



# Boliden update & Market view

CMD 21 November 2013

Lennart Evrell  
CEO, Boliden Group

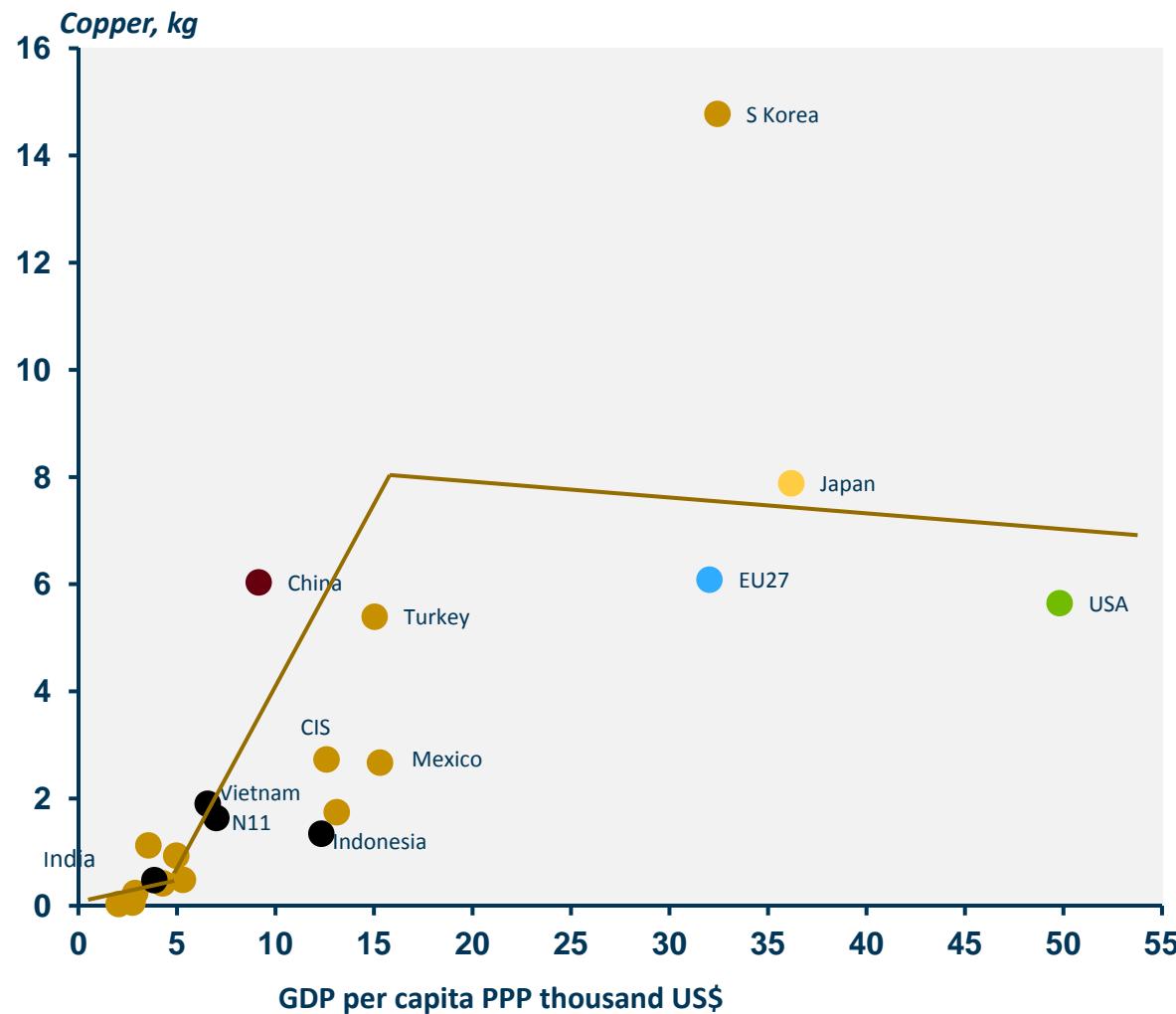
