



**TSX-V: PML**  
**BVL: PML | BORSE: PZM**  
**OTC: POROF**

The background of the slide is an aerial photograph of a rugged, mountainous landscape in Peru. The terrain is characterized by steep, eroded hillsides with varying shades of brown, tan, and green, indicating different geological formations and vegetation. The sky is filled with soft, white clouds, and the overall scene conveys a sense of vast, untamed natural resources.

**PERU FOCUSED COPPER EXPLORER**

**Corporate Presentation**

**February 2020**

# Forward Looking Statements

Information and statements contained herein that are not historical facts are “forward-looking information” within the meaning of applicable Canadian securities legislation and involve risks and uncertainties. Examples of forward-looking information and statements contained in this news release include information and statements with respect to:

- acceleration of payments by Wheaton Precious Metals to match third party financing by Panoro targeted for exploration at the Cotabambas Project
- payment by Wheaton Precious Metals of US\$140 million in installments
- negotiation of a definitive PMPA
- Panoro weathering the current depressed equity and commodity markets, minimizing dilution to existing shareholders and making targeted investments into exploration at the Cotabambas Project
- mineral resource estimates and assumptions
- the PEA, including, but not limited to, base case parameters and assumptions, forecasts of net present value, internal rate of return and payback;
- copper concentrate grade from the Cotabambas Project;

Various assumptions or factors are typically applied in drawing conclusions or making the forecasts or projections set out in forward-looking information. In some instances, material assumptions and factors are presented or discussed in this news release in connection with the statements or disclosure containing the forward-looking information and statements. You are cautioned that the following list of material factors and assumptions is not exhaustive. The factors and assumptions include, but are not limited to, assumptions concerning: metal prices and by-product credits; cut-off grades; short and long term power prices; processing recovery rates; mine plans and production scheduling; process and infrastructure design and implementation; accuracy of the estimation of operating and capital costs; applicable tax and royalty rates; open-pit design; accuracy of mineral reserve and resource estimates and reserve and resource modeling; reliability of sampling and assay data; representativeness of mineralization; accuracy of metallurgical test work; and amenability of upgrading and blending mineralization.

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ materially from those expressed or implied by the forward-looking statements, including, without limitation:

risks relating to metal price fluctuations;

risks relating to estimates of mineral resources, production, capital and operating costs, decommissioning or reclamation expenses, proving to be inaccurate;

the inherent operational risks associated with mining and mineral exploration, development, mine construction and operating activities, many of which are beyond Panoro’s control;

risks relating to Panoro’s ability to enforce Panoro’s legal rights under permits or licenses or risk that Panoro’s will become subject to litigation or arbitration that has an adverse outcome;

- risks relating to Panoro’s projects being in Peru, including political, economic and regulatory instability;
- risks relating to the uncertainty of applications to obtain, extend or renew licenses and permits;
- risks relating to potential challenges to Panoro’s right to explore and/or develop its projects;
- risks relating to mineral resource estimates being based on interpretations and assumptions which may result in less mineral production under actual circumstances;
- risks relating to Panoro’s operations being subject to environmental and remediation requirements, which may increase the cost of doing business and restrict Panoro’s operations;
- risks relating to being adversely affected by environmental, safety and regulatory risks, including increased regulatory burdens or delays and changes of law;
- risks relating to inadequate insurance or inability to obtain insurance;
- risks relating to the fact that Panoro’s properties are not yet in commercial production;
- risks relating to fluctuations in foreign currency exchange rates, interest rates and tax rates; and
- risks relating to Panoro’s ability to raise funding to continue its exploration, development and mining activities.

This list is not exhaustive of the factors that may affect the forward-looking information and statements contained in this news release. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in the forward-looking information. The forward-looking information contained in this news release is based on beliefs, expectations and opinions as of the date of this news release. For the reasons set forth above, readers are cautioned not to place undue reliance on forward-looking information. Panoro does not undertake to update any forward-looking information and statements included herein, except in accordance with applicable securities laws.

# Peru Focused Copper Explorer – Multiple Projects & Partners

## Investment Highlights

### Cotabambas Copper Project

722 Mt Resource  
PEA Complete  
 **WHEATON**  
PRECIOUS METALS Funding

Petra-David Oxide Cu  
Maria Jose Oxide/Sulphide Cu  
Chaupec Sulphide Cu/Skarn

Multiple Resource  
Growth Targets

### Antilla Copper Project

382 Mt Resource  
PEA Complete

Increasing  
Metallurgical  
Recoveries

Feasibility and  
Permitting

### Kusiorcco Copper Project

Funded by  **HUDBAY**

Milestone payments  
+ 2% NSR Royalty

Nearby Constanca  
Mine

### Humamantata Copper Project

Funded by  **JOGMEC**  
Japan Oil, Gas and Metals  
National Corporation  
US\$8M

Joint Venture

Nearby Constanca  
Mine

# Capital Structure & Share Performance

## Tickers

**TSX-V:PML**

BVL:PML

BORSE:PZM

OTC:POROF

**Share Price** \$0.08

**52 Week Low-High** \$0.08 - \$0.22

**Shares Issued** 263.8M

**Options** 16.2M

**Fully Diluted** 280.0M

## Market Capitalization

**Undiluted** \$21.0M

**Fully diluted** \$22.0M

## 12 MONTH CHART



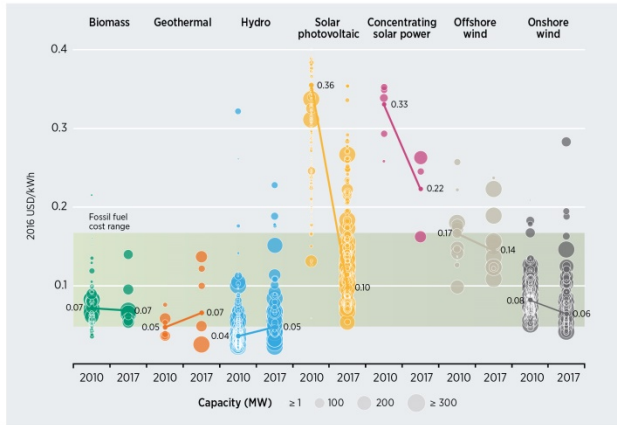
## FUNDING

Company	Total	2020-2021
Wheaton Precious Metals	\$7.3	\$3.9
Hudbay Minerals	\$2.0	\$2.0
JOGMEC	\$10.0	\$3.5
Cash	\$0.5	\$0.5
<b>Total</b>	<b>\$19.8</b>	<b>\$10.0</b>

# Towards a Renewable Energy Future

## Emerging Security and Economics plus Environment

**Figure ES.1** Global levelised cost of electricity from utility-scale renewable power generation technologies, 2010-2017



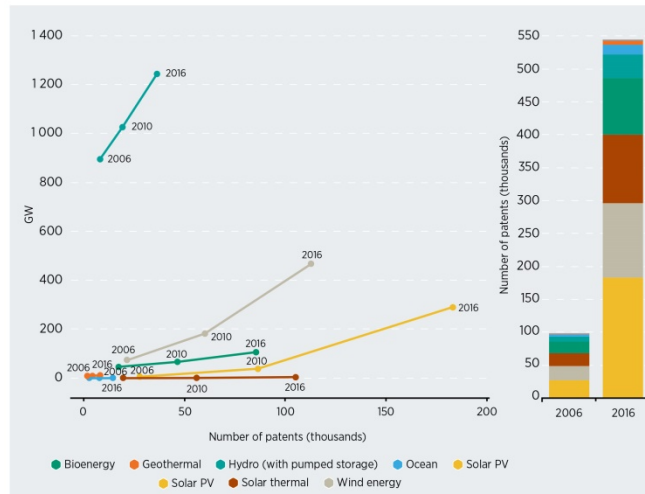
Source: IRENA Renewable Cost Database.

Note: The diameter of the circle represents the size of the project, with its centre the value for the cost of each project on the Y axis. The thick lines are the global weighted average LCOE value for plants commissioned in each year. Real weighted average cost of capital is 7.5% for OECD countries and China and 10% for the rest of the world. The band represents the fossil fuel-fired power generation cost range.

- Rapidly decreasing cost of generating wind and solar power
- Within the range of hydrocarbon based generation

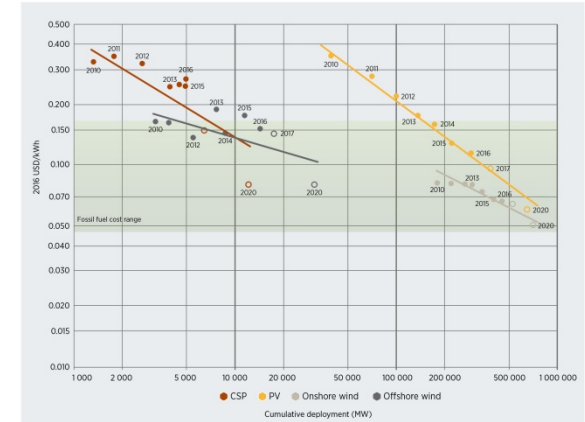
- Rapidly increasing investment and advancements in wind and solar technologies
- Five fold increase in new patents

**Figure B2.1** Development of patent data for renewable energy technologies, 2010-2016



Based on INSPIRE web platform ([www.irena.org](http://www.irena.org)) and IRENA (2017a).

**Figure 2.14** Global weighted average CSP, solar PV, onshore and offshore wind project LCOE data to 2017 and auction price data to 2020, 2010-2020



Based on IRENA Renewable Cost Database and Auctions Database; GWEC (2017), MAKE Consulting (2017a), SolarPower Europe (2017), and WindEurope (2017).

10. Global cumulative installed capacity of CSP is projected to be 12 GW by 2020, for offshore wind 31 GW, solar PV 650 GW and onshore wind 712 GW. This is based on IRENA (2017a), GWEC (2017), WindEurope (2017), SolarPower Europe (2017) and MAKE Consulting (2017a).

11. Extending the horizon to 2022 to take into account the likely commissioning of the DEWA project increases uncertainty over total deployment values, but would be unlikely to greatly alter the learning rate.

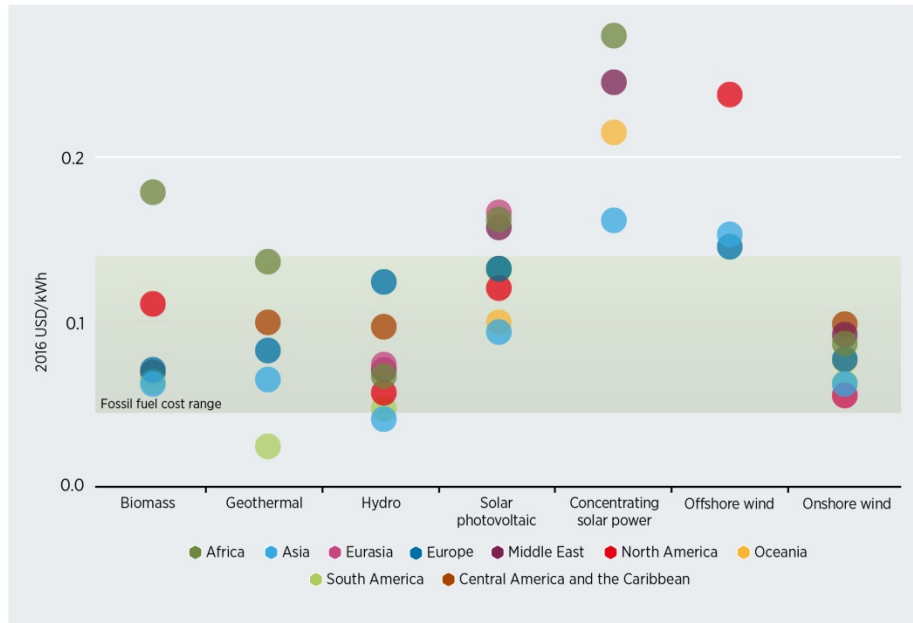
- Wind and solar lead the way in achieving economies of scale



