimising start-up risk for both parties

#### **MINING FLEET**



Excavator - Liebherr R9100 + CAT 974 backup

Pit Shell

- Trucks Volvo A40F's
- Dozer CAT D8T
- Grader CAT 14M
- Drilling CAT MD5150C

## **GRADE CONTROL**

Geo-statistical study complete, Grade Control designed

Drilling ~2,000m on 5m x 5m grid over primary mineralisation close to surface within Stage 1 pit

Follow-up will determine parameters for the day-to-day Grade Control activities at the mine

Drilling started today

### **EXCELLENT ROCKS**



# **ANTAS MILESTONES**



#### > An aggressive build programme is being pursued

Start Civils	June
Commence Open Pit Pre-Strip	August
Start Mech-Elect Installation	August
Complete Earthworks	September
Complete Tailings Dam	November
Complete Power Line	October
Low grade ore to ROM pad	December
Start Commissioning	December
Ramp-up on high-grade ore	March 2016
Dispatch first concentrates	March 2016



### **PLANT UPDATE**

1716

AVB | 19

11



# **CUT & FILL WELL ADVANCED**

H

CONTRACTOR CONT

# **BUILDING ANTAS**



ROM PAD

CRUSHING

FILTER FLOAT PLANT

TMF

MILL

ADMIN

### **BALL MILL EXCAVATION**



# **TMF DE-GRUBBING**



**Organics removed & stockpile for future reclamation** 

# **PROCUREMENT**



> Tailings Dam contract awarded & advancing

Civils, LOI issued

LOI for Metso LSTK for Dewatering Filter signed

Contractor for 34,5 Kv transmission line mobilised

**Transformers, substations & electrocenters ordered** 

Structural steel ordered

PO's issued for main equipment packages

### **MANAGEMENT BUILD-UP**



- Antas Mine Manager, Brazilian CFO & Financial Controller Perth identified
- Performance incentive scheme in place to motivate & reward
- MD relocating to Brazil, close to the operation
- Board investigating the need for more Independent Directors

# **ANTAS CONCENTRATE**



Substantial interest from potential off-take customers

- Antas to produce ~45,000tpa of copper concentrates containing low levels of deleterious elements
- A number of firm offers received, discount TC-RC's & 90% payable FOB being offered
- Terms for Avanco's "clean" copper concentrate continue to improve as forecast shortages (essential for blending) weigh on market sentiment
- Decision on selection of off-take group rescheduled to Q4 2015

# **STAGE 2 PEDRA BRANCA**





Development strategy

- Pedra Branca, known as Stage 2 is located in the same district as Stage 1
- High grade mineral Resource, considerably larger than Antas
- In-fill drilling to improve Mineral Resource confidence completed
- > Mining License applied for with DNPM
- Environmental Study commenced

Pedra Branca (and Stage 1 Antas) Copper grades fall comfortably within the first quartile of copper project grades globally, in line with the Company's ongoing business strategy



#### **Results of East Upgrade Drilling**

Assays support previously work and confirm the high grade mineralisation hosted within the core of both the east and west deposits:

<ul> <li>40.00m at 1.60% Cu, 0.26g/t Au from 436.00m</li> <li>Inc. 18.80m at 2.89% Cu, 0.89g/t Gold from 437.60m</li> </ul>	APBD-15-39
<ul> <li>47.85m at 1.27% Cu, 0.36g/t Au from 418.15m</li> </ul>	APBD-15-42
<ul> <li>27.00m at 1.63% Cu, 0.37g/t Au from 261.00m</li> <li>Inc. 12.65m at 2.39% Cu, 0.55g/t Gold from 261.00m</li> </ul>	APBD-15-43
<ul> <li>40.85m at 1.38% Cu, 0.70g/t Au from 274.95m</li> <li>Inc. 13.05m at 3.14% Cu, 1.63g/t Gold from 274.95m</li> </ul>	APBD-15-44
<ul> <li>106.10m at 0.81% Cu, 0.20g/t Au from 174.00m</li> </ul>	APBD-15-45
o 24.00m at 1.01% Cu, 0.28g/t Gold from 151.00m	APBD-15-49