 **BOLIDEN**

## **Market**

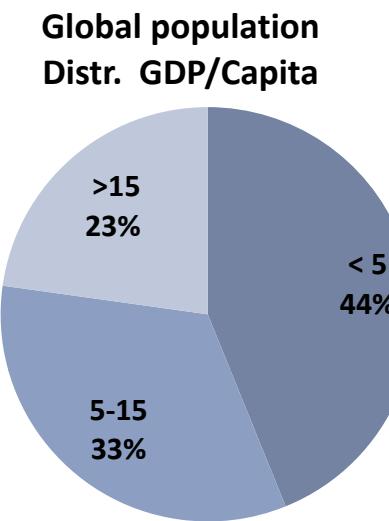
Boliden vs peers

Strategy

# Long term demand outlook still looks solid

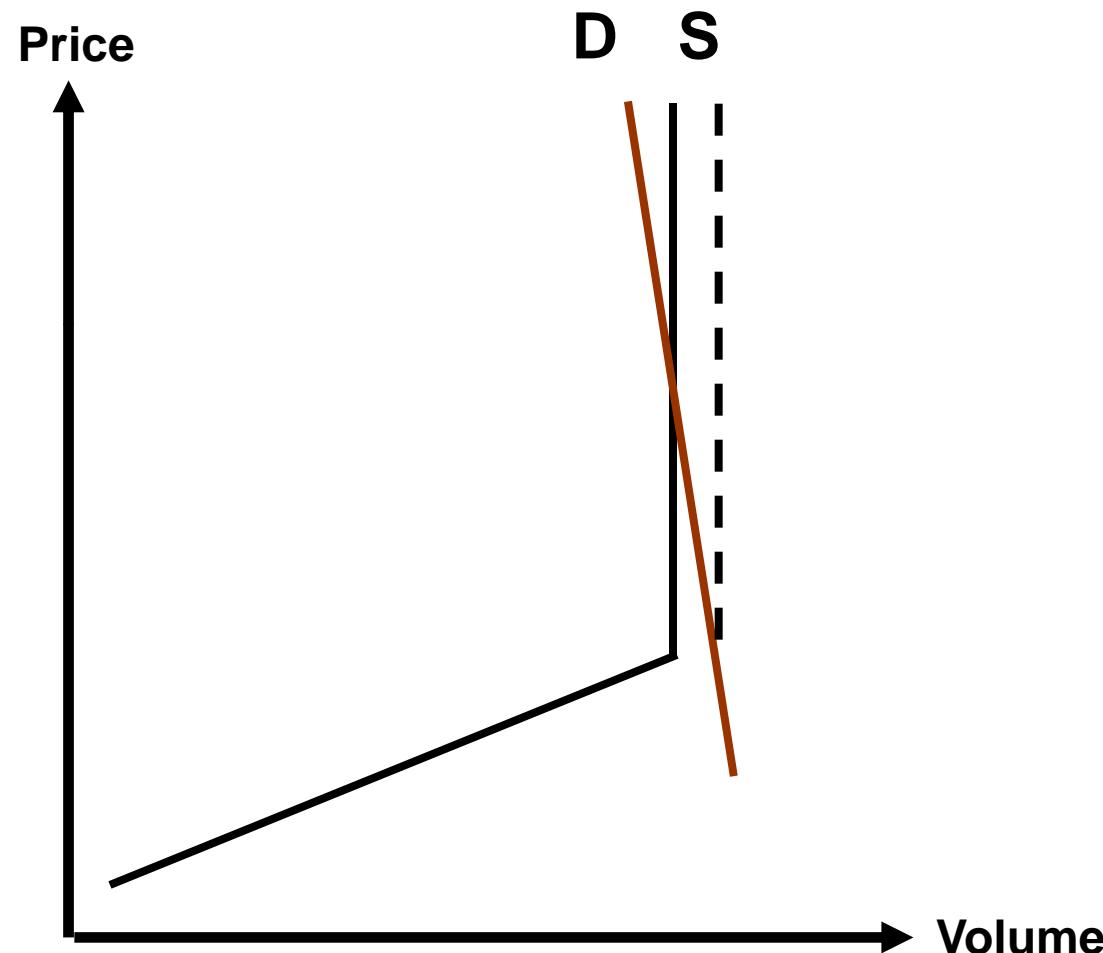


Källa: IMF, Wood Mackenzie