# Emerging Security and Economics plus Environment

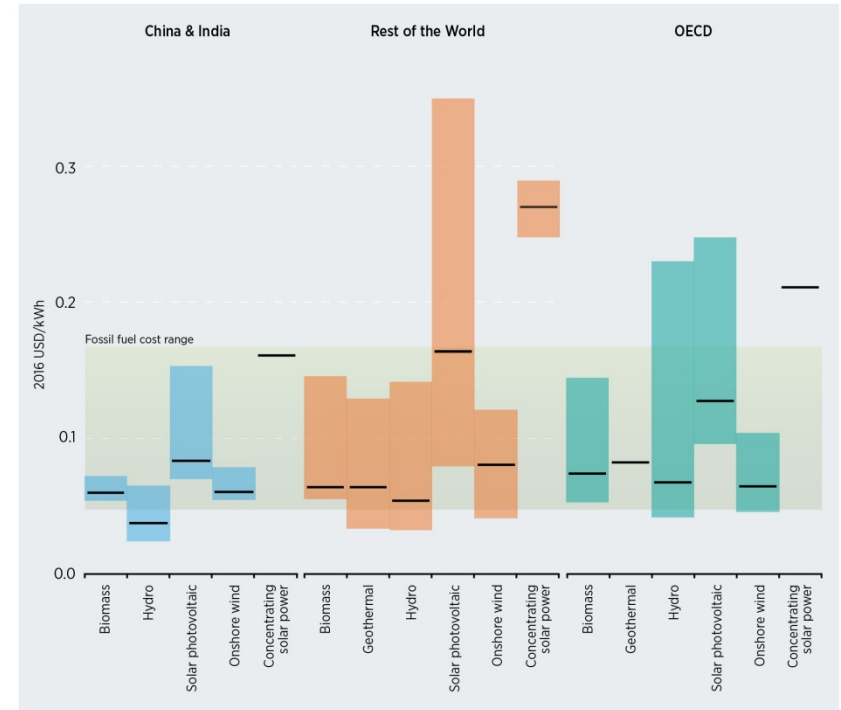
## The Age of Electricity

**Figure 2.3** Regional weighted average levelised cost of electricity by renewable power generation technology, 2016 and 2017



Source: IRENA Renewable Cost Database

**Figure 2.11** Project LCOE ranges and weighted averages for China and India, OECD and rest of the world, 2016 and 2017



Source: IRENA Renewable Cost Database

- China, India and developing economies are leading the way
- Wind, solar and hydro generation achieving costs and scale advantages over hydrocarbons

# Emerging Security and Economics plus Environment China and Developing World Motivated

Figure 9. Clean energy manufacturing value added (2014, US\$ billion)

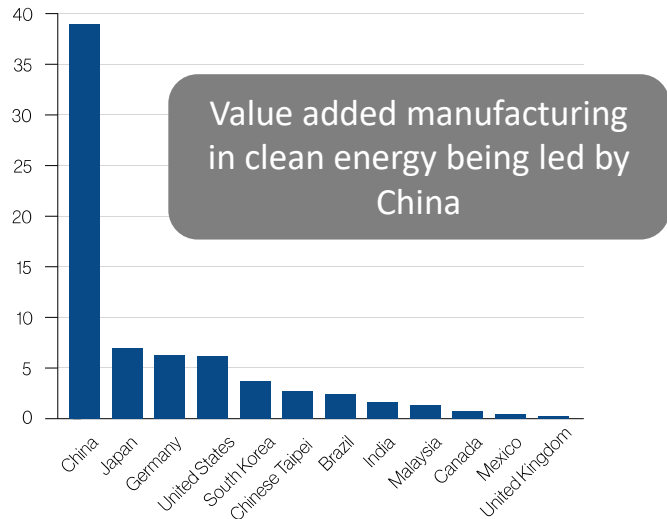
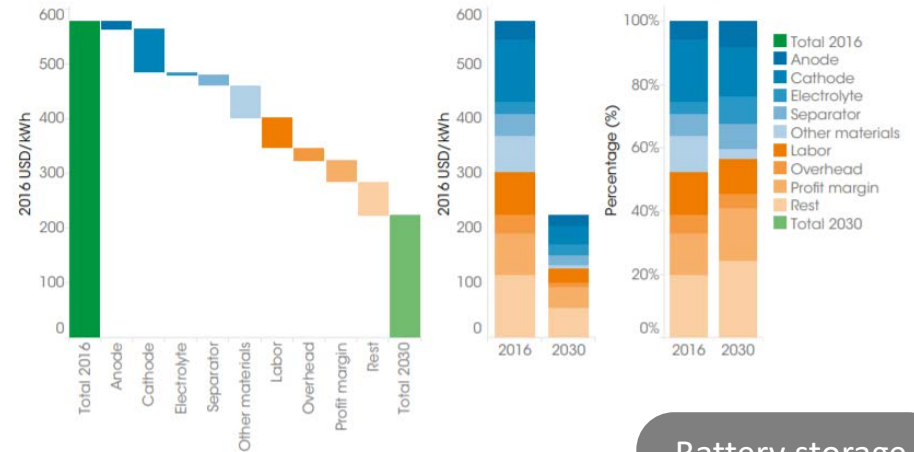
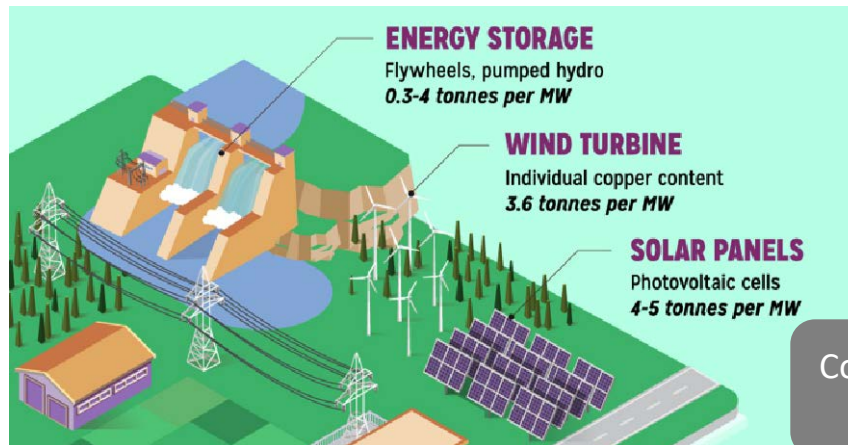


Figure ES7: Cost reduction potential by source of lithium iron phosphate battery energy storage systems, 2016 and 2030



Source: Irena Electricity Storage and Renewables: costs & markets to 2030

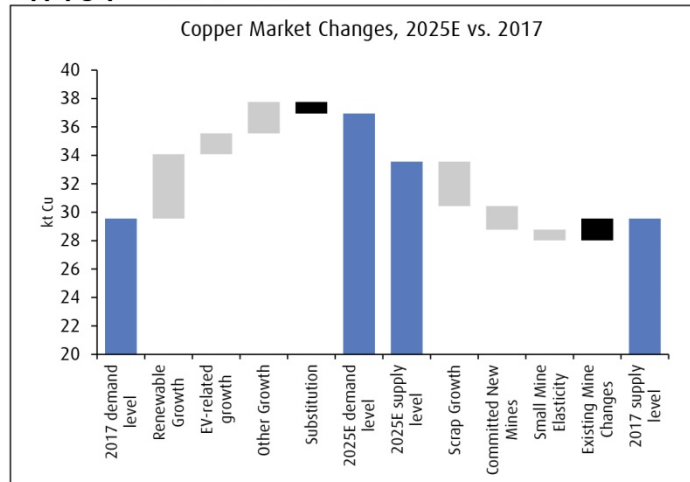
Battery storage costs to be reduced by +60%



Copper required for generation and storage of electric power

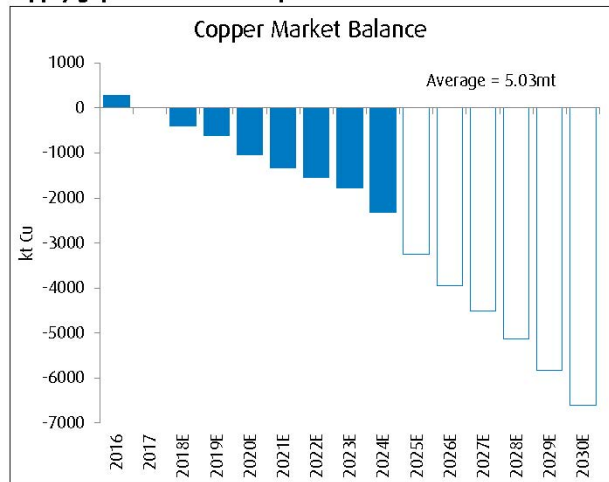
# Copper Usage Increasing, Production Decreasing

**Figure 2: There are a number of factors in determining the copper supply gap in 2025 onwards**



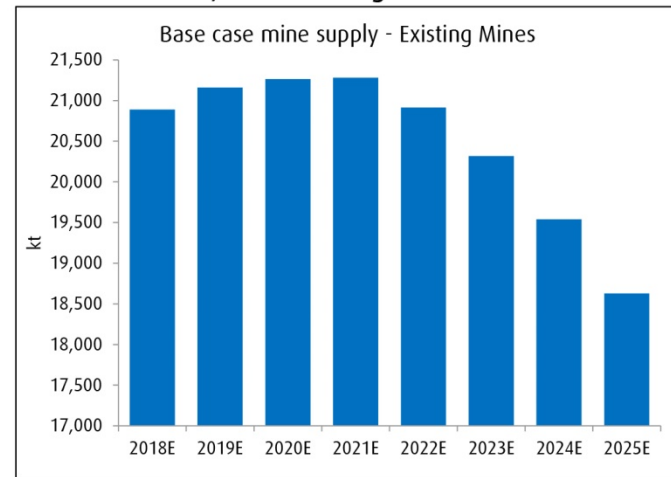
Source: Wood Mackenzie, Copper Alliance, BMO Capital Markets

**Figure 14: Everything else being even, we see an average supply gap in excess of 5mtpa over 2025-30**



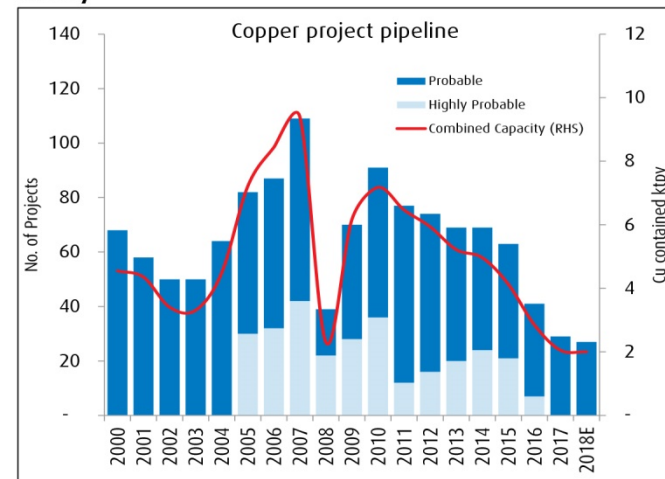
Source: ICSG, BMO Capital Markets

**Figure 9: Existing copper mines have been a drag on growth in the last decade, and will be again from 2021 onwards**



Source: Wood Mackenzie, Company Data, BMO Capital Markets

**Figure 35: The copper project pipeline is now the leanest this century**

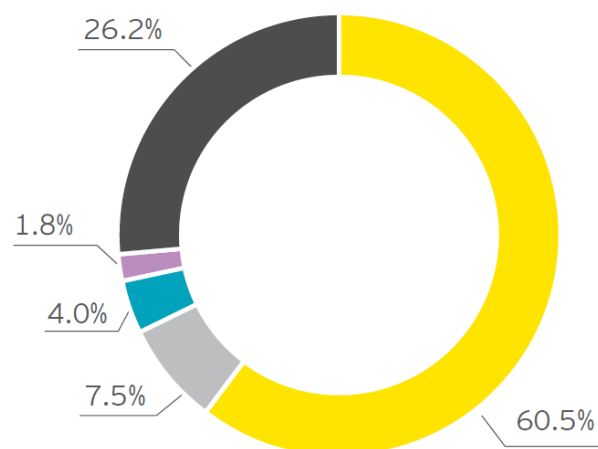


Source: Wood Mackenzie, BMO Capital Markets



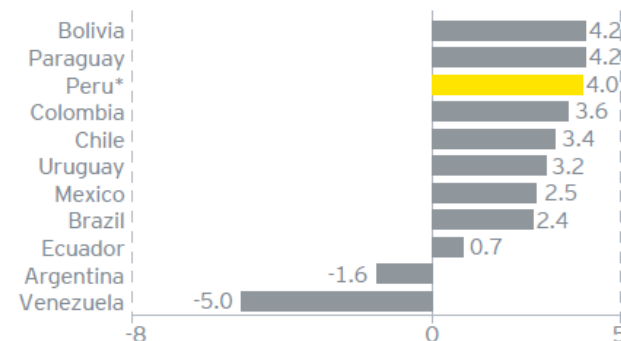
# Exports by Economic Sector

## Exports by economic sector (2017)



Source: BCRP

## Estimated Latin American GDP growth rates (2019)



\*Peru's Central Bank estimates a 4.0% growth in 2019

Source: IMF

*"Peru's economy continues to grow and the mining industry is the engine".*





















Elizabeth Rosado  
Tax Partner  
EY Peru

# Main Economic Activities by Region

*Main economic activities by region*

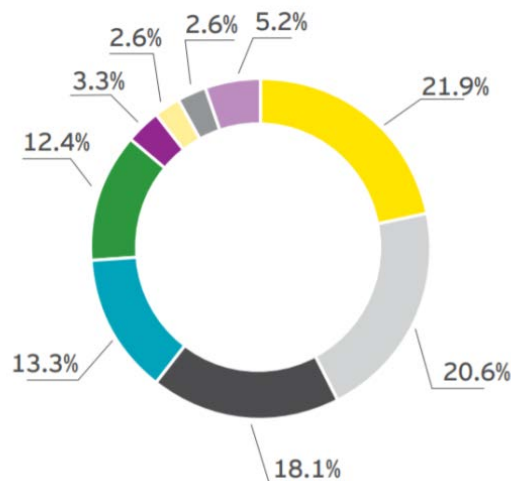


	Fishing		Metal industry
	Petroleum		Smelting
	Oil refinery		Metallurgical industry
	Sugar refinery		Gold
	Fishmeal plant		Silver
	Natural gas		Copper
	Textile industry		Zinc
	Cement plant		Lead
	Chemical plant		Iron

