



Mahr Tunel Plant, Yauli



San Cristóbal Mine, Yauli

# Volcan Compañía Minera



Oxides Plant, Cerro de Pasco



Alpamarca Plant, Alpamarca



Corporate Presentation  
June 2017

# Disclaimer

Some statements contained in this presentation or in documents referring to this presentation may contain inaccuracies. No reliance for any purpose whatsoever may be placed on the information or opinions contained in this presentation or on the completeness of this presentation. Volcan Compañía Minera S.A.A. (the Company), its shareholders and its officers make no representation or warranty as to the accuracy or completeness of the information contained in this presentation. Any person who has access to this presentation must evaluate independently all information provided in it and shall not rely on it. Nothing in this presentation is to be construed as a profit forecast.

Some statements contained in this presentation or in documents referring to this presentation may include forward-looking statements. Actual results may differ from those expressed in such statements, depending on a variety of factors. Past performance of the Company or its shares cannot be relied on as a guide to future performance. Any forward-looking information contained in this presentation was prepared on the basis of a number of assumptions that may prove to be incorrect. Actual results may vary accordingly.

This presentation does not constitute, form part of, or contain any invitation or offer to any person to carry out any investment or underwrite, subscribe or otherwise acquire or dispose of any shares in the Company or its subsidiaries; or advise persons to do so in any jurisdiction or under any applicable law. No part of this document shall form the basis of or be relied upon in any connection with or act as an inducement to enter into any contract or commitment.

No liability whatsoever is accepted by the Company, its shareholders, its officers or any related parties for any loss howsoever arising from any use of this presentation or its contents in connection therewith. To the maximum extent permitted by law, and, except in case of gross negligence or willful misconduct, the Company and its respective shareholders, officers, employees, agents, contractors or advisers are not liable to any person for any loss or damage incurred as a result of using or relying on this presentation.

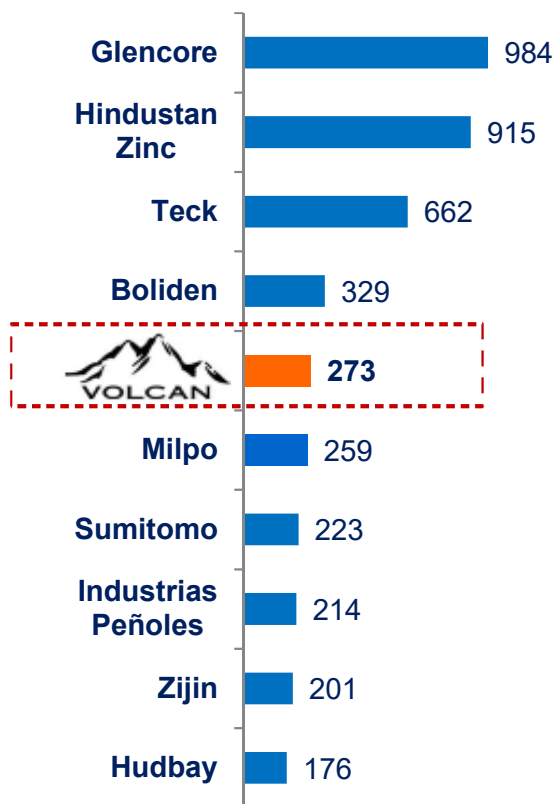
# Strategic Location with Diversified Operations

- More than 70 years of mining experience
- Committed to the highest standards of safety & environmental protection
- A world-class producer with significant organic growth potential
- Diversified, balanced and stable production of base & precious metals
  - Five operating units, 12 mines
  - Seven concentrator plants & one lixiviation plant (Ag oxides)
- First-quartile C1 zinc & silver cash costs
- Logistical flexibility
- Constructive relationships with authorities, labor & communities

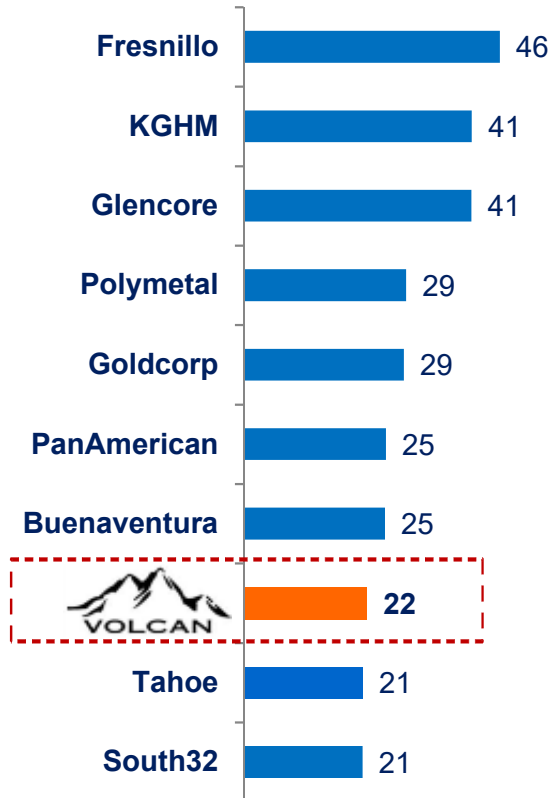


# A Leading Global Producer of Zinc, Silver & Lead

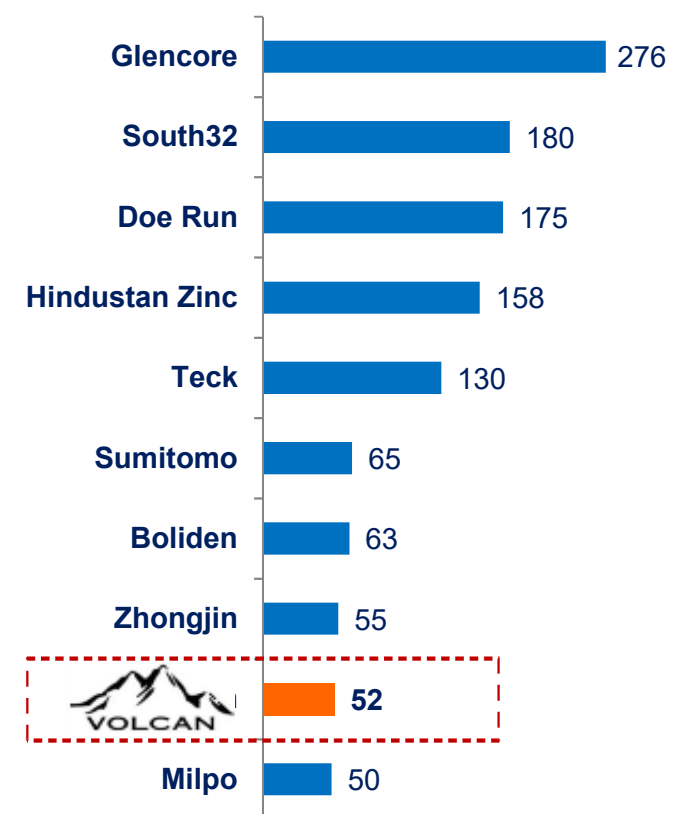
**Zinc Production 2016  
(000 FMT)**



**Silver Production 2016  
(MM Oz)**



**Lead Production 2016  
(000 FMT)**



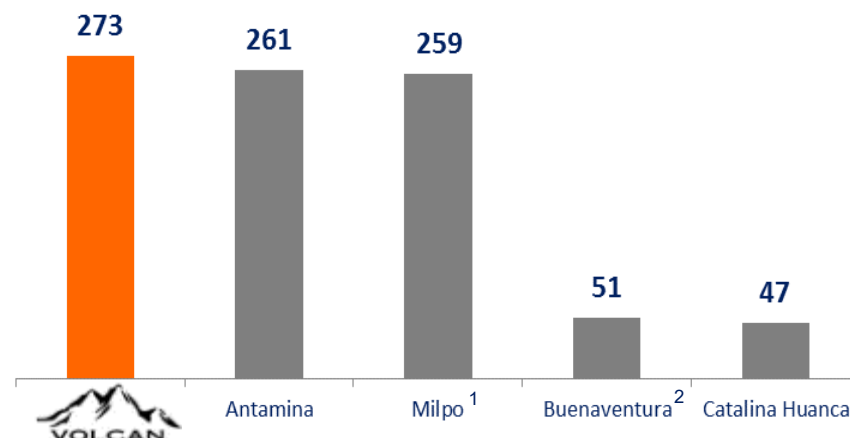
- Significant negotiating leverage due to ability to deliver large volumes across several key metals
- Broad client base composed of major global commodity traders and refineries