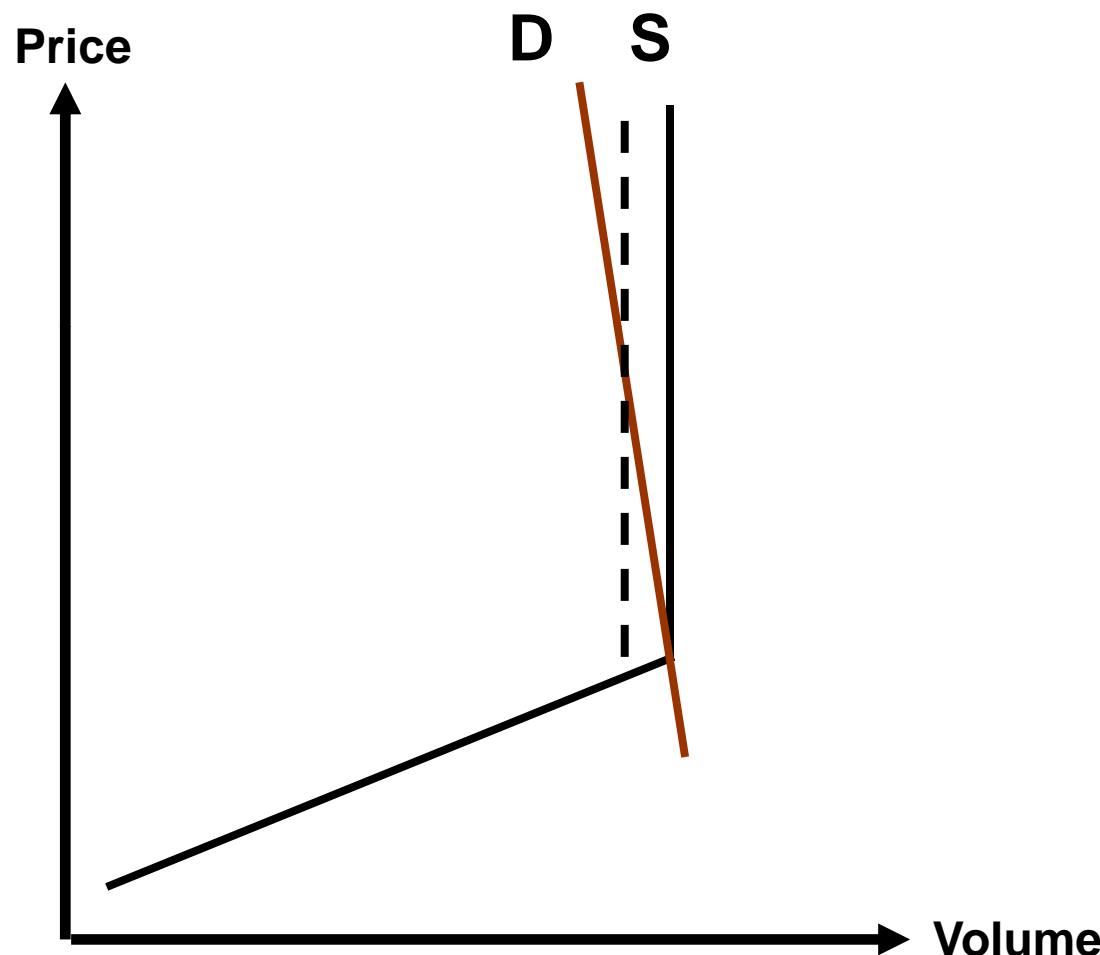
**BOLIDEN**

# New supply in copper



 **BOLIDEN**

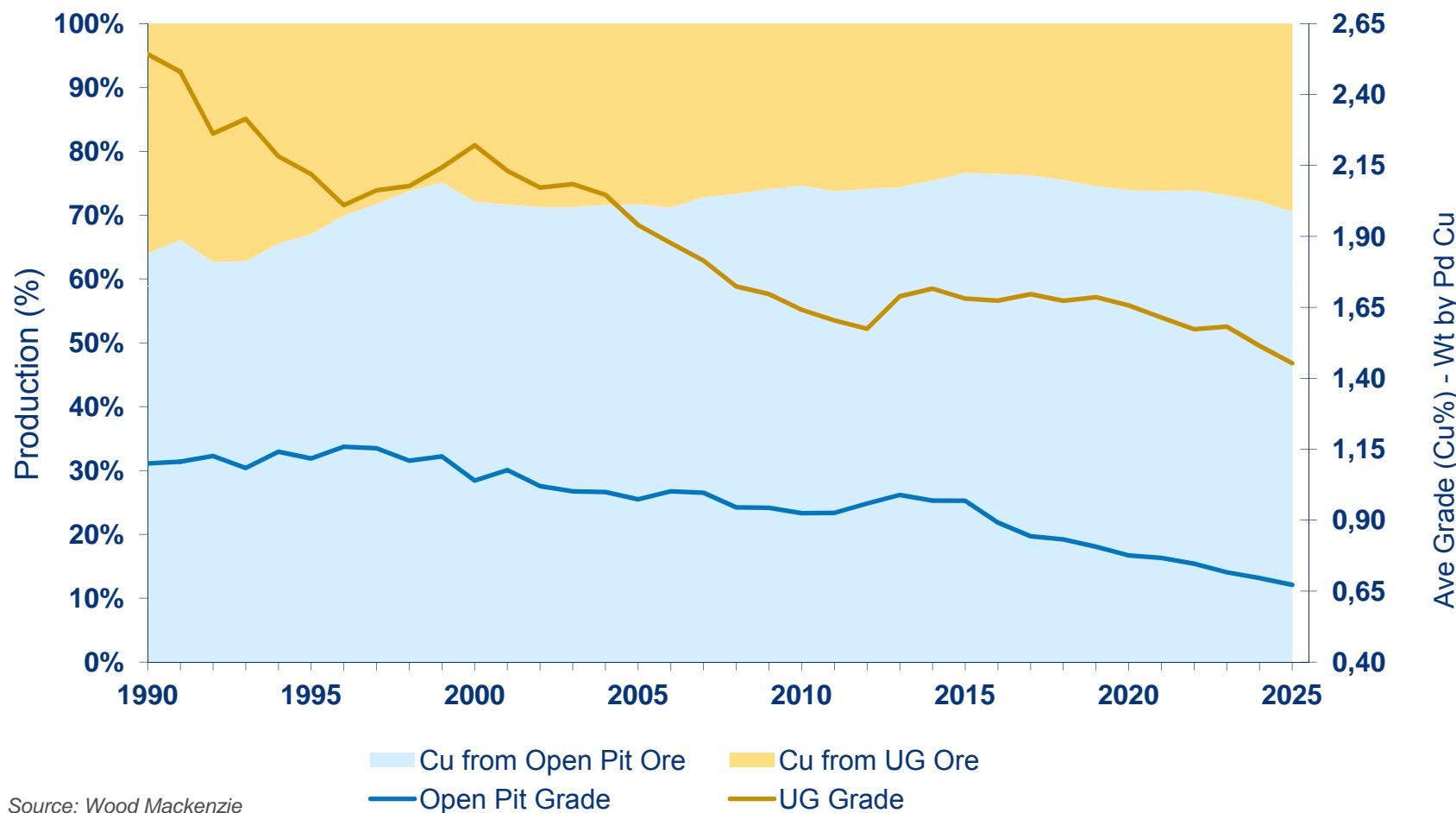