Source: University of Texas - Perry Castaneda Library Map Collection

# Foreign Direct Investment by Industry

Foreign direct investment by industry (2017)



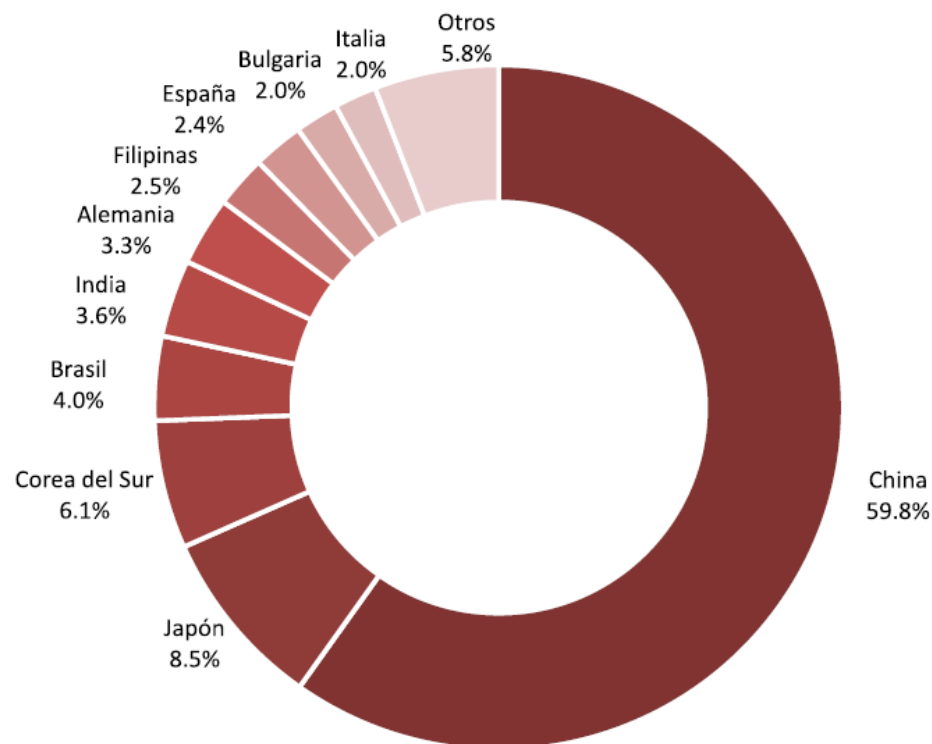
Mining	Commerce
Communications	Petroleum
Finance	Services
Energy	Others
Industry	

Source: ProInversion

## Foreign investment legislation and trends in Peru

- Committed to pursuing an investor-friendly policy climate
- Seeks to attract both foreign and domestic investment in all sectors of the economy
- Taken the steps to establish a consistent investment policy eliminating obstacles for foreign investors
- Peru is considered to have one of the most open investment regimes in the world

# Destination of National Copper Exports



PAIS	US\$ MILLONES	%
CHINA	8,237	59.81%
JAPON	1,174	8.52%
COREA DEL SUR	835	6.06%
BRASIL	548	3.98%
INDIA	502	3.64%
ALEMANIA	448	3.25%
FILIPINAS	339	2.46%
ESPANA	328	2.38%
BULGARIA	281	2.04%
ITALIA	277	2.01%
OTROS	804	5.84%
<b>TOTAL</b>	<b>13,773</b>	<b>100%</b>

Source: Anuario Minero 2017 – Ministerio de Energia y Minas Peru

# Peru A Copper Country with Power

	Antapacay, Glencore
	Antamina, Teck
	Toromocho, Chinalco
	Constancia, Hudbay Minerals
	Las Bambas, MMG
	Cerro Verde, Soc. Minera Cerro Verde
	Quellaveco, Anglo American
	Mina Justa, Minsur
	Toquepala, Grupo Mexico
	Tia Maria, Grupo Mexico

	Cotabambas, Panoro Minerals
	Antilla, Panoro Minerals
	Corocohuayco, Xstrata
	Trapiche, Buenaventura
	Haquira, First Quantum
	Los Chancas, Grupo Mexico
	Quechua, Pan Pacific Copper
	Zafranal, Teck / Mitsubishi

Double Cu Production  
2011 to 2016

2016 / No. 2 Worldwide

- 421,000 tonnes/year concentrate
- 108,000 tonnes/year refined Cu
- 5.6% of Peru's 2015 Production

Towards World's Top  
Cu Producer

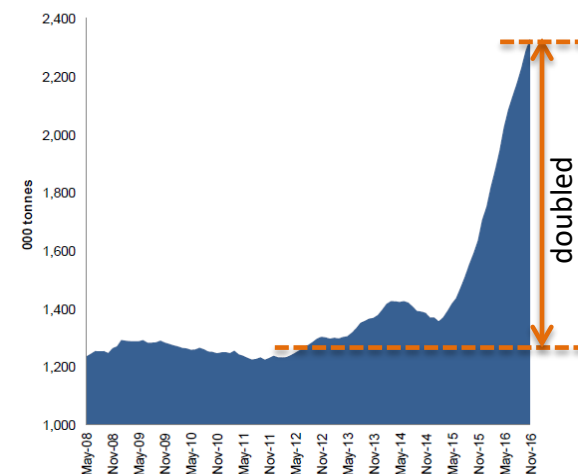
## Growing Power Supply

2013 – 2014  
9,000 MW power / capacity growth

2018 - 2024  
3,000 MW power / supply excess

Power Costs (¢/kWhr)  
Peru – 6.1  
Chile – 12.1  
Canada – 5.3  
Australia – 8.9

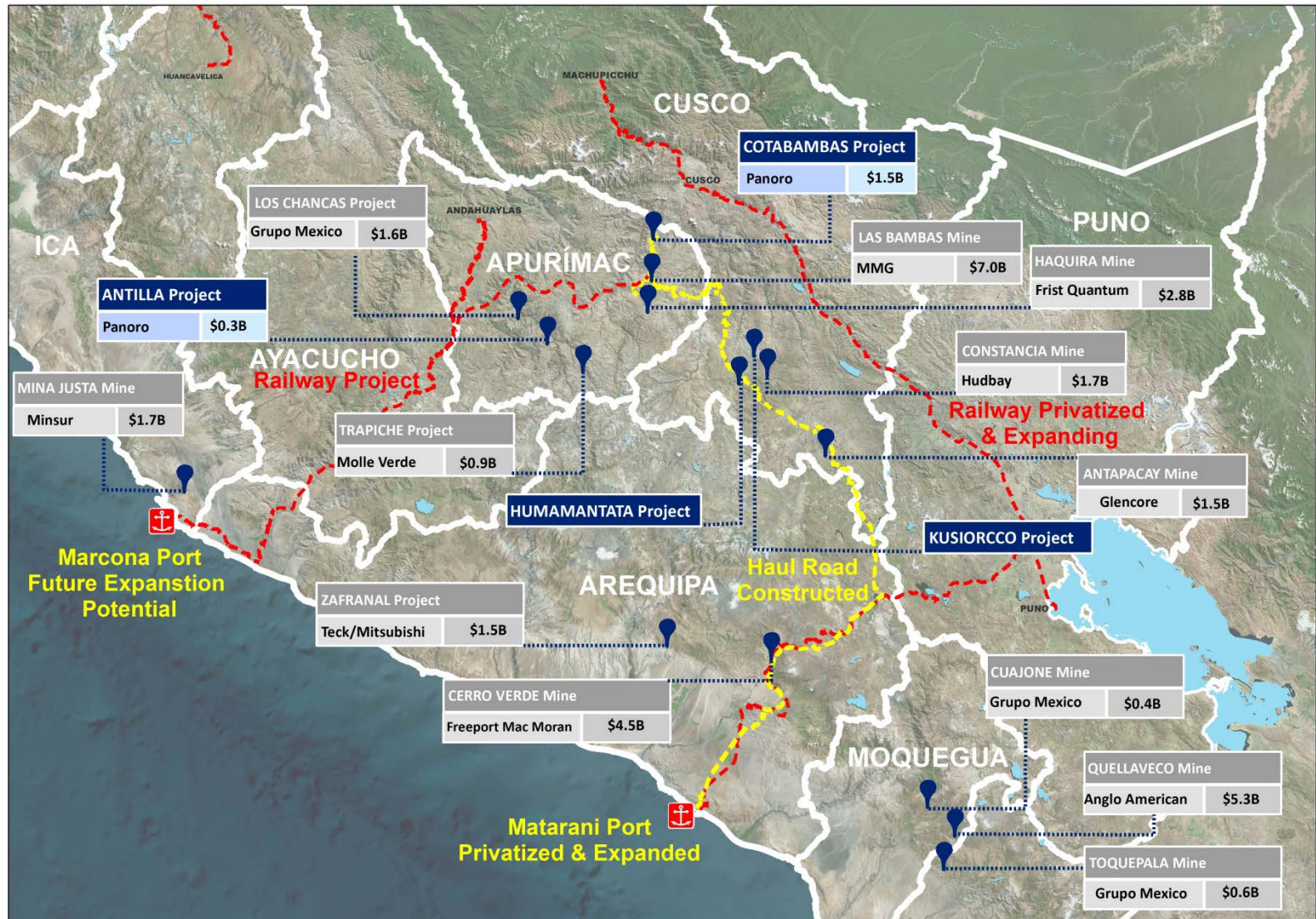
Total Copper Production in Peru (LTM)



Source: Peru's MEM; Scotiabank GBM.



# Panoro Projects' District Potential & Infrastructure



# Cotabambas and Antilla Projects

KEY PROJECT PARAMETERS (IN USD CURRENCY)			COTABAMBAS <sup>2</sup> Cu/Au/Ag PROJECT (GROWTH TARGETS)	ANTILLA <sup>4</sup> Cu PROJECT (HEAP LEACH SX/EW)
Mill Feed, life of mine	million tonnes		483.1	118.7
Mill Feed, daily	tonnes		80,000	20,000
Strip Ratio, life of mine	waste: process feed		1.25 : 1	1.38 : 1
After Tax @ PEA Prices <sup>2</sup>	NPV <sub>7.5%</sub>	million USD	683	305
	IRR	%	16.7	25.9
	Payback	years	3.6	3.0
After Tax 6 months Peak Prices <sup>3</sup>	NPV <sub>7.5%</sub>	million USD	967 (+42%)	350 (+15%)
	IRR	%	20.0 (+20%)	27.7 (+15%)
	Payback	years	3.1 (-14%)	2.9 (-3.3%)
Annual Average Payable Metals	Cu	thousand tonnes	70.5	21.0
	Au	thousand ounces	95	-
	Ag	thousand ounces	1,018	-
	Mo	thousand tonnes	-	-
Initial Capital Cost	million USD		1,533	250
1. Prices in USD 2. At PEA commodity prices; Cu = \$3.00/lb, Au = \$1,250/oz, Ag = \$18.50/oz, Mo = \$12.00/lb 3. At Spot commodity prices; Cu = \$3.25/lb, Au = \$1,340/oz, Ag = \$17.30/oz, Mo = \$7.26/lb (October 16, 2017) 4. At PEA commodity prices; long-term Cu = \$3.05/lb				

Luqman Shaheen; President & CEO, and Luis Vela, Vice President of Exploration for Panoro and a "qualified person" under National Instrument 43-101, have reviewed and approved the scientific and technical information