**Resource Upgrade** 

- Hole APBD-15-39 (eastern extent of East) shows orebody high grade core is open along strike, highlighting potential for further resource growth
- East Resource Upgrade completed and subject to check before release with West being computed by consultants.
- Resource Update release to the market in July with internal Scoping Study to be completed early Q4
- Avanco anticipates being in a position to make a "decision to mine" in December with supporting information documented in a Pre-feasibility Study by late Q1 2016

# **DECISION TO MINE**



- Upgrade from Inferred to Indicated / Inferred Resource confidence will underpin future studies
- This exercise will evaluate provisional estimates of mineable tonnes, grade, mining methods, CAPEX, OPEX, and target the ongoing Pre-Feasibility Study
- The aforementioned Study will benefit from robust cost information gleaned from the proximal Antas Project
- By December management believe that they will have sufficient information to make a "Decision to Mine"

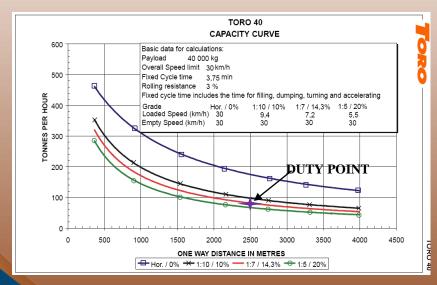


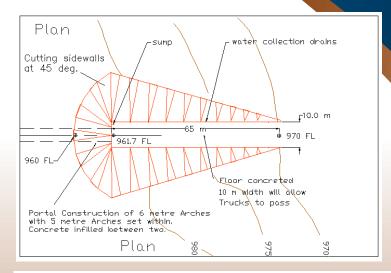
# **DECISION TO MINE**

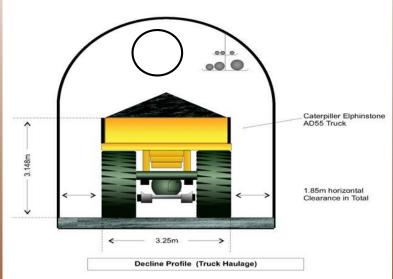
- A positive decision to mine will trigger an accelerated investment programme
- Key question is the relationship and timing between East and West Orebody mining
- This affects both the mine development expenditure and the strategy/expenditure on mill construction
- Expenditures might include an open-cut pre-strip over the Western orebody, and/or commencing a "box cut" and ramp into the higher grade Eastern orebody
- The funding for Stage 2 will be significantly greater than Antas. Capex being a function of the mining sequence, start-up lead times, copper production strategy & commodity price