# Depletions in zinc



 **BOLIDEN**

# Trends OP-UG and grades

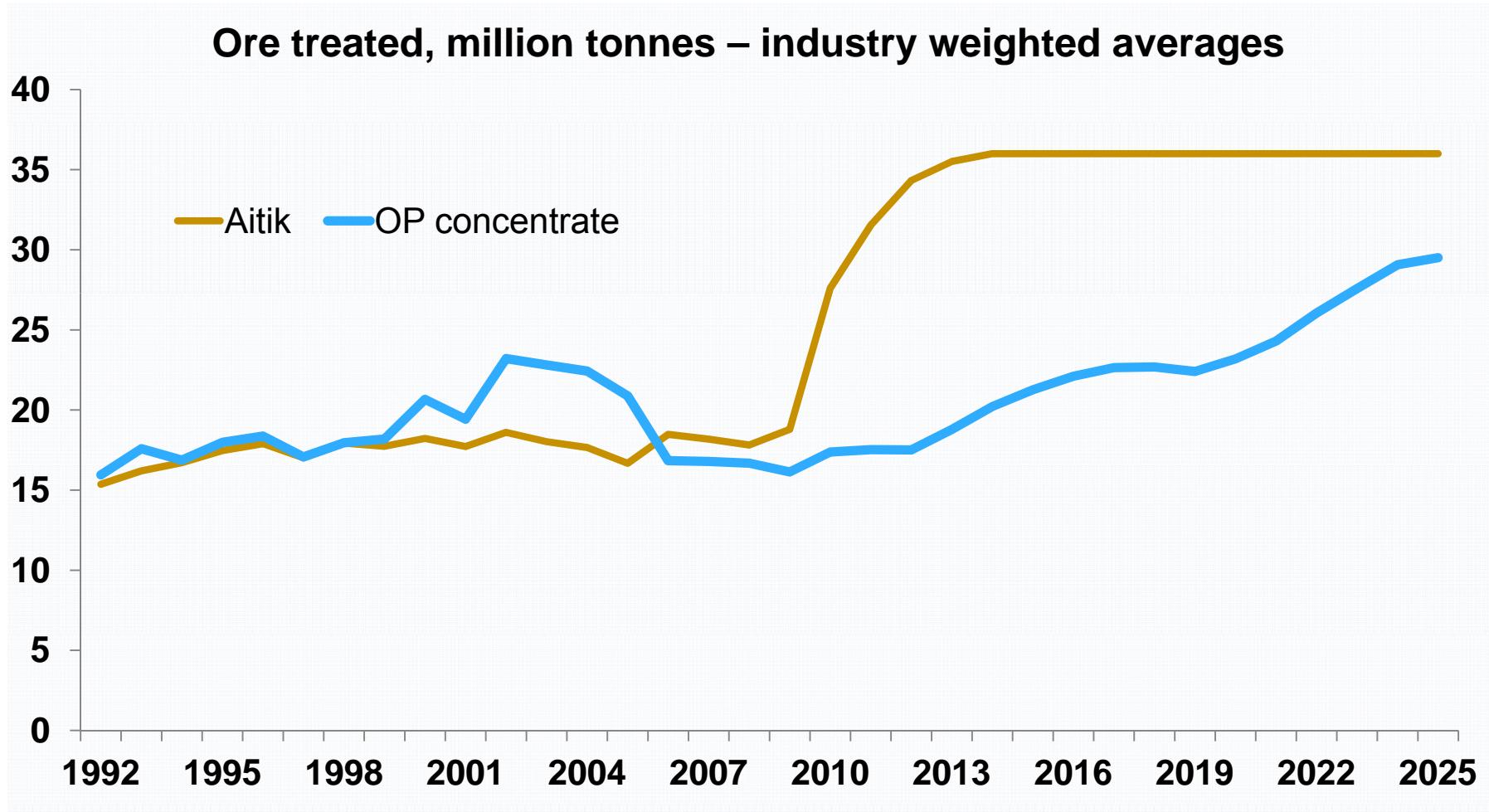
## Copper mining



BOLIDEN