# A Leading Producer of Zinc, Silver & Lead in Peru

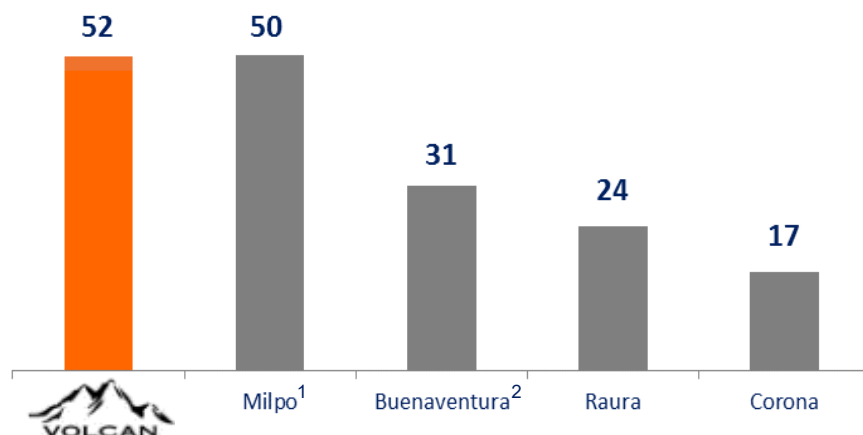
## Peru Ranking – Mining Production 2016

Metal	LatAm	Global
Zinc	1	2
Lead	1	4
Silver	2	2

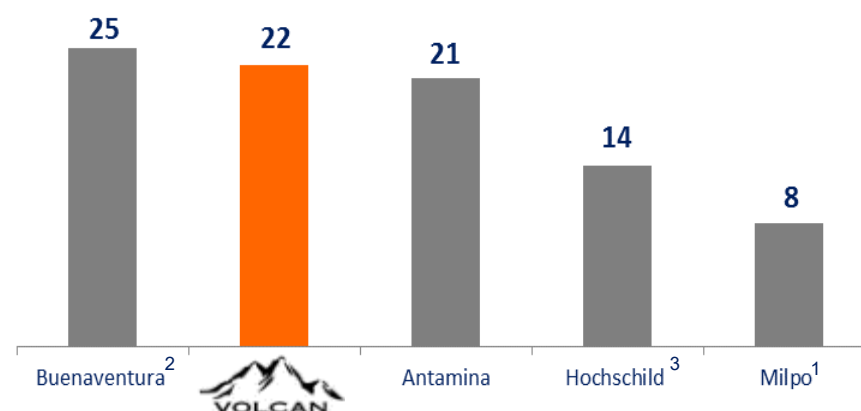
## Zinc Production 2016 (000 FMT)



## Lead Production 2016 (000 FMT)



## Silver Production 2016 (MM Oz)



5 Source: Peru Ministry of Energy & Mines, United States Geology Survey.

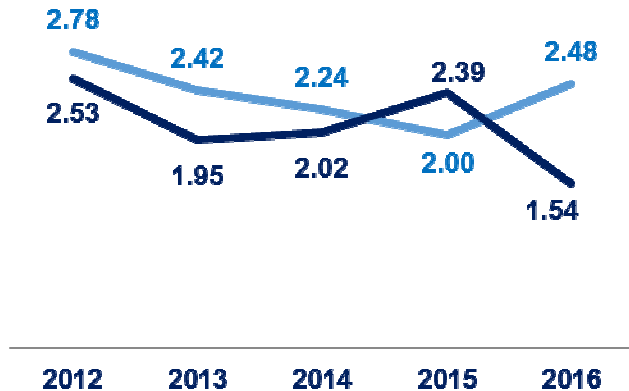
<sup>1</sup> Includes Atacocha. <sup>2</sup> Includes 61% of El Brocal. <sup>3</sup> Considers only Peruvian Ag production (Arcata, Inmaculada & Pallancata)



# A Safe Place to Work

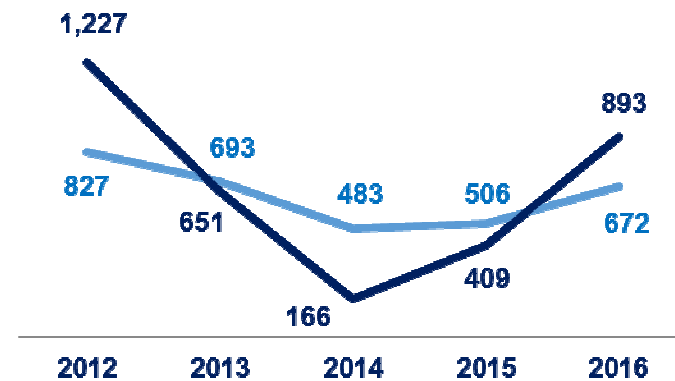
## Frequency Index

Lost-time injuries per million hours worked



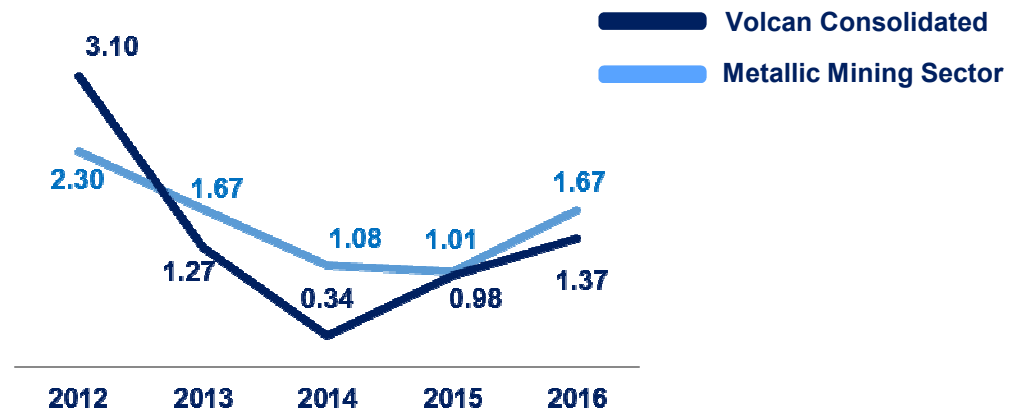
## Severity Index

Days lost per million hours worked



## Accident Index

Frequency x Severity





# Mining Operations<sup>1</sup>



**Yauli**

<b>Mines:</b>	Four underground, one open pit
<b>Reserves:</b>	27.3 MM MT; 5.34% (Zn), 0.89% (Pb), 0.22% (Cu), 3.24 oz/MT (Ag)
<b>LOM:</b>	Seven years (reserves), 16 years (reserves + inferred resources)
<b>Capacity:</b>	11,000 tpd from three concentrator plants
<b>Production:</b>	165 K FMT (Zn), 24 K FMT (Pb), 3 K FMT (Cu), 11.6 MM oz (Ag)



**Chungar**

<b>Mines:</b>	Two underground
<b>Reserves:</b>	9.8 MM MT; 5.21% (Zn), 1.50% (Pb), 0.14% (Cu), 2.52 oz/MT (Ag)
<b>LOM:</b>	Five years (reserves), 12 years (reserves + inferred resources)
<b>Capacity:</b>	5,500 tpd from one concentrator plant
<b>Production:</b>	96 K FMT (Zn), 20 K FMT (Pb), 1 K FMT (Cu), 4.1 MM oz (Ag)



**Alpamarca**

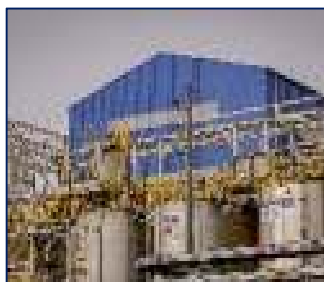
<b>Mines:</b>	One underground, one open pit
<b>Reserves:</b>	0.7 MM MT; 1.11% (Zn), 0.69% (Pb), 2.78 oz/MT (Ag)
<b>LOM:</b>	One year (reserves), three years (reserves + inferred resources)
<b>Capacity:</b>	2,500 tpd from one concentrator plant
<b>Production:</b>	10 K FMT (Zn), 7 K FMT (Pb), 2.0 MM oz (Ag)