# Cotabambas Project Targeting Growth

SEPTEMBER 2015 PEA

## BEFORE TAX

**\$1,052M NPV**  
**20.4 % IRR**  
**3.2 Year Payback**

## CASH COSTS, NETS OF BY PRODUCTS CREDITS

**C1 \$1.22/lb Cu**  
**C2 \$1.94/lb Cu**

## AFTER TAX

**\$683M NPV**  
**16.7 % IRR**  
**3.6 Year Payback**

## ANNUAL PAYABLE METALS

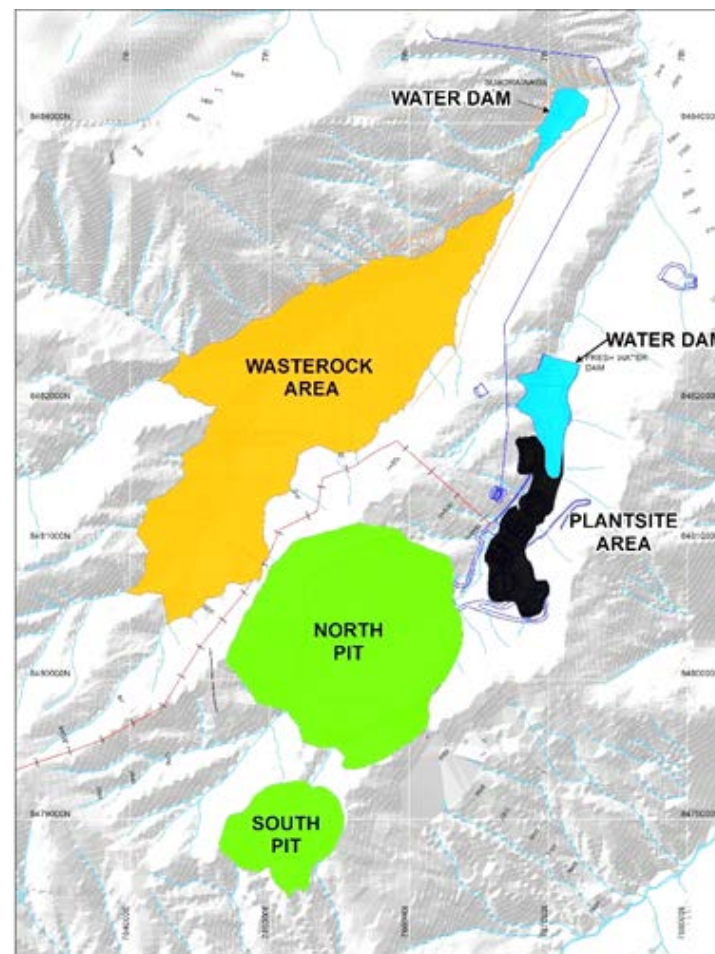
**155 M lbs Cu**  
**95 k oz Au**  
**1,018 k oz Ag**

## LIFE OF MINE PAYABLE METALS

**2.6 B lbs Cu**  
**1.6 M oz Au**  
**17 M oz Ag**

## CLEAN CONCENTRATE

**27% Cu**  
**11 g/t Au**  
**134 g/t Ag**



**Note: @ Cu = \$US3.00/lb, Au = \$US1,250/oz, Ag = \$US18.50/oz**

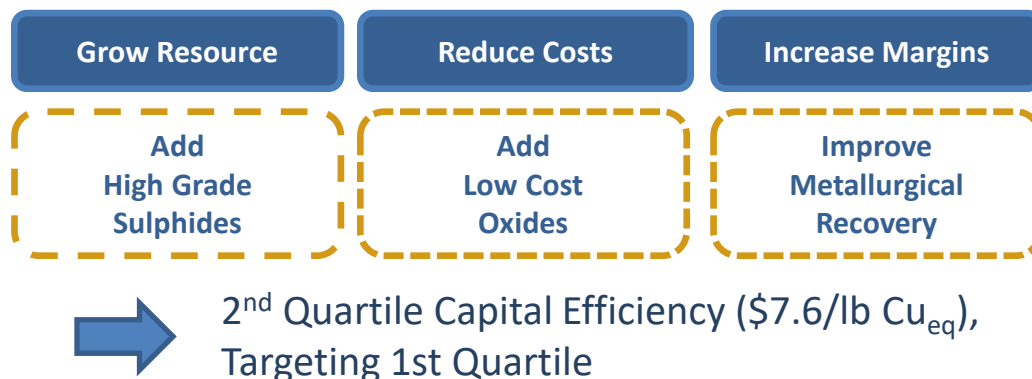
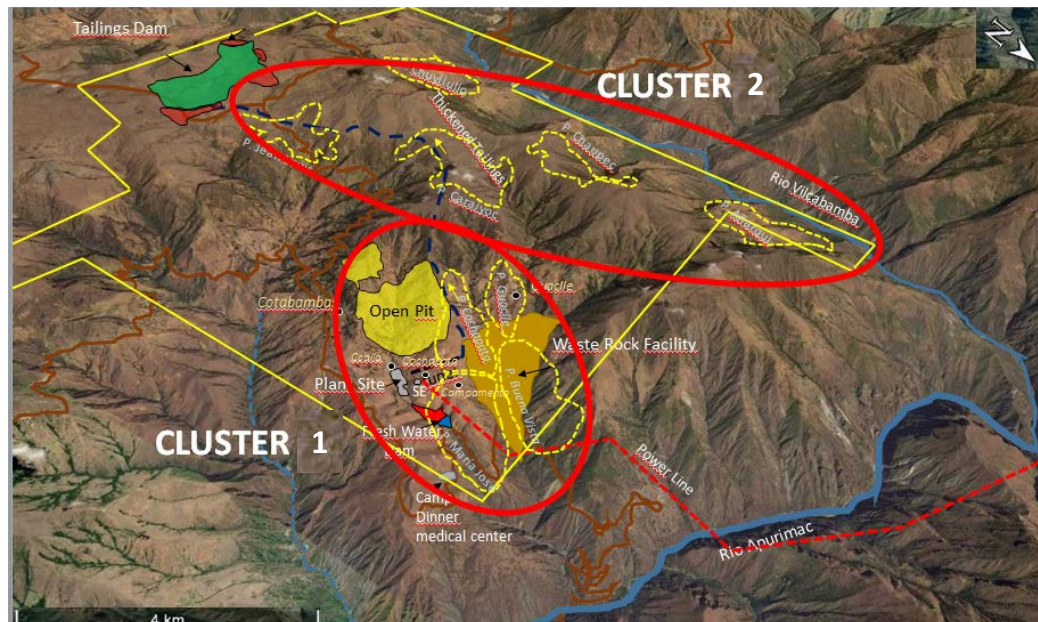
*Luis Vela, Vice President of Exploration for Panoro and "qualified persons" under National Instrument 43-101, have reviewed and approved the scientific and technical information*



# Cotabambas Project

## Capital Costs and Enhancements

COTABAMBAS INITIAL CAPEX (US\$ MILLIONS)	
Item	Cost
Mine Equipment	\$236
Mine Development	\$127
Mine Infrastructure	\$17
Tailings Starter Dams	\$4
Tailings Disposal System	\$73
Process Plant	\$505
Site Infrastructure	\$67
Off Site Infrastructure	\$27
Mine Closure	\$50
Subtotal	\$1,106
Owners Cost	\$40
Indirect Costs	\$152
Subtotal	\$1,298
Contingencies	\$235
Initial Capital Cost	\$1,533



Luis Vela, Vice President of Exploration for Panoro and a "qualified person" under National Instrument 43-101, has reviewed and approved the scientific and technical information

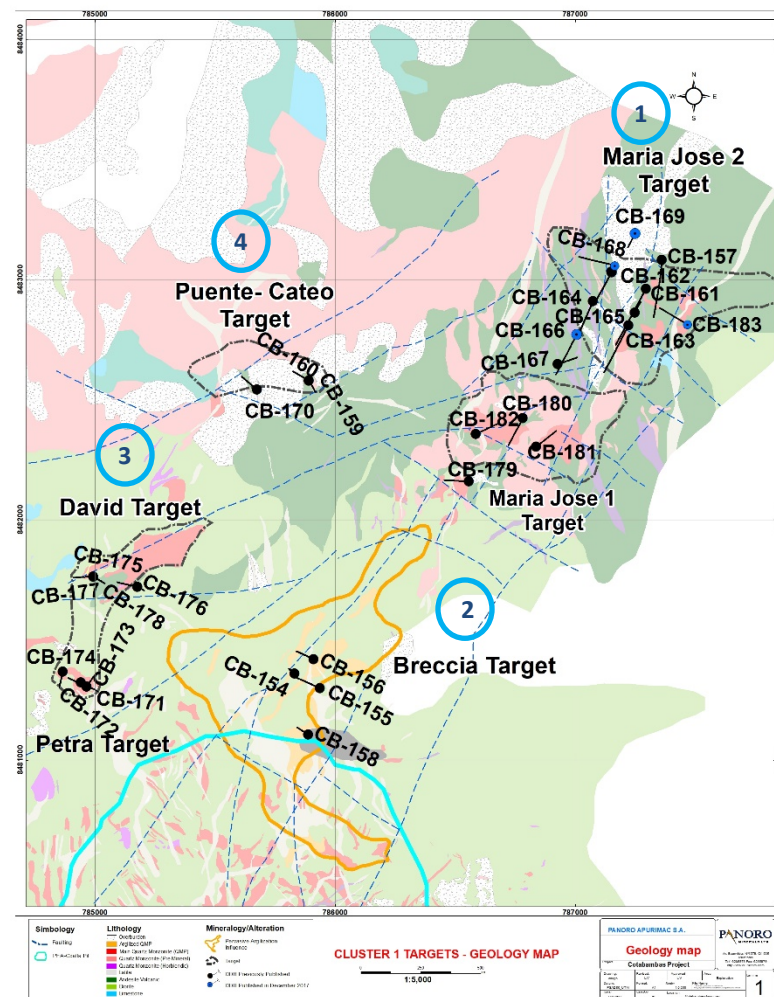
# Cotabambas Project

## Deposit Resource & Growth Potential

Company	Year	Drill Holes	Metres
Antofagasta	1995 to 2002	24	8,538
CDLM	2002 to 2007	10	3,252
Panoro	2007 to 2012	29	17,785
Panoro	2012 to 2013	81	40,467
Panoro	2013 to 2014	11	4,946
Panoro	2017 to 2018	36	8,805
<b>Total</b>		<b>134</b>	<b>83,793</b>

Resource Category	Zone	Million tonnes	Cutoff Grade % Cu <sub>eq</sub>	Cu %	Au g/t	Ag g/t
Indicated	Hypogene	84.2	0.20	0.37	0.21	2.73
	Supergene	8.9	0.20	0.73	0.31	3.07
	Oxide Cu-Au	23.8	0.20	0.49	0.24	2.63
	Oxide Au	0.2	0.20	-	0.66	3.74
	<b>Total</b>	<b>117.1</b>	<b>0.20</b>	<b>0.42</b>	<b>0.23</b>	<b>2.74</b>
Inferred	Hypogene	521	0.20	0.29	0.18	2.41
	Supergene	7.4	0.20	0.73	0.18	1.93
	Oxide Cu-Au	75.8	0.20	0.41	0.15	1.82
	Oxide Au	1.2	0.20	-	0.61	3.27
	<b>Total</b>	<b>605.3</b>	<b>0.20</b>	<b>0.31</b>	<b>0.17</b>	<b>2.33</b>

Source: April 2015 NI 43-101 Technical Report prepared by Amec Foster Wheeler & Tetra Tech



Luis Vela, Vice President of Exploration for Panoro and a "qualified person" under National Instrument 43-101, has reviewed and approved the scientific and technical information



# Cotabambas Project

## 2017-2018 Cluster 1 Exploration Program

### MARIA JOSE TARGETS / NEAR SURFACE / SULPHIDES & OXIDES 1

#### CB-157

195.2m 0.34% Cu, 0.06 g/t Au, 1.6 g/t Ag

#### CB-161

39.7m 0.54% Cu, 0.06 g/t Au, 2.52 g/t Ag  
56.3m 0.41% Cu, 0.05 g/t Au, 2.19 g/t Ag  
187.7m 0.25% Cu, 0.04 g/t Au, 1.75 g/t Ag  
22.9m 0.48% Cu, 0.08 g/t Au, 3.39 g/t Ag

#### CB-165

13.2m 0.41% Cu, 0.06 g/t Au, 2.3 g/t Ag  
2.7m 1.03% Cu, 0.11 g/t Au, 6.8 g/t Ag  
74.8m 0.24%-0.78% Cu, 0.03 g/t-  
0.12 g/t Au, 1.3 g/t-2.7 g/t Ag

#### CB-180

112.8m 0.23% Cu, 0.02 g/t Au, 1.1 g/t Ag, incl.  
• 9.0m 0.43 % Cu, 0.03 g/t Au, 1.1 g/t Ag  
• 34.9m 0.30% Cu, 0.02 g/t Au, 1.3 g/t Ag