# Size

## Copper mines

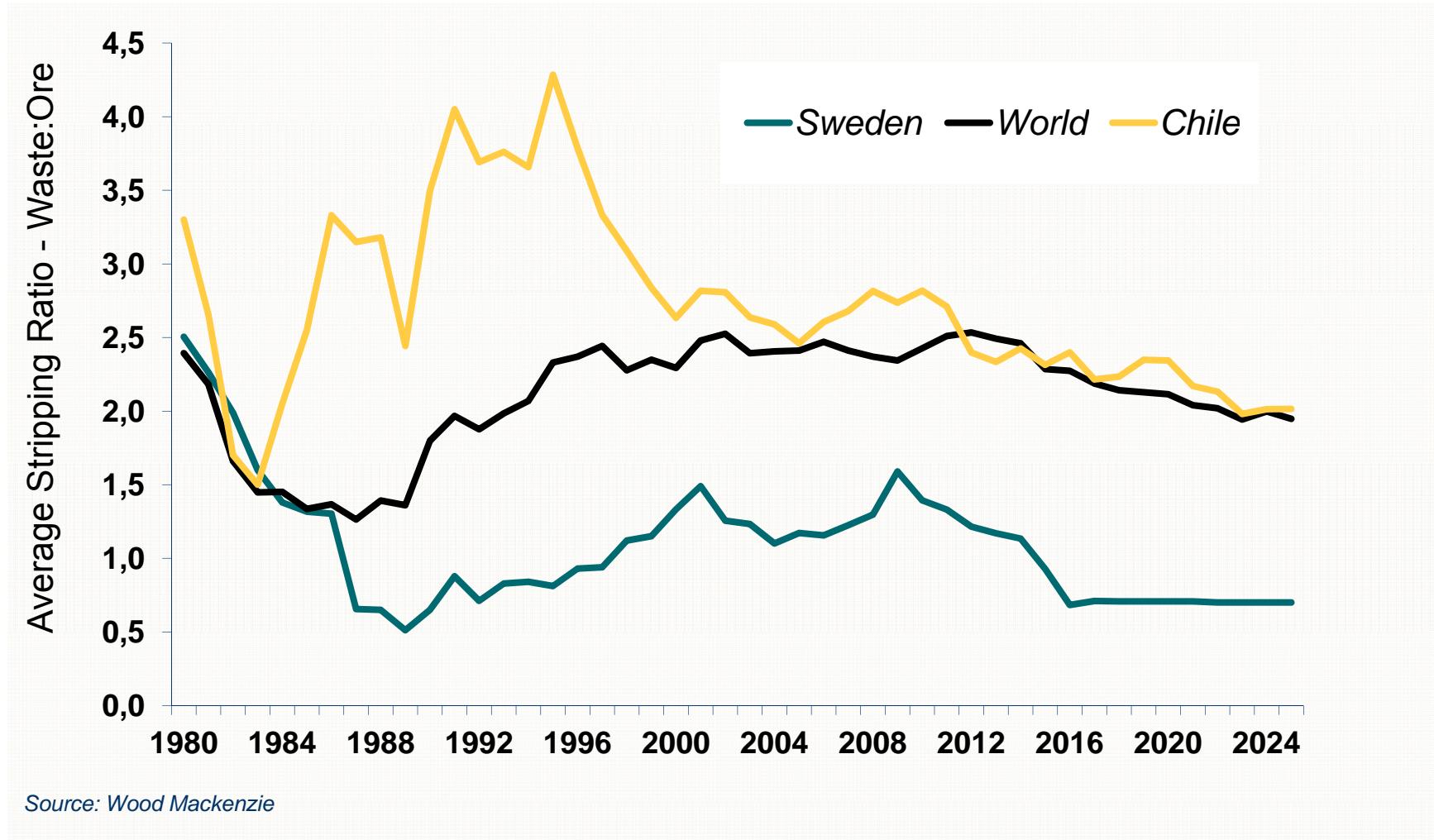


Source: Wood Mackenzie