# Mining Operations<sup>1</sup>



**Cerro de Pasco**

**Mines:** Two underground, open pit  
**Reserves:** 15.3 MM MT; 3.51% (Zn), 1.21% (Pb), 1.56 oz/MT (Ag)  
**Capacity:** 6,000 tpd from two concentrator plants  
**Production:** 2 K FMT (Zn), 1 K FMT (Pb), 0.1 MM Oz (Ag)



**Oxides Plant**

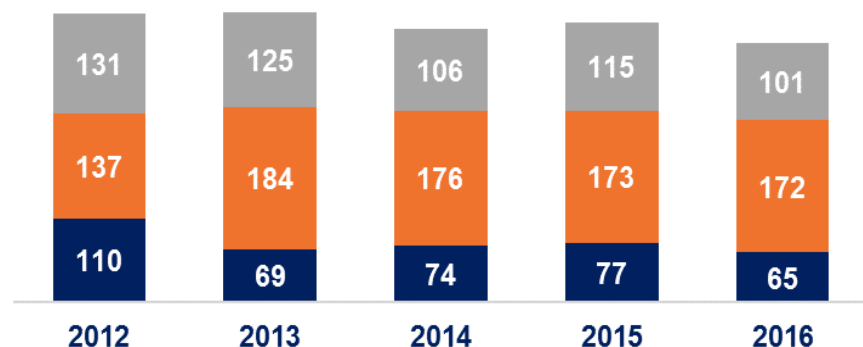
**Feed:** Stockpiles & in-situ mineral from Raul Rojas Open Pit  
**Reserves:** 12.1 MM MT; 6.25 oz/MT (Ag)  
**LOM:** 13 years of reserves, 19 years (reserves + inferred resources)  
**Capacity:** 2,500 tpd from one lixiviation plant  
**Production:** 4.1 MM Oz (Ag), 3.3 k Oz (Au)



# Solid Life of Mine (LOM)<sup>1</sup>, Robust Geological Potential

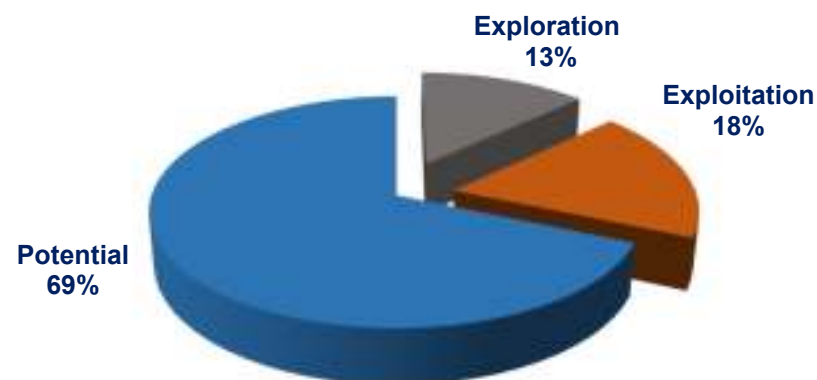
- 8-year LOM (Reserves), 19-year LOM (Reserves + Inferred Resources)
- 9 MM FMT of Zn (Reserves + Resources)
- 798 MM ounces of Ag (Reserves + Resources)

## Evolution of Reserves & Resources (MM MT)



■ Inferred Resources ■ Measured & Indicated Resources ■ Reserves

## ~ 344k Ha. of Mining Concessions

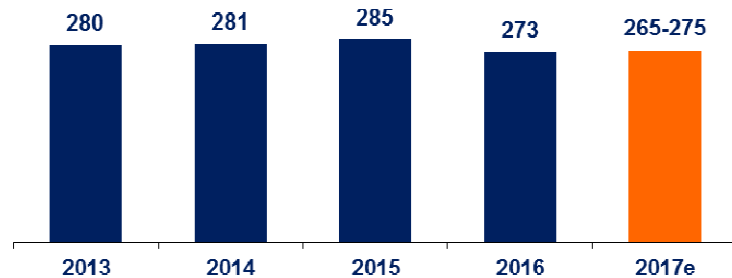


**Prices used to calculate R+R 2016:** Zn 2,300 USD/MT, Pb 2,100 USD/MT, Cu 5,800 USD/MT, Ag 18 USD/Oz

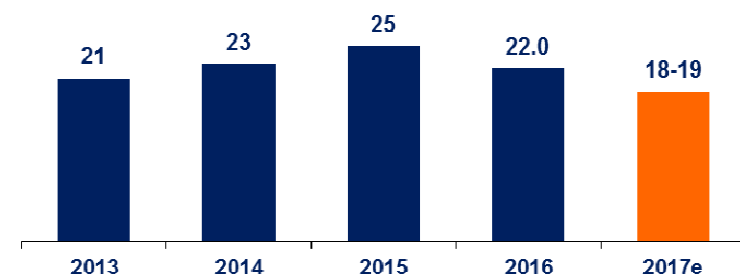
# Stable Production with Operating Flexibility

- Silver production now more diversified
- Expansion from new and existing operations compensate suspended production at Cerro de Pasco