#### CB-183

127.6m 0.41% Cu, 0.06 g/t Au, 2.0 g/t Ag, incl.  
• 37.0m 0.56% Cu, 0.10 g/t Au, 2.8 g/t Ag  
• 52.9m 0.46% Cu, 0.07 g/t Au, 2.1 g/t Ag

#### CB-184

23.1m 0.17% Cu, 0.02 g/t Au, 1.44 g/t Ag, incl.  
• 6.4m 0.23 % Cu, 0.03 g/t Au, 2.01 g/t Ag

#### CB-186

44.7m 0.22% Cu, 0.04 g/t Au, 1.78g/t Ag, incl.  
• 13.2m 0.26% Cu, 0.06 g/t Au, 1.9 g/t Ag  
• 3.1m 0.41% Cu, 0.06 g/t Au, 3.31g/t Ag

### BRESCIA TARGETS / NEAR SURFACE / OXIDES 2

#### CB-158

4.3m 0.9 g/t Au, 1.1 g/t Ag, 0.01% Cu, incl.  
• 2.4m 1.52 g/t Au, 0.8 g/t Ag, 0.01% Cu

#### CB-154

2m 0.75 g/t Au, 3.4 g/t Ag, 0.02% Cu

#### CB-155

0.9m 0.85 g/t Au, 39.6 g/t Ag, 0.03% Cu

### PETRA-DAVID TARGETS / NEAR SURFACE / CU OXIDES 3

#### CB-171

19m 0.35% Cu, 0.09 g/t Au, 2.7 g/t Ag, incl.  
• 10.8m 0.44 % Cu, 0.12 g/t Au, 2.8 g/t Ag  
49.3m 0.24 % Cu, 0.07 g/t Au, 1.7 g/t Ag, incl.  
• 30.2m 0.32% Cu, 0.09 g/t Au, 2.2 g/t Ag  
• 12.0m 0.40% Cu, 0.09 g/t Au, 3.2 g/t Ag

#### CB-172

78.8m 0.32% Cu, 0.08 g/t Au, 2.2 g/t Ag, incl.  
• 20.4m 0.48 % Cu, 0.12 g/t Au, 2.6 g/t Ag  
• 10.0m 0.57 % Cu, 0.14 g/t Au, 2.2 g/t Ag

#### CB-173

61.4m 0.38% Cu, 0.10g/t Au, 4.9 g/t Ag, incl.  
• 27.1m 0.58 % Cu, 0.14 g/t Au, 2.9 g/t Ag

#### CB-175

87.6m 0.20% Cu, 0.07 g/t Au, 1.8 g/t Ag, incl.  
• 7.6m 0.39% Cu, 0.13 g/t Au, 2.4 g/t Ag  
• 8.6m 0.29 % Cu, 0.08 g/t Au, 2.3 g/t Ag

#### CB-185

46.5m 0.21% Cu, 0.02 g/t Au, 1.77 g/t Ag, incl.  
• 23.0m 0.27% Cu, 0.03 g/t Au, 1.89 g/t Ag

Luis Vela, Vice President of Exploration for Panoro and a "qualified person" under National Instrument 43-101, has reviewed and approved the scientific and technical information

# Cotabambas Project Potential Heap Leach SX/EW

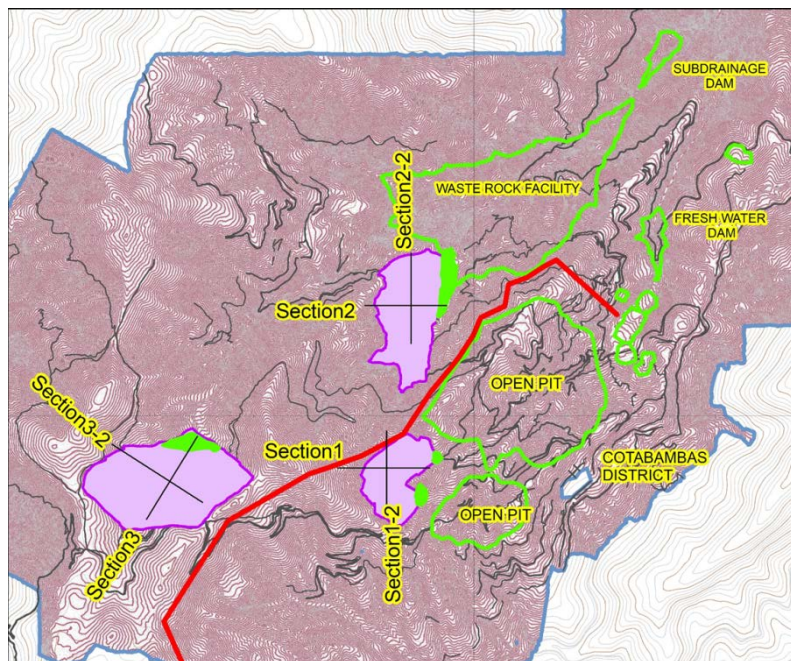


Table: Mineral Resources, Tetra Tech, October 2013.

Resources Category	Zone	Cut-Off Grade% CuEq	Million Tonnes	Cu (%)	Au (g/t)	Ag (g/t)	Mo (%)	Cu (Bib)	Au (Moz)	Ag (Moz)	Mo (Mlb)
Indicated	Hypogene Sulphide	0.2	84.2	0.37	0.21	2.73	0.0018	0.69	0.58	7.39	3.43
	Supergene Sulphide	0.2	8.9	0.73	0.31	3.07	-	0.14	0.09	0.88	0.01
	Oxide Copper-Gold	0.2	23.8	0.49	0.24	2.63	-	0.26	0.18	2.01	0.01
	Oxide Gold	Na	0.2	-	0.66	3.74	-	-	0.02	-	-
	Total		117.1	0.42	0.23	2.74	0.0013	1.09	0.86	10.3	3.45
Inferred	Hypogene Sulphide	0.2	521	0.29	0.18	2.41	0.0021	3.36	2.94	40.35	24.22
	Supergene Sulphide	0.2	7.4	0.70	0.48	1.93	0.0007	0.12	0.04	0.46	0.11
	Oxide Copper-Gold	0.2	75.8	0.41	0.15	1.82	0.0009	0.68	0.37	4.44	0.5
	Oxide Gold	Na	1.2	-	0.61	3.27	-	-	0.02	0.12	-
	Total	0.2	605.3	0.31	0.17	2.33	0.0019	4.16	3.38	45.37	24.83

99.6 Mt @  
0.42 % Cu  
0.21 g/t Au  
2.43 g/t Ag

Assuming  
same cutoff as  
for flotation

Mineral Resources have an effective date of June 20, 2013 and were estimated by Qualified Person Robert Morrison, P.Geo. (APGO, 1839). The estimate is based on 56,813 meters of drilling by Panoro and 9,923 meters of drilling from legacy campaigns. Copper equivalent (CuEq) is calculated using the equation:  $CuEq = Cu + 0.4422 Au + 0.0065 Ag$ . based on the differentials of long range metal prices net of selling costs and metallurgical recoveries for gold and copper and silver. Mineralization would be mined from open pit and treated using conventional flotation and hydrometallurgical flow sheets. Rounding in accordance with reporting guidelines may result in summation differences. CuEq cut-offs were used to report almost all of the resource. These cut-offs are a function of metal price and recoveries. In the in situ resource, estimated gold, silver and molybdenum are then converted to US dollars and combined. The combined funds are re-converted to copper and added to the in situ copper values. The following metals prices are used: copper - \$US3.20/lb; gold - \$US1.350/roy oz; silver - \$US23.00/roy oz; molybdenum - \$US12.50/lb. The following metal recoveries were applied to the in situ resource: molybdenum - 40%; gold - 64%; silver - 63%. As the resource is reported as in situ, no recovery is applied to copper.

# Cotabambas Project Potential

## Heap Leach SX/EW

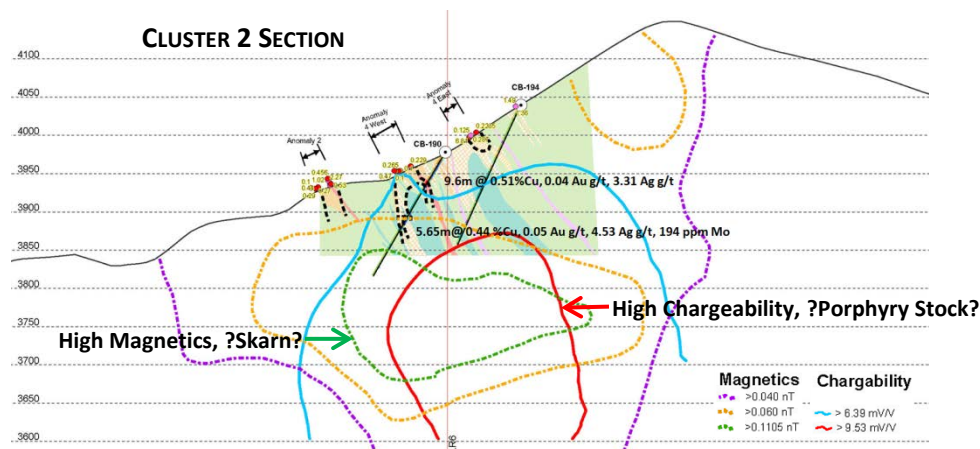
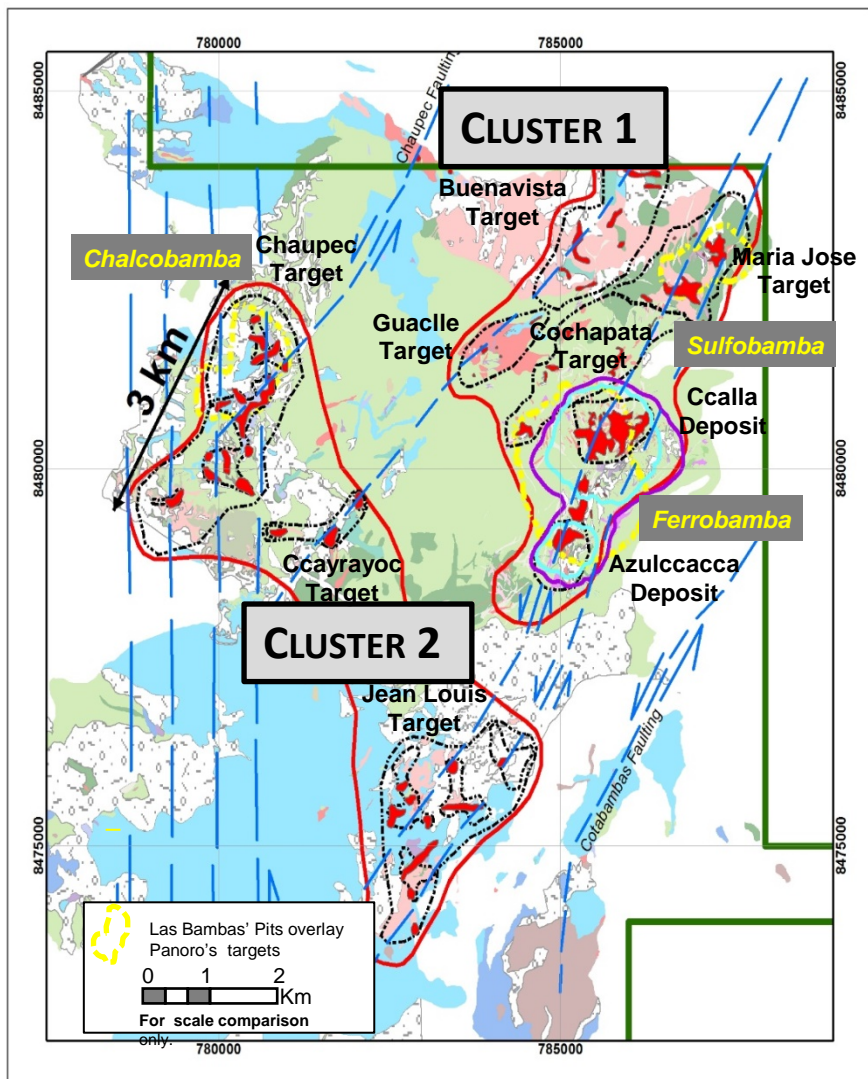
### Assumptions:

- \$US 250 M Capex
  - Heap leach pad
  - SX/EW Plant
  - Crusher
  - Mining Equipment
  - Infrastructure
- \$US 8/tonne mining and processing cost
- \$US 191 M NPV
- 24.1% IRR
- 9 Year Life of Mine
- 33 Ktpd Mining rate
- 60% Cu recovery
- 29 Ktpa Cu Cathode