#### Access and Haulage





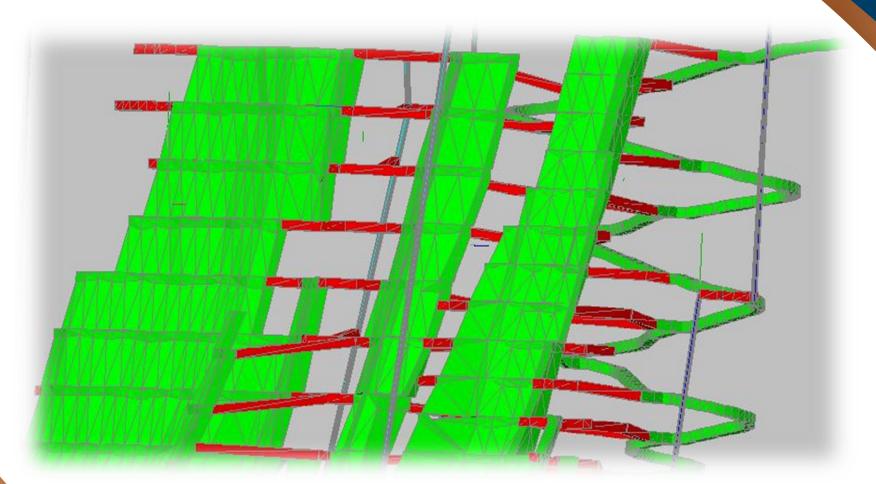








#### **Probable Mining Method**

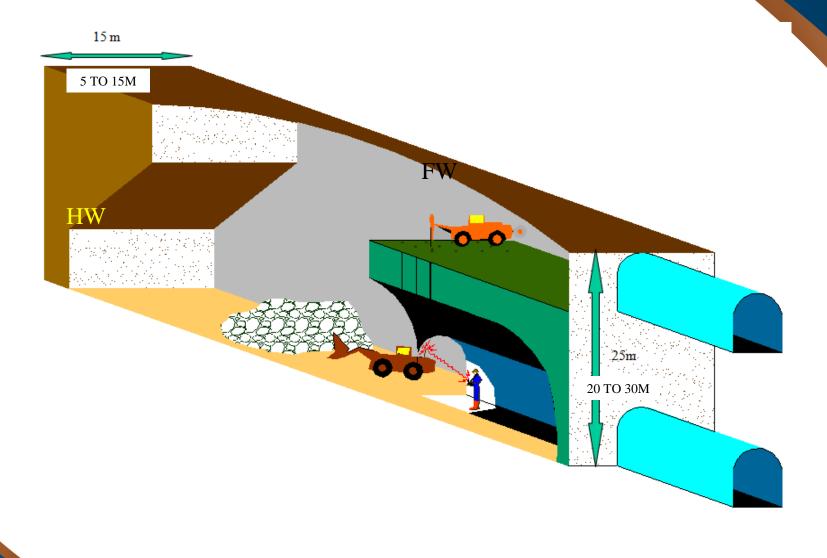


#### LONGITUDINAL SLOS





#### SLOS – Sub-Level Open Stoping



#### Stope Drilling



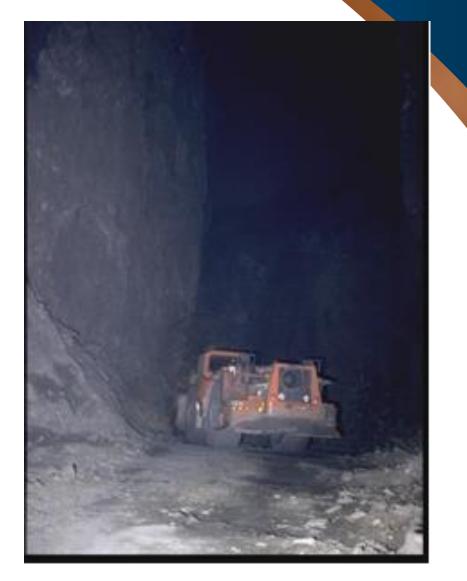
epos

## **PEDRA BRANCA**



### Remote Mucking





## **PEDRA BRANCA**



### **DECISION AND PFS PROGRAMME**

Task Name	Do	May	lun	hul	Aug	Son	Oct	Nov	Dec	lan	Feb	Mar	Anr	May
□ Phase 1 Scoping Study	Ne:	Ivicity	Juil	Jui	Aug	JCh	ou	1404	Dec	Jan		wa	Λμι	IVICA)
• Resources													2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
* Reserves				Ĭ										
Mining													* * * * * * * *	
Metallurgical Studies													8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 9 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8
+ Infrastructure													5 5 5 5 5 7 7 7 7 8 8 8 8 8 8 8 8 8 8 8	8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
COMPLETE SCOPING STUDY	Sirr					02	/09						8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	5 5 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Phase 2 Decision to Mine													5 5 5 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
Refine Mine Planning													8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
Refine Metallurgical Studies													2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
+ Infrastructure													2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Costing													2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
OPTION DECISION									30/	11			- 	
Refine Selected Option														
COMPLETE												•	30/	03