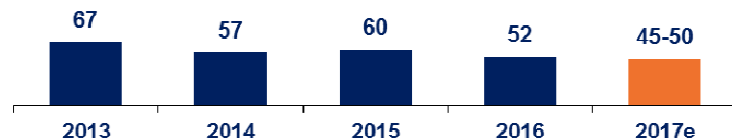
**Zinc Production  
(000 TMF)**



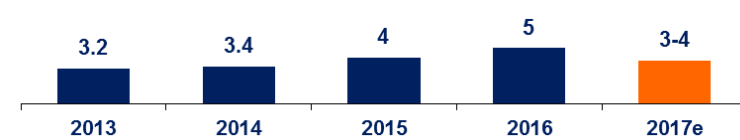
**Silver Production  
(MM Oz)**



**Lead Production  
(000 FMT)**

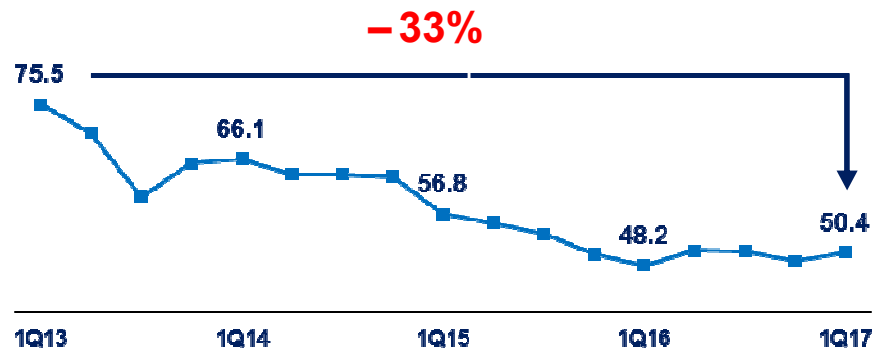


**Copper Production  
(000 FMT)**

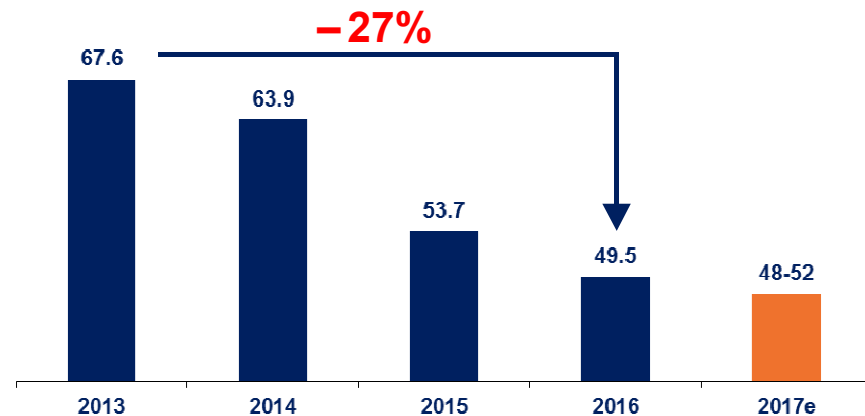


# Operating Cost Restructured & Reduced

## Quarterly Unit Cost (USD/MT)<sup>1</sup>



## Annual Unit Cost (USD/MT)<sup>1</sup>

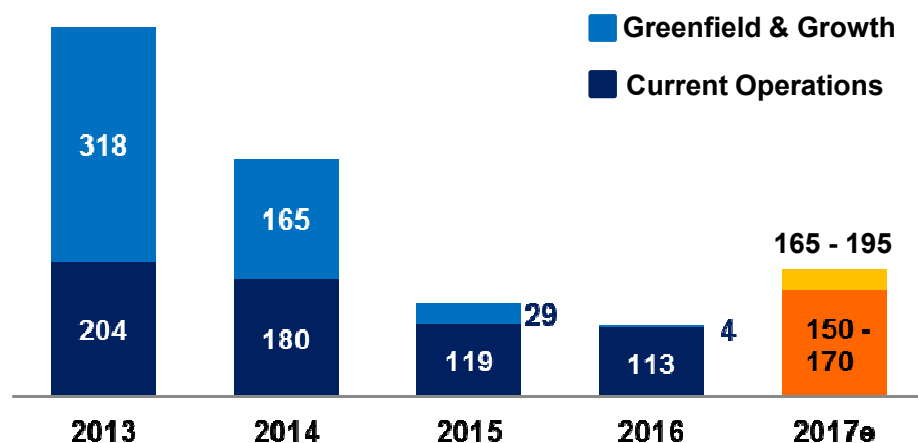


## Operating-cost reductions from continuous-improvement program integrated into all operating units

- ✓ Stable operating-cost outlook for 2017
- ✓ **33%** operating-cost reduction since 1Q13 (75.5 USD/MT)
  - Optimization of mining methods
  - Restructuring of the number, scope and rates of contractors
  - Personnel reduction
  - Optimization of raw material usage
  - Increased efficiencies in mine support & energy usage
- ✓ Expected additional cost reduction from infrastructure investments like San Cristobal-Carahuacra & Animon-Islay integration tunnels

# Disciplined Capital Investment

## Annual Mining CAPEX (USD MM)



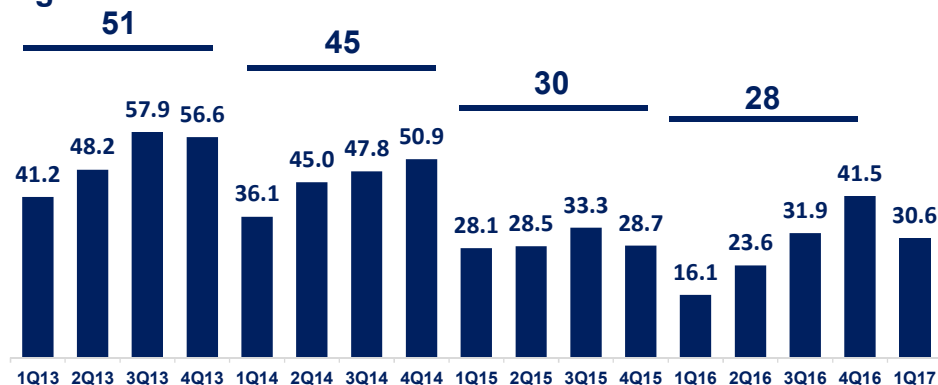
✓ **45% reduction** in operating CAPEX (2013 – 2016) to preserve cash

✓ **90% YOY investment increase** (1Q17 vs. 1Q16) in explorations, mine development & infrastructure

✓ **2017 CAPEX increase** is related to mine development, infrastructure & explorations

## Quarterly Current Operations CAPEX (USD MM)

Avg.



## Volcan Exploration DDH (000 Meters)

	2016	2017	var. %
Greenfield	6.6	43.5	562.2
Yauli Growth	8.3	23.1	176.3
Chungar Growth	10.6	31.0	193.5
Sustaining <sup>1</sup>	104.2	109.1	4.7
<b>Total</b>	<b>129.7</b>	<b>206.6</b>	<b>59.3</b>

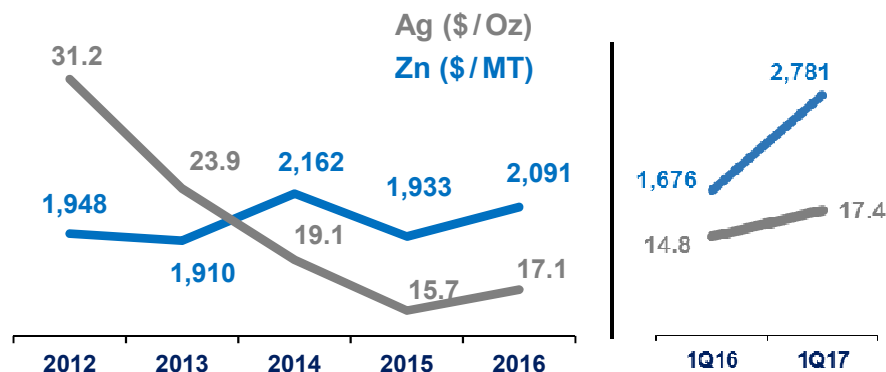


# Mining Operations Guidance 2017

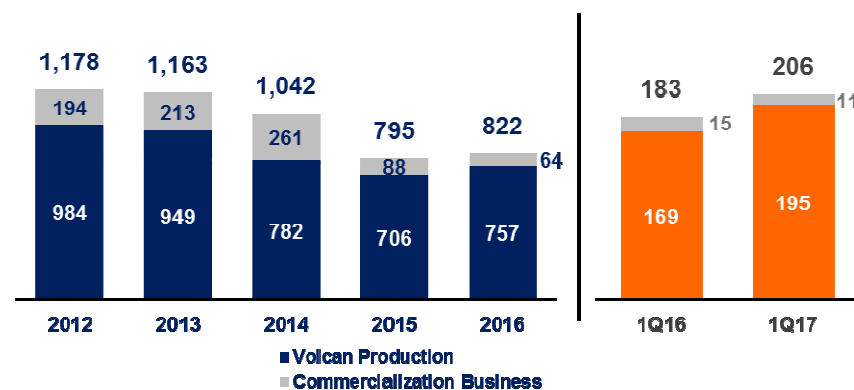
Consolidated Production		2015	2016	Var. %	Estimated 2017
<b>TMT (000)</b>		<b>7,910</b>	<b>7,716</b>	<b>-2</b>	<b>7,500 – 8,500</b>
Zinc	(000 FMT)	285	273	-4	265 – 275
Lead	(000 FMT)	60	52	-12	45 – 50
Copper	(000 FMT)	4	5	20	3 – 4
Silver	(MM Oz)	25	22	-11	18 – 19
Gold	(000 Oz)	5	6	9	4 – 5
Consolidated OPEX		2015	2016	Var. %	Estimated 2017
Unit Cost	(USD/TM)	53.7	49.5	-8	48 – 52
Consolidated CAPEX (MM USD)		2015	2016	Var. %	Estimated 2017
<b>Mining Operation</b>		<b>147.6</b>	<b>116.9</b>	<b>-21</b>	<b>165 – 195</b>
Operating Capex		118.6	113.1	-5	150 – 170
Greenfield & Growth		29.0	3.8	-87	15 – 25

# Financial Indicators

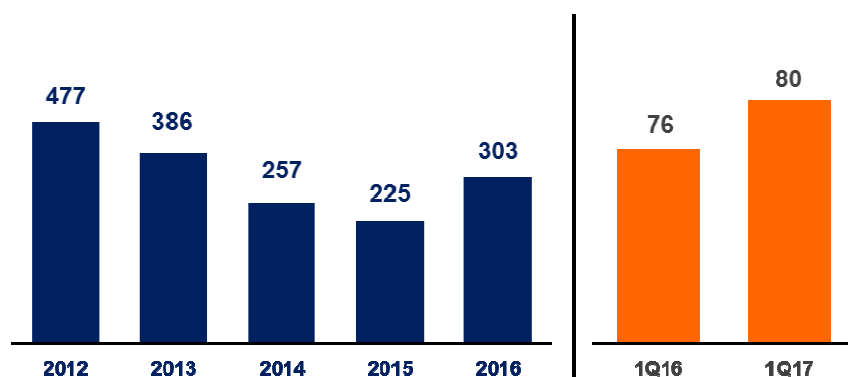
## Average Spot Prices (LME)