Met Testwork & Pre-feasibility Study	(MUSD)
Metallurgical Testing	\$0.41
Pre Feasibility Studies	\$1.70
Infill Drilling cost (5 months, 5 rigs)	\$5.50
Drilling for LP Geomechanics/Hidrology	\$0.25
Drill Core Lab Assays	\$0.30
Geomechanics & Hydrology Lab Assays	\$0.05
Geometallurgy Lab Assays	\$0.05
Metallurgy Testwork Laboratory Cost	\$0.15
Social Permits (Cochapata, Guacile, Calla, Cotabambas)	\$1.00
Environmental Permits	\$0.05
<b>Total</b>	<b>\$9.50</b>

# Cotabambas Project Cluster 1 and Cluster 2

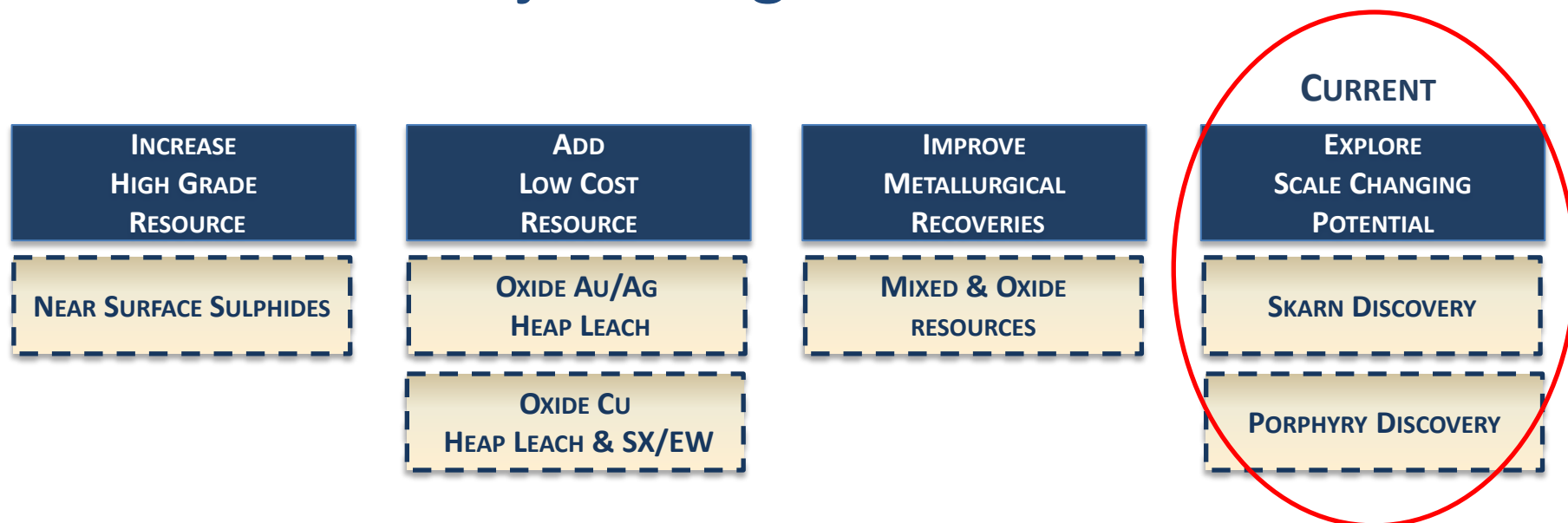
## Project Scale Expansion Potential



Drillhole	From	To	Length (m)	% Cu	Au g/t	Ag g/t	% Mo	% Pb	% Zn
CB-190	40.45	50.05	9.60	0.51	0.04	3.31	8	0.016	0.0230
Include	45.00	50.05	5.05	0.80	0.06	4.91	10	0.026	0.0300
" "	111.45	117.10	5.65	0.44	0.05	4.53	194	0.004	0.0160
Include	111.45	113.00	1.55	1.26	0.03	10.29	238	0.002	0.0100
CB-191	106.4	116.5	10.10	0.02	0.37	8.32	16	0.003	0.0070
Include	106.4	110.5	4.10	0.03	0.52	14	32	0.0081	0.0129
include	112.5	116.5	4.00	0.02	0.40	6.43	6	0.0003	0.0028
CB-192	39.40	53.20	13.80	0.16	0.02	3.50	7	0.038	0.060
Include	45.20	48.10	2.90	0.37	0.03	5.60	6	0.004	0.0320
" "	66.00	66.60	0.60	0.89	0.02	13.80	12	0.099	0.0640
" "	89.30	90.10	0.80	0.40	0.01	5.90	6	0.0223	0.0156
CB-193	15.20	32.80	17.60	0.42	0.05	24.20	12	0.067	0.38
Include	15.20	20.40	5.20	0.67	0.08	37.29	12	0.12	0.41
Include	26.85	32.80	5.95	0.59	0.08	34.97	14	0.074	0.39



# Cotabambas Project Targets



## Cotabambas Project 2020 – 2021 Plan

- \$2.3 M investment program.
- Resource growth exploration will focus on the Chaupec and Guacile areas identified in 2019.
- A 1,000 m drill hole exploration program is planned at the Chaupec Target to further delineate the mineralization identified in 2019.
  - 2019 exploration identified 1.2 km of mineralization along strike to the north side of the Chaupec target.
  - 2020 exploration will focus on delineating this mineralization further along strike to the south and identifying the best location to test the potential underlying porphyry center and massive skarn targets identified in the geophysics.
- A 1,000 m drill hole exploration program is planned at the Guacile Target to test the high grade skarn mineralization at depth below the surface outcroppings.
- A 2,000 m drill hole program at the both/either the Chaupec and Guacile Targets will be planned pending the results of the above outlined exploration.

*Luis Vela, Vice President of Exploration for Panoro and a "qualified person" under National Instrument 43-101, has reviewed and approved the scientific and technical information*



# Antilla Project

## Heap Leach SX/EW Project

### Initial Capital

\$US 250 M

### Pretax

NPV \$US 520 M  
IRR 34.7%  
PAYBACK 2.6

### After Tax

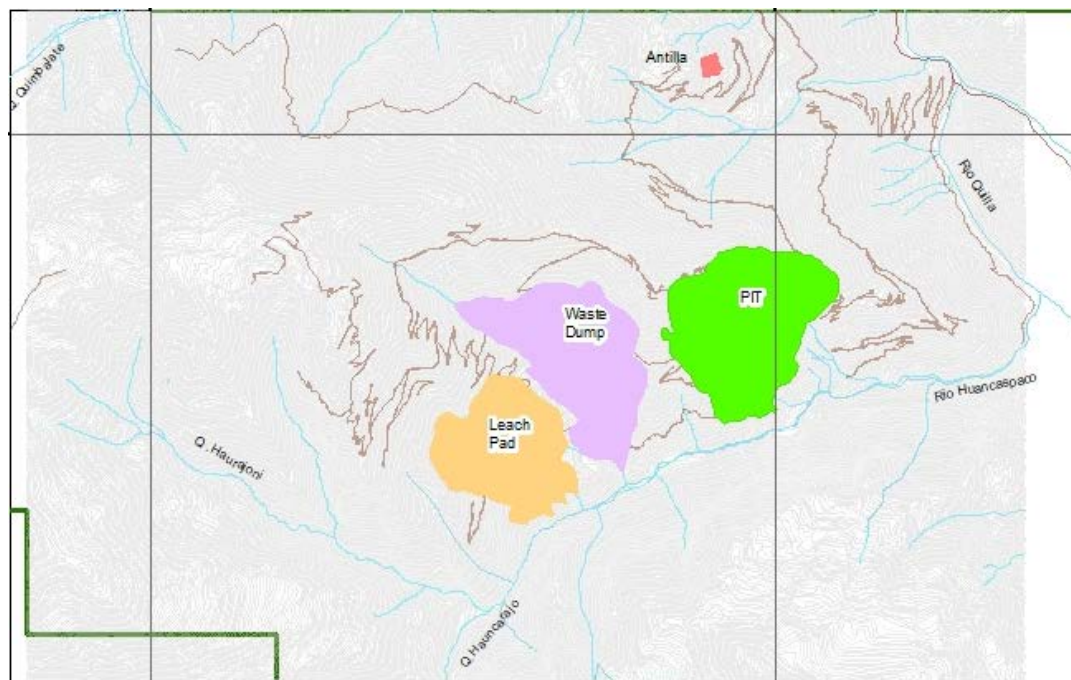
NPV \$US 305 M  
IRR 25.9%  
PAYBACK 3.0

### Cash Costs

C1 \$1.51/lb  
C2 \$ 1.82/lb

### LOM Cashflow

\$US 1.0 B pretax  
\$US 669 M after tax



**NOTE: @ Cu = \$US3.05 long-term Cu price/lb**

*Luis Vela, Vice President of Exploration for Panoro and a "qualified person" under National Instrument 43-101, has reviewed and approved the scientific and technical information*

### Antilla Initial CAPEX (US\$ millions)

Item	Cost
Mine Equipment	\$0
Mine Development	\$41
Process Plant	\$95
Tailings Storage Facility	\$0
Infrastructure	\$42
<b>Subtotal</b>	<b>\$178</b>
Owners Cost	\$8
Indirect Costs	\$14
<b>Subtotal</b>	<b>\$200</b>
Contingencies	\$50
<b>Total Initial Capital Cost</b>	<b>\$250</b>

# Antilla Project

## Heap Leach SX/EW PEA Summary

### PEA DESIGN PARAMETERS

119 Mt Mill Feed  
20,000 tpd  
17 year LOM

1.38 Strip Ratio  
163 Mt wasterock

0.44% Cu Grade

Payable Metal  
21 Kt/year Cu  
Cu Cathode

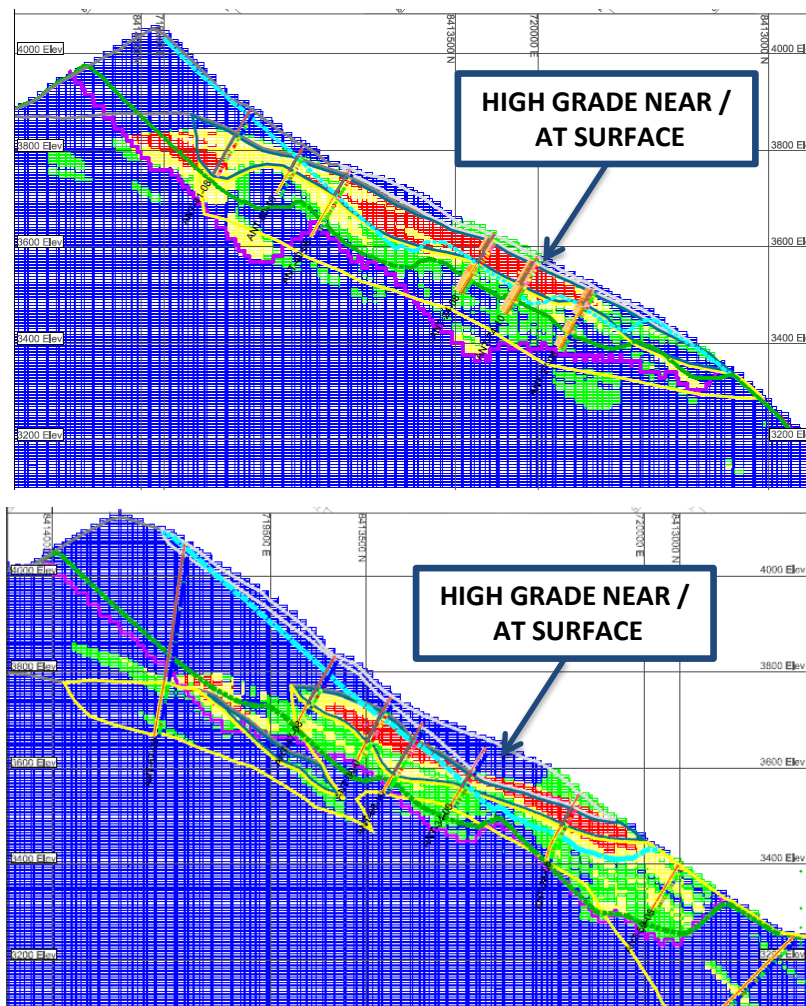
72.5% in 200 Days

No Tailings Dam

LOM Payable Metal  
358 Kt Cu Cathode

Column Tests  
79.9%  
in 150 Days

Potential 11%  
increase in  
Production and 30%  
increase in Value



**Note: @ Cu = \$US3.05 long-term Cu price**

Luis Vela, Vice President of Exploration for Panoro and a "qualified person" under National Instrument 43-101, has reviewed and approved the scientific and technical information