# PEDRA BRANCA

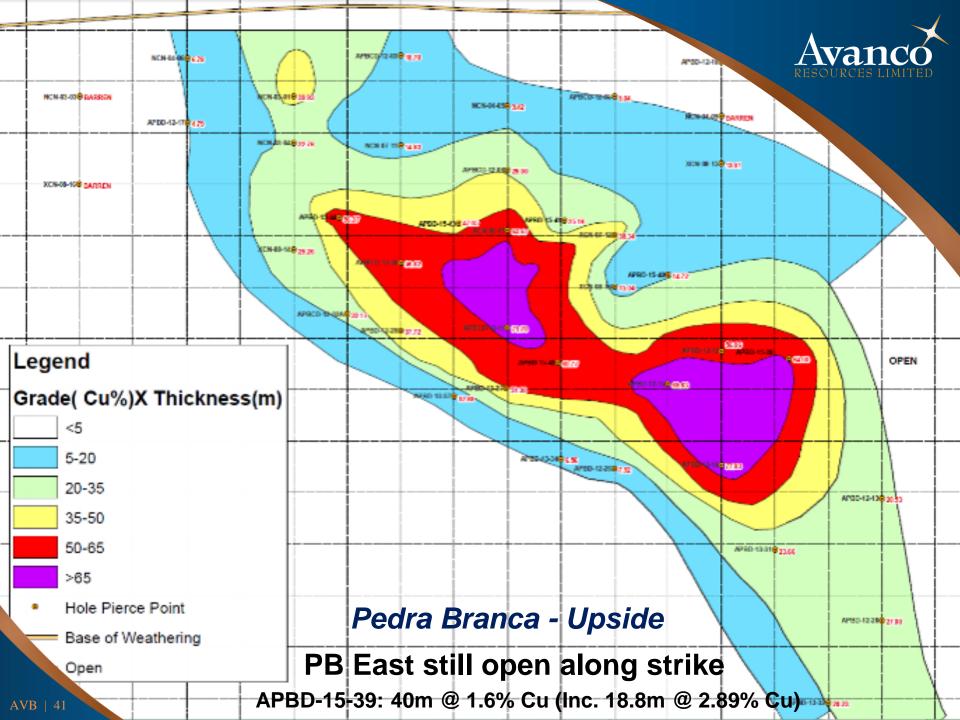
### Conclusions

- Recent "Infill Drilling"
  - Consistent bodes well for Resource conversion
  - Probable increased East Resource
  - PB East still open along strike
    - APBD-15-39: 40m @ 1.6% Cu (Inc. 18.8m @ 2.89% Cu)
- Studies to date suggest:-
  - Viability with West strategy in relation to East as Key
  - Eventually Mining Underground in both ore bodies
  - Sub-Level Stoping / Ramp haulage
  - Simple "traditional" flotation processing to clean concentrate
  - Significant scope to increase Grade (and Tonnage)
- Ongoing Studies
  - Updated Scoping Study early Sept 2015
  - Decision to mine December 2016 with PFS completed March 2016

## **EXPLORATION**



- The Company is examining new opportunities, some are worthy of drill testing
- Additional to above, a return to the Nova Esperanca target is highly justified
- Up to \$2m has been allocated for continuing exploration in 2015
- ~5,000m drill programme already commenced, will sytematicaly test high priority targets including: Pedra Branca East (Extension), Nova Esperanca, Sucurui\* & Sao Jorge



## **SUMMARY HIGHLIGHTS**



Only ASX copper company in construction Two quality copper projects in same district High grade resource/reserves which continue to grow Good infrastructure, no environmental concerns Incremental staged development reducing risk & Capex Substantial exposure to exploration upside Well supported by blue chip resource funds Antas funding completed, financially strong & debt free **Experienced owners/operational team resident in Brazil** Strong news flow over next 12 months Significant upside at each stage and beyond