 **BOLIDEN**

# Stripping ratio

## OP copper mines

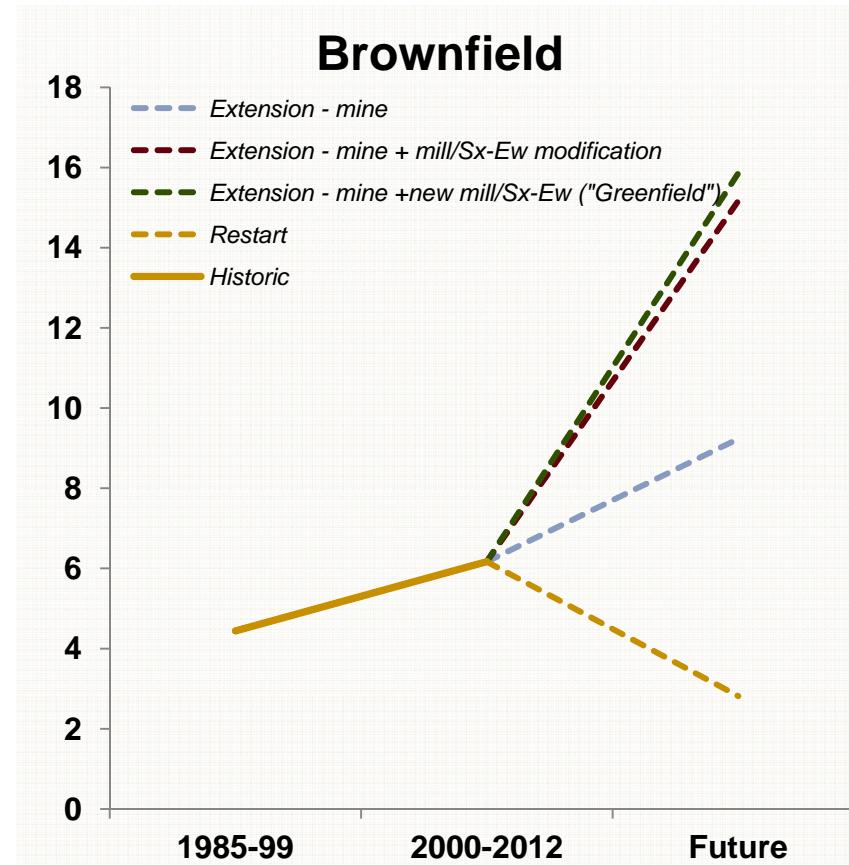
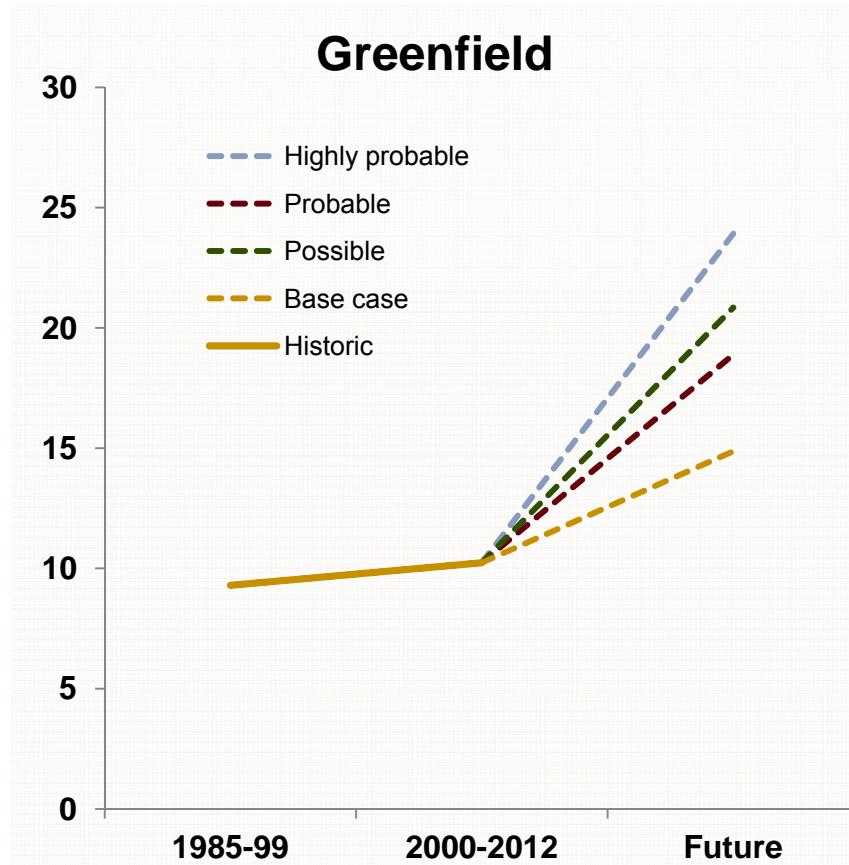