# Antilla Project Growth Potential

KEY PROJECT PARAMETERS (IN USD CURRENCY)			HEAP LEACH PROJECT <sup>2</sup>	HEAP LEACH GROWTH POTENTIAL <sup>3</sup>
Mill Feed, life of mine	million tonnes		118.7	171.1
Mill Feed, daily	tonnes		20,000	35,000
Strip Ratio, life of mine	waste: process feed		1.38 : 1	1.77 : 1
After Tax @ PEA Prices	NPV <sub>7.5%</sub>	million USD	305	499
	IRR	%	25.9	36.9
	Payback	years	3.0	2.2
Annual Average Payable Metals	Cu	thousand tonnes	21.0	38.5
	Au	thousand ounces	-	-
	Ag	thousand ounces	-	-
	Mo	thousand tonnes	-	0.9
Initial Capital Cost	million USD		250	327
1. Prices in USD 2. At PEA commodity prices; long-term Cu = \$3.05/lb 3. Conceptual level estimate				

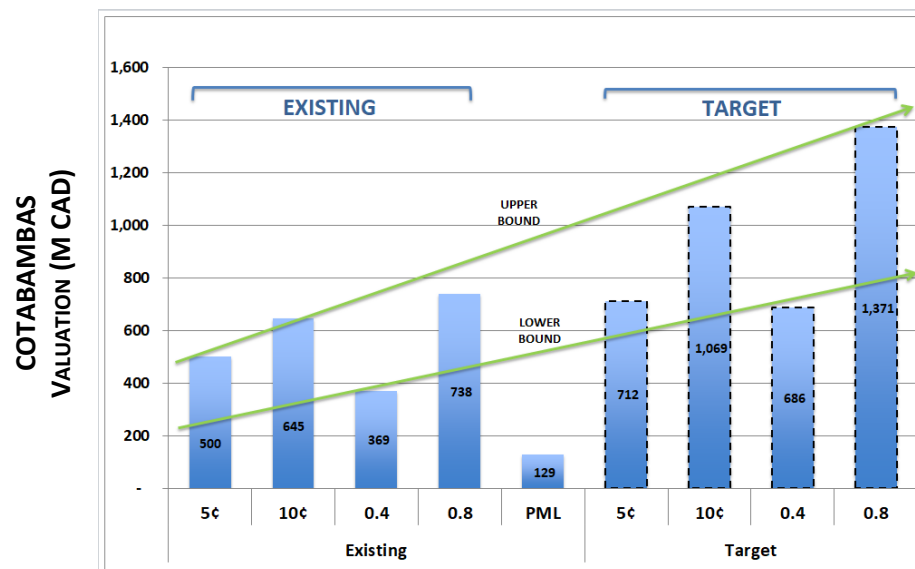
Luqman Shaheen; President & CEO, and Luis Vela, Vice President of Exploration for Panoro and a "qualified person" under National Instrument 43-101, have reviewed and approved the scientific and technical information

# Antilla Project

## Heap Leach SX/EW

Optimized Mine Plan	Increased Grade 0.31% to 0.43%	Secondary Sulphides 117 Mt, 98% of feed	Indicated Category 95% of mine plan	
Reduced Throughput	Cathode Production 21.0 Kt/yr	Strip Ratio 1.38	Mine Plan 20,000 tpd	Life of Mine 17 years
Lower Capital and Operating Costs	Cu Recovery 72.5% from leaching secondary Sulphides	Capital Cost reduced 59%	C1, C2 Costs Reduced 18-23%	
Eliminated Sustaining Capital Costs	No Tailings Dam	Use Contract Mine Fleet		
Maximized Project Cash Flows	After Tax NPV +36%	IRR + 72% Payback -27%	NPV/Capex > 1	Capital Intensity, lower quartile 5.41
Roadmap to Permit	Infill Drilling \$ 2 million, 3 months	Feasibility Study \$ 2 million, 7 months	Impact Assess & Approval \$ 0.5 million, 22 months	

# Panoro Minerals Valuation Metrics



## Legend

5¢ indicates 5¢/lb Cu<sub>eq</sub> in M/I/I Resource  
 10¢ indicates 10¢/lb Cu<sub>eq</sub> in Mineable Resource  
 0.4 indicates 40% of NPV  
 0.8 indicates 80% of NPV

**MARCH 2012**

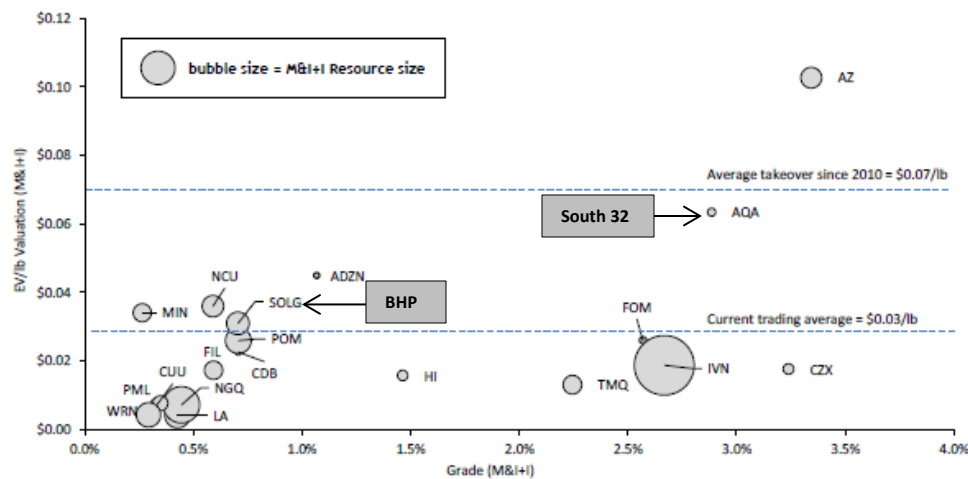
PML Market Capitalization \$120M

➡ **6¢/lb Cu<sub>eq</sub>**

**OCTOBER 2017**

Antilla + Cotabambas = 10.5B lb Cu<sub>eq</sub>

➡ **\$630M Valuation Potential**

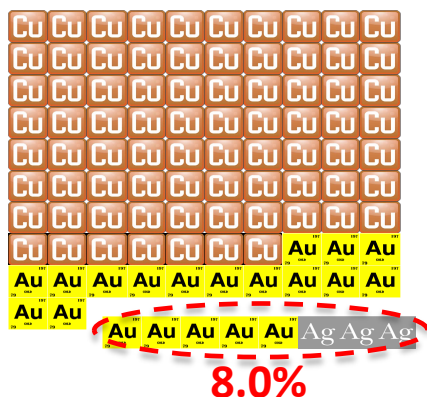


Source: RBC Capital Markets, Company Reports, ThomsonONE

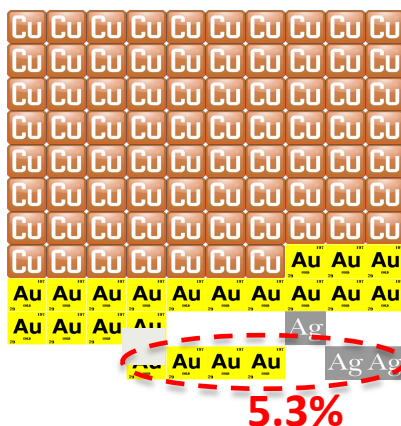


# Panoro Minerals Valuation Potential

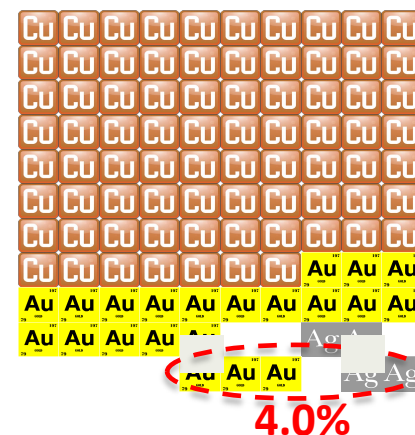
## STREAM AGREEMENT



## CAPPED POST 90M AG<sub>EQ</sub> OZ



## OPTION CHANGE OF CONTROL



**WHEATON**  
PRECIOUS METALS  
PAYMENTS

USD (M)

Advance	\$140
Gold Delivery	\$ 180
Silver Delivery	\$ 100
Total	\$ 420

STREAM REDUCTION IN FUTURE  
CAPTURES EXPLORATION UPSIDE

FLEXIBILITY FOR  
ACQUIRER OF PROJECT

Exploration  
Funding

Derisked  
Financing

Flexibility

Validation of  
Project

Development  
Funding

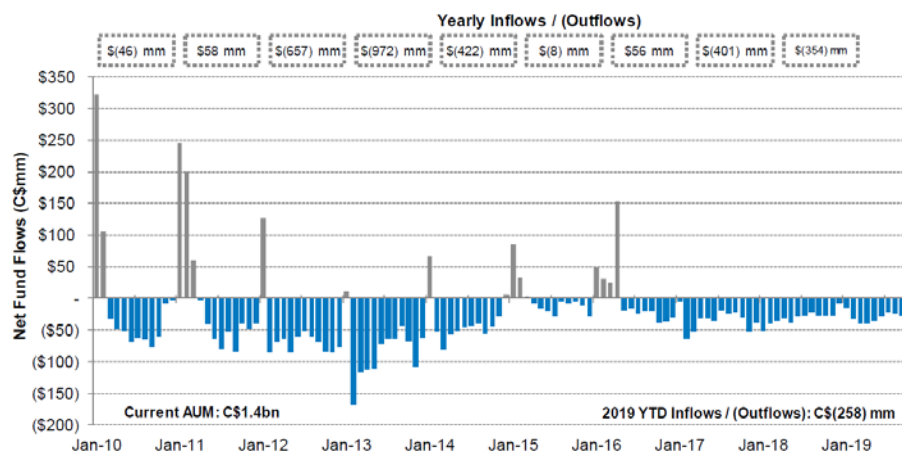
Custom Fit  
Agreement

Valuation  
Benchmark

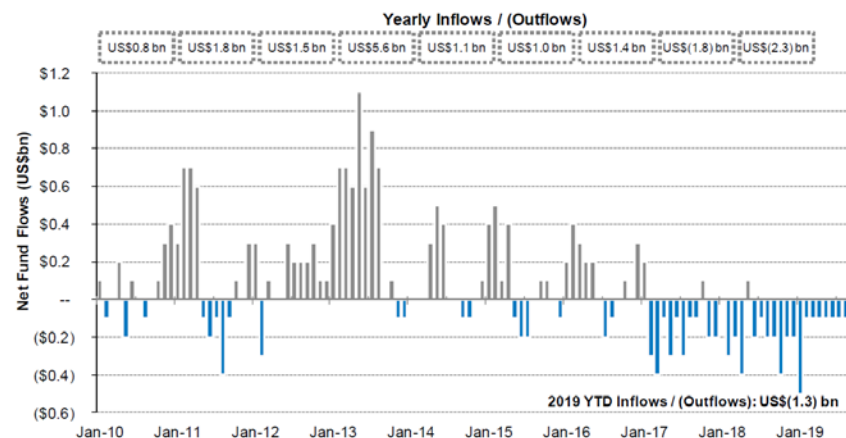
Leveraged for  
2016 Placement

# North American Metals & Mining Equity Issuance

## CANADA – NATURAL RESOURCE FUND FLOWS



## UNITED STATES – NATURAL RESOURCE FUND FLOWS



Source: Bloomberg, BMO Capital Markets, company filings, Dealogic, FactSet, IFIC, Lipper

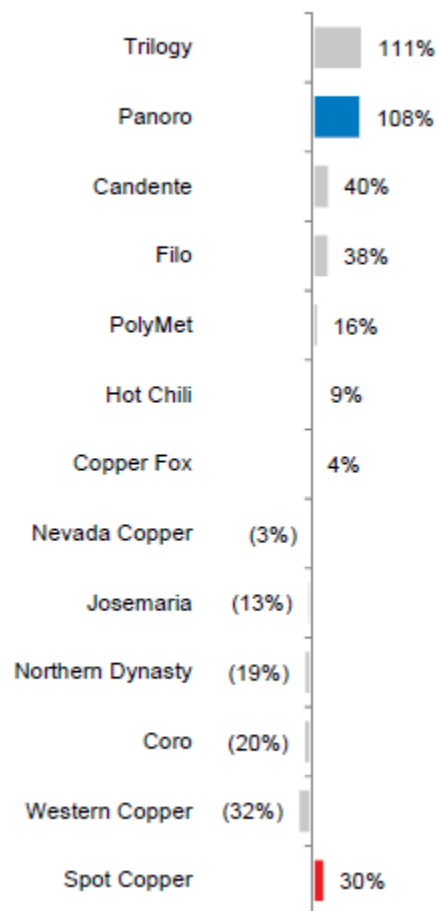
Note: ⓘ indicates BMO acted as bookrunner on transaction.

- Recent equity offerings >US\$25 mm shown. Includes over-allotment option, if exercised; select Cu deals shown.
- Where applicable, discounts are adjusted for warrant value; for marketed offerings, discounts are measured relative to the last trade prior to announcement of the offering.
- Osisko Mining transaction includes both tranches of flow-through common shares.