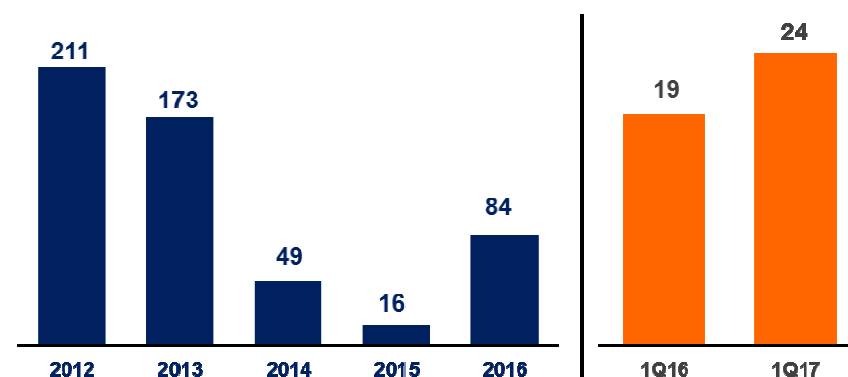
## Sales (USD MM)



## EBITDA<sup>1</sup> (USD MM)



## Net Profit<sup>2</sup> (USD MM)



14 <sup>1</sup>EBITDA 2016 includes an extraordinary gain of USD 12.9 MM in 1Q16 related to the partial buyback of international bonds issued in 2012

<sup>2</sup>Net profit 2015 excludes exceptional items, as non-cash impairment of assets, intangibles and inventory. Net profit with exceptionals was USD - 454 MM.

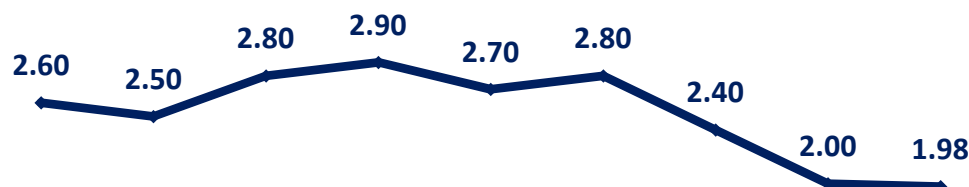




# Liquidity & Creditworthiness

- Lower leverage and increasing EBITDA
- Focused on cash generation & balance-sheet strength

## Net Debt / EBITDA (USD MM) <sup>1</sup>



	1Q15	2Q15	3Q15	4Q15	1Q16	2Q16	3Q16	4Q16	1Q17
Net Debt	655	660	660	648	631	629	633	610	610
EBITDA	253	263	236	225	237	228	267	303	307

## Cash Flow 1Q17 (USD MM)

Balance – Dec 2016	203.4
Operating Flow	73.4
Mining Investment	-30.5
Energy Business	+0.9
Other Investments	-1.5
Dividends and Interest	-31.4
Net Financing	-13.8
Balance – Mar 2017	200.5

15 <sup>1</sup> EBITDA is trailing 12 months & Net Debt is as of quarter-end. EBITDA 2016 includes an extraordinary gain of USD 12.9 MM in 1Q16 related to the partial buyback of international bonds issued in 2012.

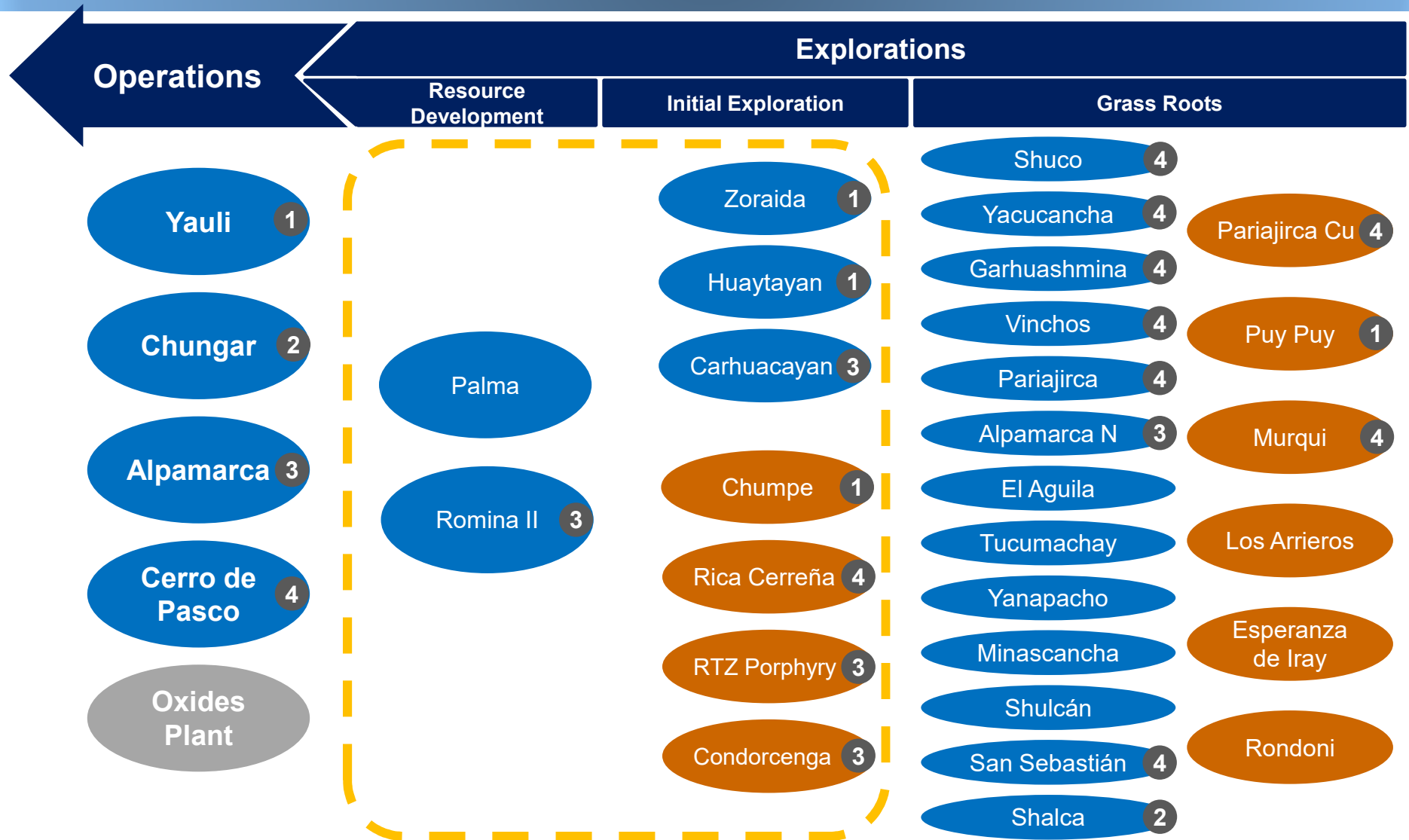


# Growth Strategy

- Build on competitive global position in zinc, silver & lead production
- Capitalize on the geological potential within the portfolio
- Enhance diversification through significant copper production
- Achieve goals via organic & inorganic growth



# World Class Mining Assets



17 The number represents the mining unit to which the Project belongs to:  
1 for Yauli; 2 for Chungar; 3 for Alpamarca; and 4 for Cerro

● Copper

● Polymetallic

● Silver & Gold



## Resource Development: Romina II

- Located 15 km from UEA Alpamarca (6,554 Ha.)
- Polymetallic PIPE & vein mineralizations
- Potential of 15 MM MT (6-7% Zn, 2-3 oz Ag/t)
- Exploration permits approved (DIA)
- Preliminary expected production: 30-35 K FMT (Zn), 12-15 K FMT (Pb), 0.8-1.2 MM Oz (Ag)