# Avanco RESOURCES LIMITED

# STAGE 1 - IN CONSTRUCTION

--0

## DIRECTORS



#### Owners team to actively participate in all critical activities

#### Mr Colin Jones – Non-Executive Chairman

Mr Jones started his mining career with British Coal in South Wales and following Coal Mine certification completed a mining degree at Cardiff University in the UK. Several years of contract management followed with Thyssens, supervising development, including mechanised mine development and shaft sinking activities Mr Jones was responsible for the underground development of the Fortaleza Nickel Mine in Brazil and was a core consultant for the underground development at the Palabora mine in South Africa. Mr Jones is an independent consultant, has an MBA, speaks Portuguese and maintains a residence in Brazil.

#### Mr Tony Polglase – Managing Director

With over 30 years multi-disciplined mining experience across ten different countries, Mr Polglase is qualified in mechanical and electrical engineering with an honours degree in Metallurgy from the Camborne School of Mines, UK and is fluent in Portuguese. Mr Polglase has acquired detailed knowledge relating the development and operation of gold, copper, lead, zinc and tin projects and has either been responsible for or closely involved with the commissioning of more than seven mining projects. Project management including critical evaluation, implementation and commissioning are Mr Polglase's strengths. Mr Polglase has a demonstrated ability of successfully bringing projects on line in the most challenging of environments.

#### **Mr Simon Mottram – Executive Director**

Mr Mottram is a geologist with over 20 years' experience predominantly in iron oxide copper gold, nickel sulphide and precious metals. Having held senior management positions with a number of successful mining companies both in Australia and overseas Mr Mottram has extensive knowledge in base and precious metal evaluations, and has seen a number of discoveries advanced through to commercial mine development and has been central to several significant exploration successes. Mr Mottram is an expert in the application of modern exploration techniques, large-scale drill programmes and feasibility studies. Mr Mottram is a graduate of Melbourne RMIT University, a Fellow of the AusIMM, speaks Portuguese, and assumes responsibility for all of the company's exploration activities.

## DIRECTORS



#### Owners team to actively participate in all critical activities

#### Mr Luis Azevedo – Executive Director

Mr Azevedo is an outstanding resource industry professional with over 35 years of international experience. Mr Azevedo qualified as a geologist at the University of Rio de Janeiro in 1985 and subsequent to working as a geologist he completed a law degree at the University of Candido Mendes in 1992 and obtained his Masters of Law from Pontifical Catholic University Rio de Janeiro in 1994. Mr Azevedo has held senior positions with major resource companies including Western Mining Corporation, Barrick Gold and Harsco. He is based in Rio de Janeiro, Brazil and is a Brazilian citizen.

#### Mr Wayne Phillips – Executive Director

Mr Phillips is a Brazilian national and outstanding industry professional with a solid track record of project management and access to an extensive Brazilian network. In 1977, as a chemical engineering graduate from the University of Rhodesia, Mr Phillips migrated to Brazil and established a very successful metallurgical consulting business. Mr Phillips has been credited with participating in the engineering and commissioning of the Cariaba Copper Smelter and the design and construction of a number of small copper mines in northern Brazil. For the last ten years Mr Phillips has been Technical Director for Kinross Gold South America and has played a pivotal role in the expansion of Kinross's giant Paracatu Gold Mine in Brazil.

#### Mr Scott Funston – Executive Director

Mr Funston is a qualified Chartered Accountant and Company Secretary with more than 10 years' experience in the mining industry and the accounting profession. His expertise is financial management, regulatory compliance and corporate advice. Mr Funston possesses a strong knowledge of the Australian Securities Exchange requirements and currently assists or has previously assisted a number of resources companies operating throughout Australia, South America, Asia, USA and Canada with financial accounting, stock exchange compliance and regulatory activities.