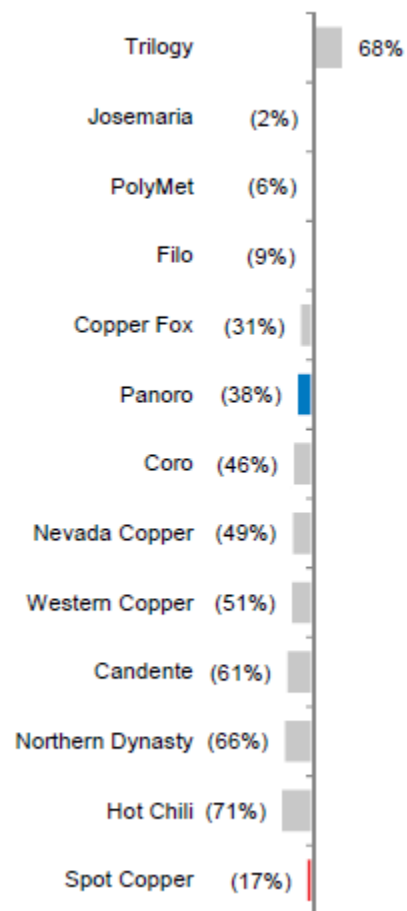
- Osisko Mining transaction includes both the charitable flow-through share portion and the common share portion.
- Victoria Gold transaction includes the common share portion, the flow-through common share portion, and the concurrent private placement portion.
- TMAC Resources transaction includes both the common share portion and the concurrent private placement portion.

# Relative Performance

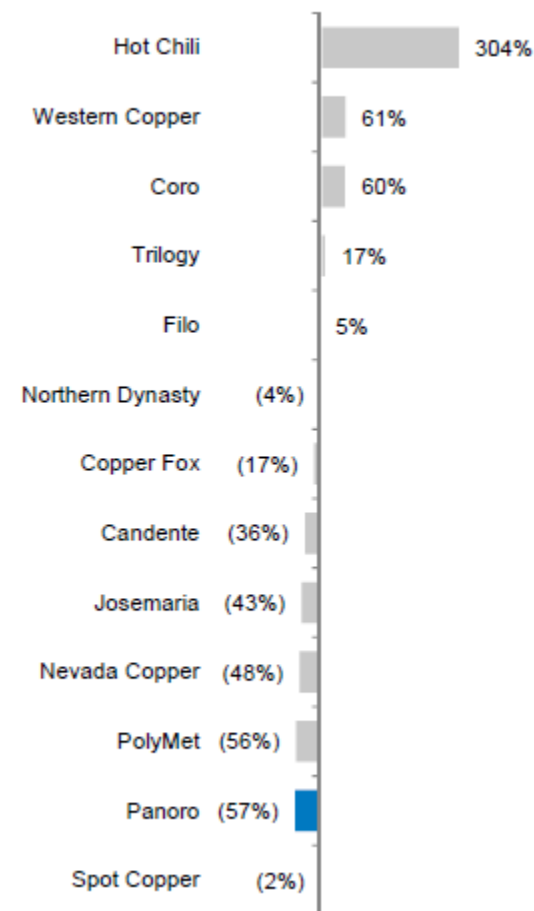
2017



2018



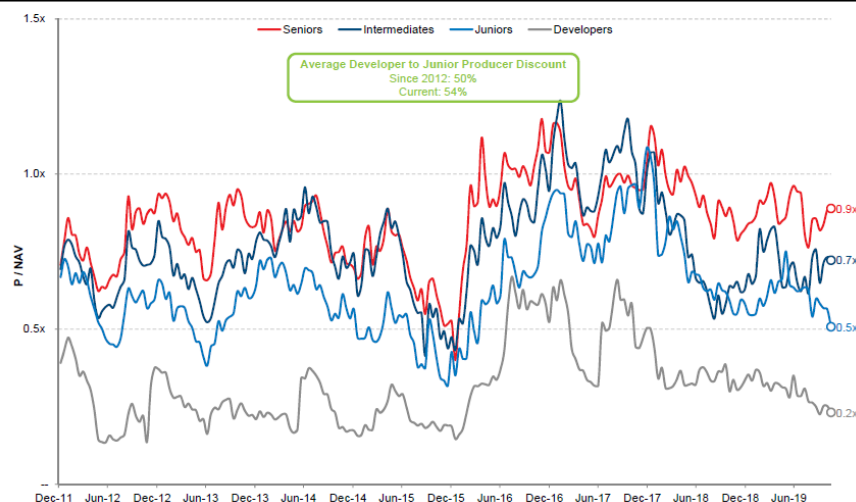
2019 YTD



Source: FactSet  
Note: Calculated in local currency.

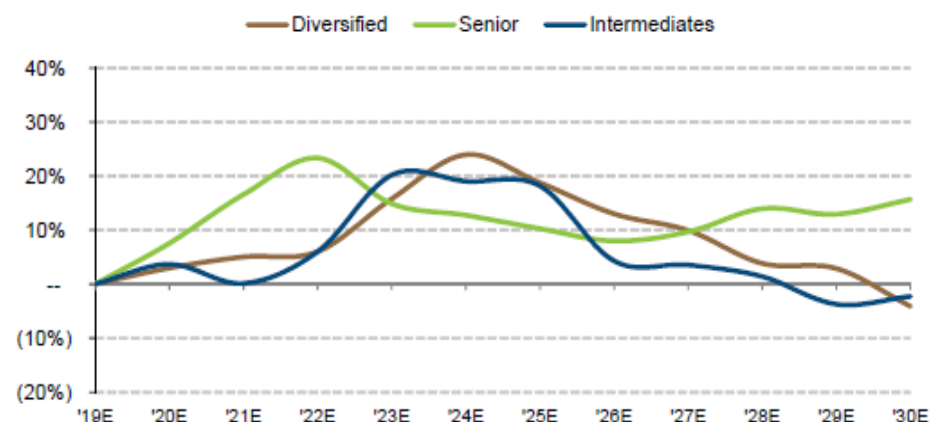
# Base Metal Sector Valuation Trends

## BASE METAL SECTOR VALUATION TRENDS



Source: FactSet, street research

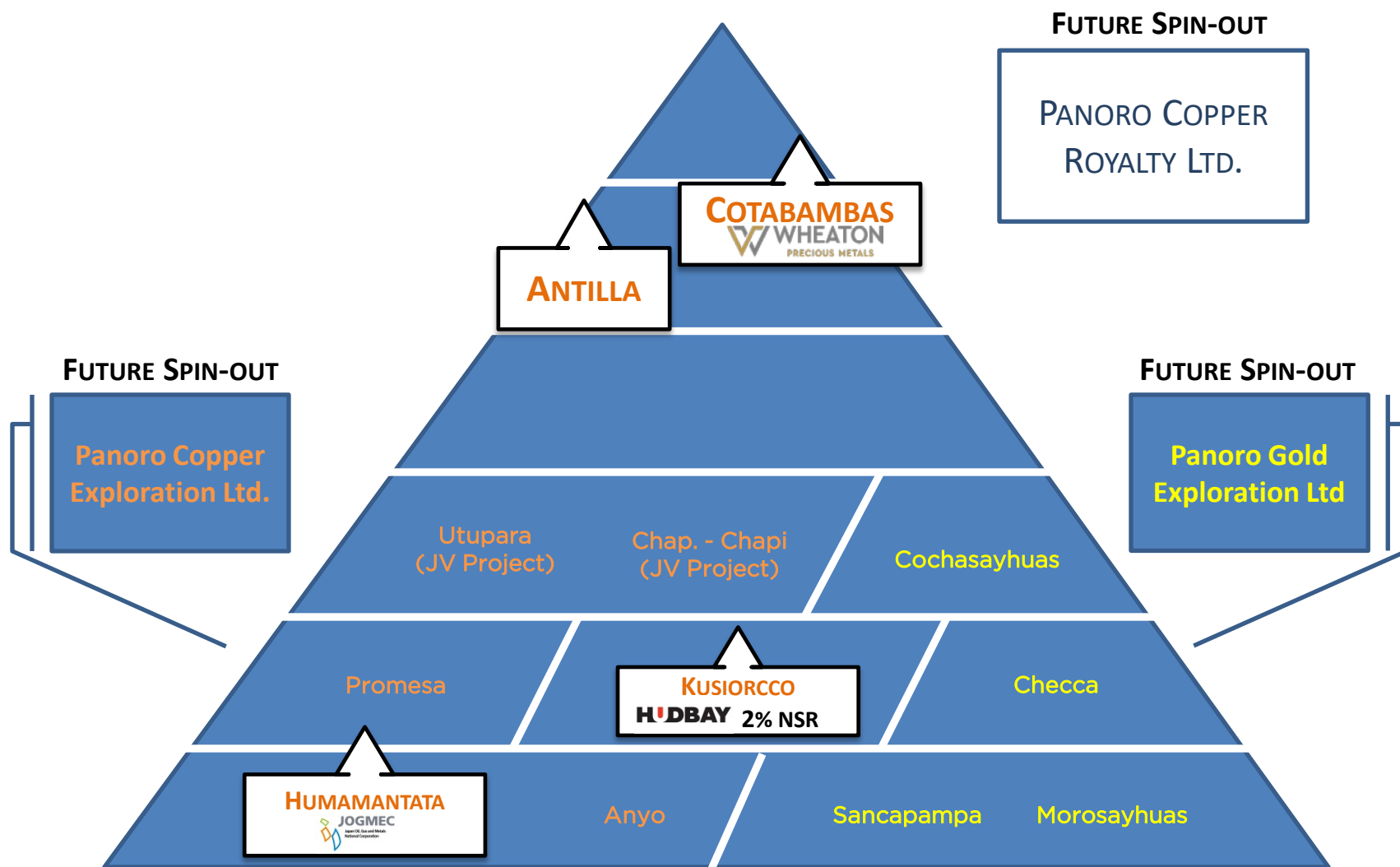
## CU ONLY PRODUCTION GROWTH OVER TIME (%)



Source: BMO Capital Markets Equity Research, street research

1. Based on BMO Capital Markets M&A database for transactions greater than US\$50 mm.

# Future Copper & Gold Exploration Companies





# Management & Directors – Peru Experience

## MANAGEMENT

### **LUQUMAN SHAHEEN, PENG, PE, MBA – PRESIDENT & CHIEF EXECUTIVE OFFICER & DIRECTOR**

Over 27 years experience in mining sector, 20 years experience in Peru and Latin America



### **SHANNON ROSS, CPA,CA – CHIEF FINANCIAL OFFICER**

Over 25 years experience in accounting and financial management in the mining sector

### **YVES BARSIMANTOV – VICE PRESIDENT OPERATIONS & PERU GENERAL MANAGER**

20 years management experience with Peruvian banking, fishing and mining sector



### **LUIS VELA, P.GEO., MSc.ECON.GEOLOGY – VICE PRESIDENT EXPLORATION**

Over 25 years exploration experience in Peru and Chile mining sector



## DIRECTORS

### **WILLIAM BODEN, CPA,CA – CHAIRMAN**

Former Chairman of First Coal Corporation

### **AUGUSTO BAERTL – DIRECTOR**

Over 50 years of experience in the Peruvian and International Mining Sector



### **RONALD HALL – DIRECTOR**

Over 40 years of experience in the management, operation, evaluation and design of mining projects globally

### **ANTHONY LAUB – DIRECTOR**

Partner at Laub & Quijandria Consultores y Abogados



### **CHRISTIAN PILON – EXECUTIVE DIRECTOR PERU – DIRECTOR**

Over 30 years of experience in applied geophysics and mining sector, resident in Peru



### **CHRISTIAAN STAARGAARD, MSc, PGEO – DIRECTOR**

Over 40 years experience in exploration including as a Director or Senior Officer of public companies since 1990

### **LORNE TORJHELM – DIRECTOR**

President RNJ Ventures

# Conclusions

## COTABAMBAS PROJECT

Large scale copper project,  
greater potential, strategic  
location

## ANTILLA PROJECT

Moderate scale project,  
potential to monetize

## FINANCED

Funding in Place \$19.8M CAD

## COPPER

Principal commodity with supply  
constraints coming and demand  
strong

## PERU

Key copper producing nation  
with goal to become largest  
copper producer nation

## VALUATION POTENTIAL

Significant Valuation Growth  
Potential for New Cycle

**PANORO**  
MINERALS LTD





# PANORO

MINERALS LTD

TSXV:PML  
Frankfurt:PZM  
BVL:PML

For further information, contact:  
Luquman Shaheen, President and CEO  
Phone: 604.684.4246  
Email: [info@panoro.com](mailto:info@panoro.com)  
[www.panoro.com](http://www.panoro.com)