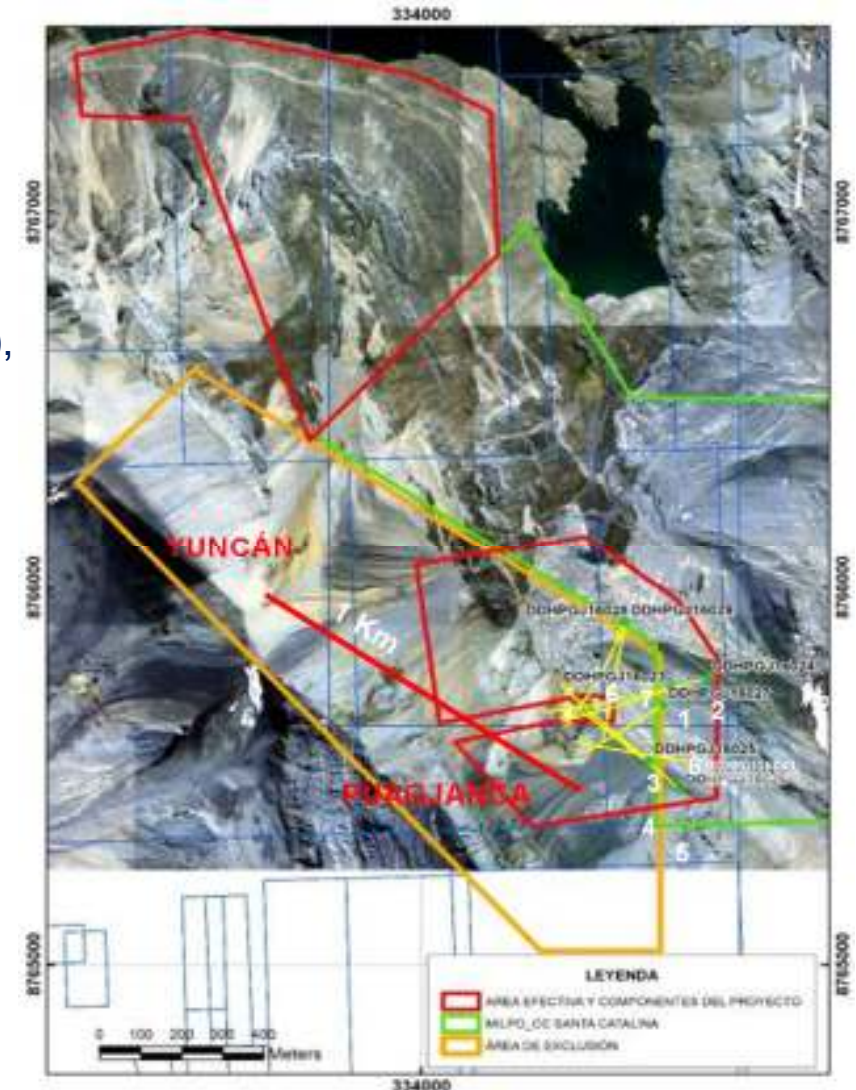
## Main Structures

## Puagjanca

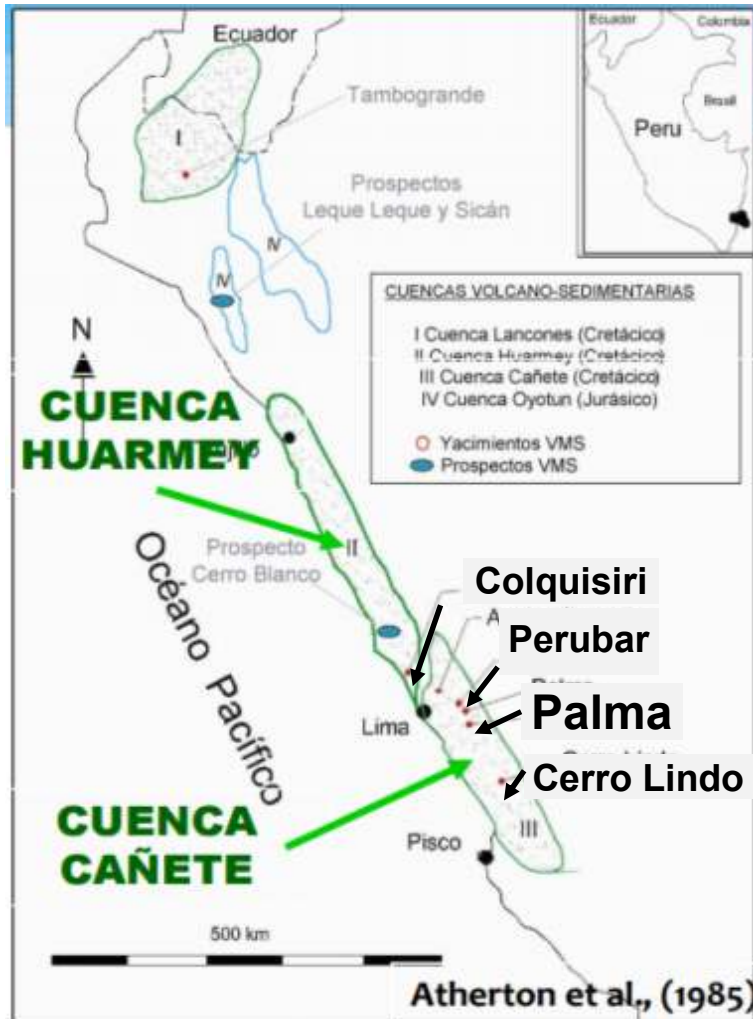
- 14 DDH perforations (5,126 m)
- Successful results cut high-grade polymetallic ore
- Estimated tonnage of 6 MM MT

## Yuncán

- Indications of an important mineralized body
- Two perforations cut high-grade zinc ore



# Resource Development: Palma



- Located at the basin of the Casma Group, same geotectonic environment as important deposits such as Cerro Lindo, Perubar & Colquisiri
- 4 prospective sectors along a 6 km corridor
- 25,000 m of DDH:
  - Current resources of 5.2 MM TM (7.19% Zn, 1.48% Pb, 1.45 oz Ag/t)
  - Cu presence confirmed
- Environmental Impact Assessment (EIA) modified to build a 1 km exploratory tunnel, expected to begin in 2Q17

# Initial Exploration: Polymetallic Projects



## Zoraida (Yauli)

- Located 7 km South of Andaychagua
- Potentially Yauli's third mineralized system
- Permits in process for 2,500 m of DDH

## Huaytayan (Yauli)

- A 3,000 m drilling program is being executed
- Declaration of Environmental Impact (DIA) approved

## Carhuacayan (Alpamarca)

- Located 20 km East of Alpamarca
- 2017 DDH program continuing



# Initial Exploration: Copper Projects



Volcan has an important portfolio of copper projects, with characteristics similar to Chinalco's Toromocho mine

During 2017, Volcan will complete initial drilling at four first-class porphyry projects (Cu-Mo & Cu-Au):

1. Chumpe (Yauli): 15 km from Toromocho
2. Condorcenga (Carhuacayan, Alpamarca)
3. RTZ (Carhuacayan, Alpamarca)
4. Rica Cerreña (Cerro de Pasco)

# Energy Operations

## 100+ MW hydroelectric energy portfolio

- Rucuy commercial operations began August 2016
- 40 MW connected to the national grid
- 23 MW connected to the Chungar unit
- Additional 45 MW of development projects

Current infrastructure	Capacity
13 Hydroelectric plants	63 MW
15 Transmission lines	350 Km
26 Electric substations	300 MVA

Volcan Electric Balance	GWh	%
Consumption 2016	635	100
Self generation	323	51

Cost	USD/ MWh	Hydroelectric Projects	Capacity
Produced energy	20	Tingo Expansion	15 MW
Purchased energy	75	Chancay 2 plants	30 MW

## Rucuy Hydroelectric Plant



# Why Invest in Volcan?



- A world-class, low-cost producer
- Diversified among base & precious metals
- Committed to the highest safety & sustainability standards
- Experienced & committed management team
- Highly prospective, wholly-owned resource base
- Attractive polymetallic and copper projects portfolio

# Annex

# Volcan Compañía Minera History

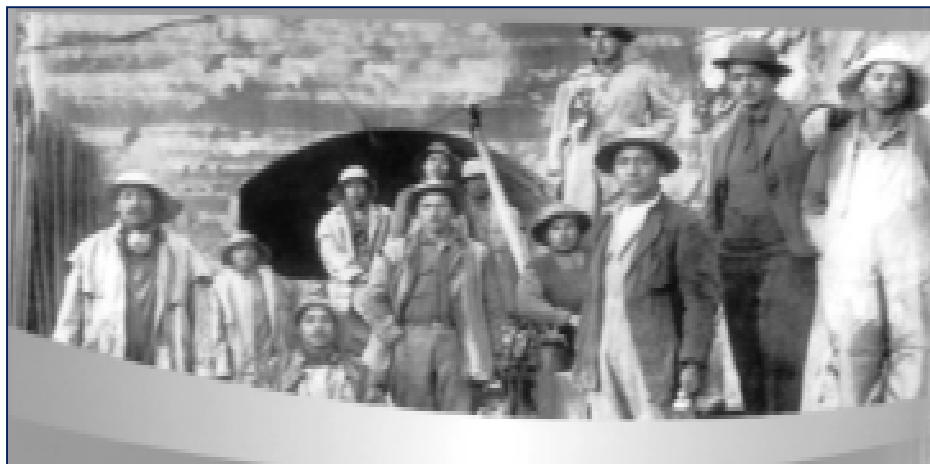
In 1943 the Company began operations as Volcan Mines Company. For more than 50 years, Volcan operated only two mines, Ticlio and Carahuacra, and the concentrator plant Victoria.