### **COMPETENT PERSON STATEMENTS**

The information in this report 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.

The information in this report that relates to Mineral Resources is based on information compiled by Dr. Bielin Shi, who is a Fellow of the Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists. Dr. Shi is an employee of CSA Global Pty Ltd. Dr. Shi 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". Dr. Shi consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on information compiled by Mr Paul O'Callaghan, who is a member of the Australasian Institute of Mining and Metallurgy. Mr O'Callaghan is an employee of CSA Global Pty Ltd. Mr O'Callaghan 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 O'Callaghan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## **ORE RESERVES**



### 59% of ore reserves classified as Proved averaging 3.62%

#### ANTAS NORTH – SULPHIDE JORC ORE RESERVES – APRIL 2014

Туре	Classification	Cut-off	Tonnes	Cu %	Au g/t	Copper	Gold
ROM ore	Proved	0.90% Cu	1.385 Mt	3.62%	0.74	50,137 t	33,046 oz
	Probable	0.90% Cu	1.264 Mt	2.72%	0.57	34,381 t	23,231 oz
	Total ROM ore		2,649 Mt	3.19%	0.66	84,518 t	56,277 oz
"Low grade"	Proved	0.65% Cu	0.342 Mt	0.74%	0.30	2,531 t	3,308 oz
	Probable	0.65% Cu	0.635 Mt	0.72%	0.23	4,572 t	4,709 oz
	Total low grade		0.977 Mt	0.73%	0.26	7,103 t	8,017 oz
TOTAL ORE RESERVES			3.630 Mt	2.53%	0.55	91,621 t	64,294 oz

# MINERAL RESOURCES



### 55% of Antas mineral resources classified as Measured

#### ANTAS DEPOSIT - SULPHIDE JORC (2012) MINERAL RESOURCES - APRIL 2014

Туре	Classification	Cut-off	Tonnes	Cu %	Au g/t	Copper	Gold
Primary	Measured	0.90% Cu	2.48 Mt	3.26%	0.71	80,137 t	56,751 oz
	Indicated	0.90% Cu	1.62 Mt	2.22%	0.42	36,002 t	21,884 oz
	M&I		4.10 Mt	2.85%	0.60	117,000 t	79,000 oz
	Inferred	0.90% Cu	1.90 Mt	1.59%	0.23	30,184 t	14,085 oz
SULPHIDE MINERAL RESOURCES			6.00 Mt	2.45%	0.48	147,000 t	93,000 oz

ANTAS SOL	TH – <u>SULPHIDE</u> JORC (2004) MINERAL RESOURCES – FEB 2012

Туре	Classification	Cut-off	Tonnes	Cu %	Au g/t	Copper	Gold
Primary	Measured	0.4% Cu	0.057 Mt	2.51%	0.36	1,400 t	600 oz
	Indicated	0.4% Cu	0.840 Mt	1.61%	0.41	13,500 t	11,000 oz
	Inferred	0.4% Cu	1.140 Mt	1.63%	0.26	18,600 t	9,400 oz
SULPHIDE MINERAL RESOURCES			2.037 Mt	1.64%	0.32	33,500 t	93,000 oz

Please refer to ASX Releases 7 May 2014 and 8 Feb 2012 for complete mineral resource statements

### **MINERAL RESOURCES**



#### PEDRA BRANCA – JORC (2012) MINERAL RESOURCES – JUNE 2013

Ore Zone	Classification	Cut-off	Tonnes	Cu %	Au g/t	Ag g/t	Copper	Gold	Silver
East	Inferred	0.4% Cu	20.48 Mt	1.50%	0.37	0.82	307,000 t	243,000 oz	541,000 oz
West	Inferred	0.4% Cu	26.34 Mt	0.96%	0.30	0.58	253,000 t	257,000 oz	494,000 oz
		RCES	46.82 Mt	1.20%	0.33	0.69	560,000 t	500,000 oz	1,035,000 oz

AVB | 49