In 1997 Volcan acquired Empresa Minera Mahr Tunel, owner of the San Cristobal and Andaychagua mines, and the concentrator plants Mahr Tunel and Andaychagua.

In 1999 Volcan acquired Empresa Minera Paragsha, which included the Cerro de Pasco mining operation.

One year later, in 2000, Volcan acquired Empresa Administradora Chungar with 450 ha. of mining concessions and a 350 tpd processing plant. Today Chungar produces 5,500 tpd.

These acquisitions, as well as mine and plant expansions executed by the Company in the last 15 years, turned Volcan into one of the principal producers of zinc, silver and lead in the world.



Ticlio, 1943

## Volcan Compañía Minera Production Growth

PRODUCTION	1997	2016
Zinc Concentrates (000 MT)	50	520
Lead Concentrates (000 MT)	6	54.5
Copper Concentrates (000 MT)	-	12.5
<b>Silver (MM Oz)</b>	<b>0.5</b>	<b>22.0</b>

# Social Responsibility

**Investment is concentrated in the communities in our area of influence in three fields: education, health and economic development**



## **Corporate Alliance**

By 2021, Volcan and Enseña Perú will transform the educational reality of the Junín and Pasco regions by placing 20 high-level teachers in the most needy schools



## **Educational programs**

- Scholarships to children of local community members
- Performance Monitoring
- Specialized training (mining, administration and soft skills)



## **Corporate project, horizon to 2018**

Working in cooperation with the NGO Prisma, Volcan's strategic partner in health & economic development



# Social Responsibility

- **USD 6MM** invested in the development of the communities in 2016
- Boosting local economies through the contracting of communal enterprises for **USD 22 MM** per year
- Volcan was a **pioneer** in investments under the modality of **public works by taxes (OPI)**
- **S /. 100 MM** invested in OPI under this since 2011



Huayhuay Peasant Community, Junín – Enseña Peru



Opening Ticlacayán School, Pasco  
Public Works by Taxes

# Yauli Mining Unit

<b>Mines:</b>	Four underground, one open pit
<b>Reserves:</b>	27.3 MM MT; 5.34% (Zn), 0.89% (Pb), 0.22% (Cu), 3.24 oz/MT (Ag)
<b>LOM:</b>	Seven years (reserves), 16 years (reserves + inferred resources)
<b>Capacity:</b>	11,000 tpd from three concentrator plants
<b>Production:</b>	165 K FMT (Zn), 24 K FMT (Pb), 3 K FMT (Cu), 11.6 MM oz (Ag)



- 1 Largest unit by volume & revenue
- 2 Ongoing infrastructure investment, improving efficiency
- 3 Systematic exploration of deposits in current operation & brownfield targets

Yauli Consolidated Production		2013	2014	2015	2016
Treatment	000 TMT	3,743	3,837	3,994	3,657
Zinc	000 FMT	159	158	175	165
Lead	000 FMT	31	22	25	24
Copper	000 FMT	2	2	3	3
Silver	MM Oz	10.8	11.5	12.9	11.6
Unit Cost	USD/MT	66.2	66.1	58.6	60.5
Operating Inv.	USD MM	111	100	63	65

# Chungar Mining Unit

<b>Mines:</b>	Two underground
<b>Reserves:</b>	9.8 MM MT; 5.21% (Zn), 1.50% (Pb), 0.14% (Cu), 2.52 oz/MT (Ag)
<b>LOM:</b>	Five years (reserves), 12 years (reserves + inferred resources)
<b>Capacity:</b>	5,500 tpd from one concentrator plant
<b>Production:</b>	96 K FMT (Zn), 20 K FMT (Pb), 1 K FMT (Cu), 4.1 MM oz (Ag)



- 1 Most profitable unit
- 2 Islay 4, located between Animón and Islay, allows for the integration of both mines. Presents important mineralization
- 3 Systematic exploration of deposits in current operation & brownfield targets

## Chungar Consolidated Production

		2013	2014	2015	2016
Treatment	000 TMT	1,827	1,954	1,896	2,016
Zinc	000 FMT	102	104	89	96
Lead	000 FMT	27	25	23	20
Copper	000 FMT	1	1	1	1
Silver	MM Oz	7.0	5.9	4.6	4.1
Unit Cost	USD/MT	56.9	53.6	48.1	50.9
Operating Inv.	USD MM	80	65	41	39

29 <sup>1</sup> Life of mine (LOM) is calculated based upon proven and probable reserves plus inferred resources as of 31/12/16. Measured and indicated resources are excluded.

# Alpamarca Mining Unit

Mines:	One underground, one open pit
Capacity:	2,500 tpd from one concentrator plant
LOM <sup>1</sup> :	One year of reserves, three years reserves + inferred resources



1. In operation since 2Q14
2. Costs below projections
3. Significant brownfield & greenfield opportunities:  
Romina II, Carhuacayan

Alpamarca Consolidated Production		2014	2015	2016
Treatment	000 TMT	593	879	910
Zinc	000 FMT	6	9	10
Lead	000 FMT	4	6	7
Copper	000 FMT	0	1	1
Silver	MM Oz	2.2	2.7	2.0
Unit Cost	USD/MT	47.6	33.2	23.5
Operating Inv.	USD MM	11.9	5.6	2.4

30 <sup>1</sup> Life of mine (LOM) is calculated based upon proven and probable reserves plus inferred resources as of 31/12/16. Measured and indicated resources are excluded.



# Oxides Plant

Capacity: 2,500 tpd from one lixiviation plant  
 Feed: Stockpiles & in-situ mineral from Raul Rojas Open Pit  
 LOM<sup>1</sup>: 13 years of reserves, 19 years reserves + inferred resources



1. Production initiated 2Q14
2. Plant operating at full capacity since 1 June, 2015
3. Annual production (est.): 3 MM to 4 MM Oz (Ag)

Oxides Plant Production		2014	2015	2016
Treatment	000 TMT	239	743	900
Silver	MM Oz	1.1	3.6	4.1
Gold	Oz	651	5,312	3,272
Unit Cost	USD/MT	-	39.1	37.4
Operating Inv.	USD MM	-	9.0	6.9

31 <sup>1</sup> Life of mine (LOM) is calculated based upon proven and probable reserves plus inferred resources as of 31/12/16. Measured and indicated resources are excluded.

# Cerro de Pasco Mining Unit

**Mines:**

Two underground, one open pit

**Capacity:**

6,000 tpd from two concentrator plants



1. Unit in transition, production suspended
2. Evaluation of new business opportunities in progress
3. Production from low-grade polymetallic stockpiles to begin 2H17

## Cerro de Pasco Consolidated Production

		2013	2014	2015	2016
Treatment	000 TMT	840	771	399	233
Zinc	000 FMT	19	13	12	2
Lead	000 FMT	9	6	5	1
Silver	MM Oz	2.9	1.9	1.1	0.1
Unit Cost	USD/MT	96.3	99.6	97.4	16.6
Operating Inv.	USD MM	10.6	1.8	-0.1	0.1



# Competitive Operating Cash Cost

Cash Cost <sup>1</sup>	Zinc (USD/MT)		
	2015	2016	var%
Co - Product	1,371	1,375	0.3
By - Product	977	911	-6.7

Cash Cost <sup>1</sup>	Silver (USD/Oz)		
	2015	2016	var%
Co - Product	11.2	11.3	1.0
By - Product	4.8	2.6	-46.0

Price	Unit	2015	2016
Zinc	USD/MT	1,933	2,091
Silver	USD/Oz	15.7	17.1

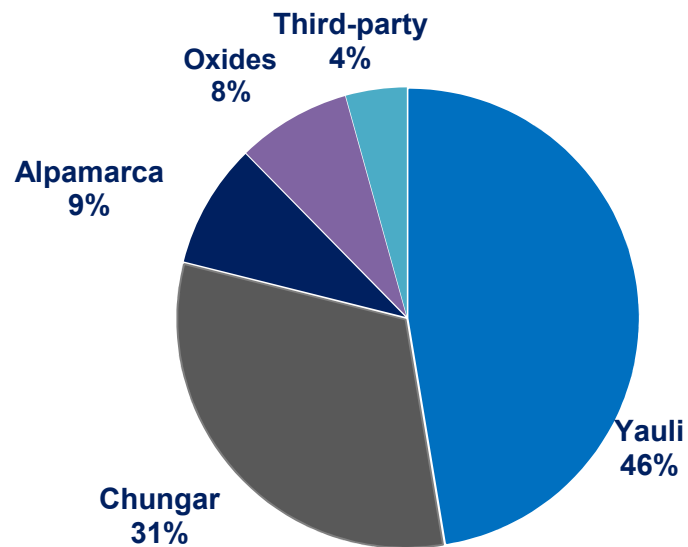
Source: Average LME spot price

33 <sup>1</sup> Cash costs include all costs incurred in the production and commercialization of concentrate, including production costs (excluding depreciation and amortization), commercial discounts, sales expenses and royalties.

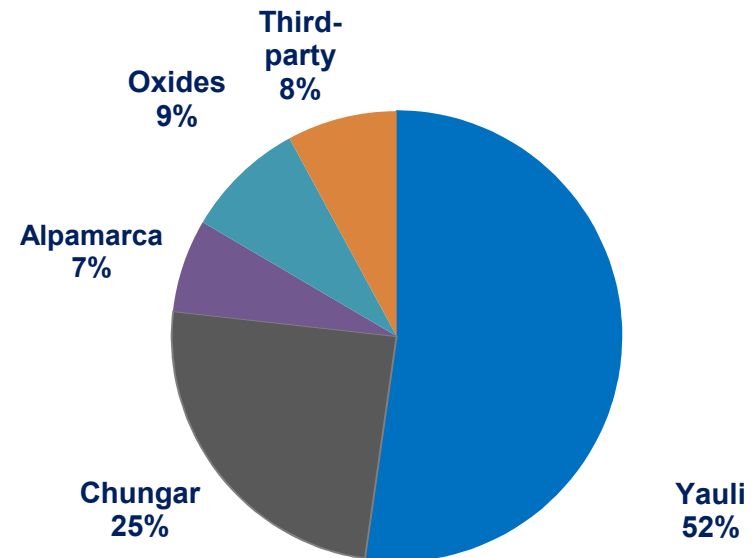


# Sales Breakdown by Origin

**1Q17**



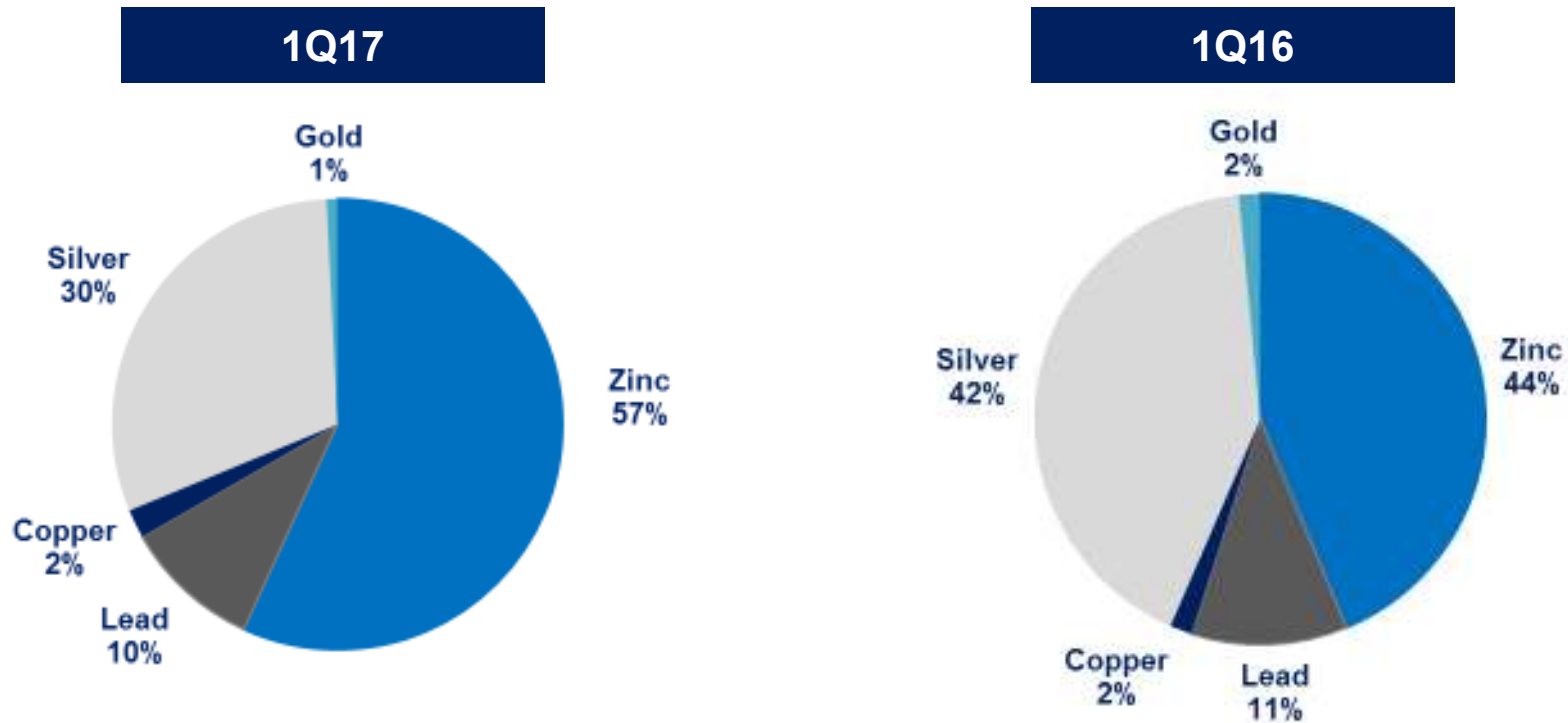
**1Q16**



Source: Volcan Cia. Minera

- The distribution of sales by origin reflects a decline in the contribution of third-party concentrates in total sales, from 8% in 1Q16 to 4% in 1Q17

# Sales Breakdown by Metal



Source: Volcan Cia. Minera

- Zinc contribution is expected to increase due price outlook

# Bonds and Credit Ratings

## International Bond Emission

- ✓ USD 600 MM issued February 2012  
(USD 535 MM currently outstanding)
- ✓ Rate: 5.375% maturing February 2022
- ✓ Demand: USD 4.8 B

## Credit Ratings

**Fitch**Ratings      BBB-

MOODY'S      Ba3

# Stock Market Highlights<sup>1</sup>

## Stock Market Listings

Lima	Since	1956
Madrid (Latibex)	Since	2000
Santiago	Since	2007

## Class A Shares : Full voting rights

Shares outstanding: 1,633,414,553  
Aprox. 600 shareholders

## Class B Shares : Div. premium of 5% over Class A

Shares outstanding: 2,443,157,622  
Aprox. 8,800 shareholders

## Selected Institutional Shareholders of Volcan Compañía Minera S.A.A.

AFP Habitat	Credicorp Capital	Mercury Asset Management
AFP Integra	Eaton Vance	Pacífico Seguros
Arca Trading Limited	FSRyC de la Marina	Prima AFP
Arte Express y Compañía	Global X Silver Miners ETF	Profuturo AFP
Ashmore Group	Inteligo	Sura
Blackrock Global Funds	Ishares MSCI All Peru Capped (EPU)	Vanguard Group
Caja Municipal Trujillo	La Positiva	





**Gracias!**