Source: Wood Mackenzie

BOLIDEN

# Capital cost for new projects (capital intensity)

## US\$/tonne Cu equivalent

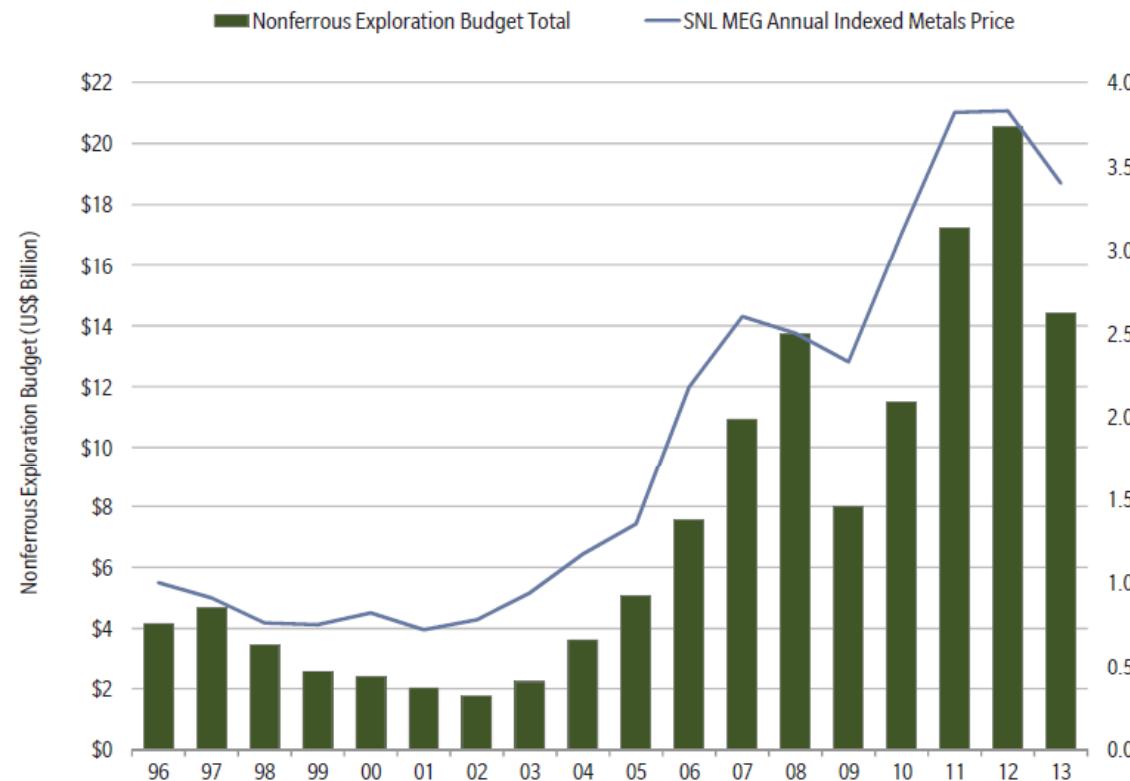


Source: Wood Mackenzie

**BOLIDEN**

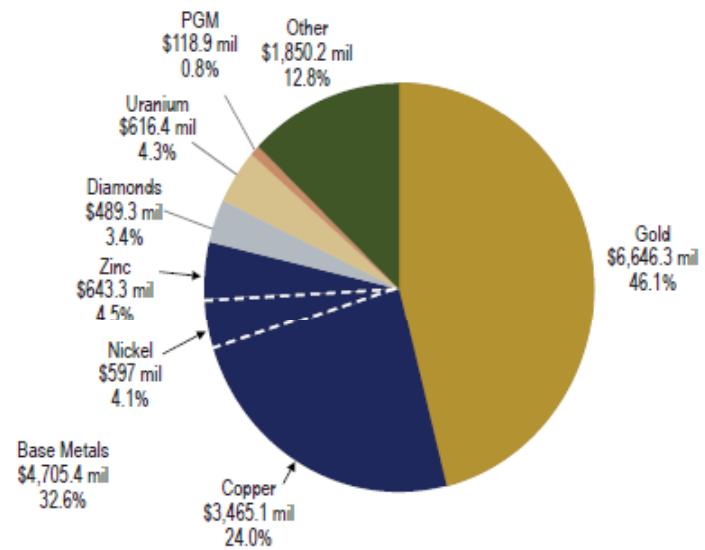
# Exploration expenditures – non-ferrous metals bn US\$

v



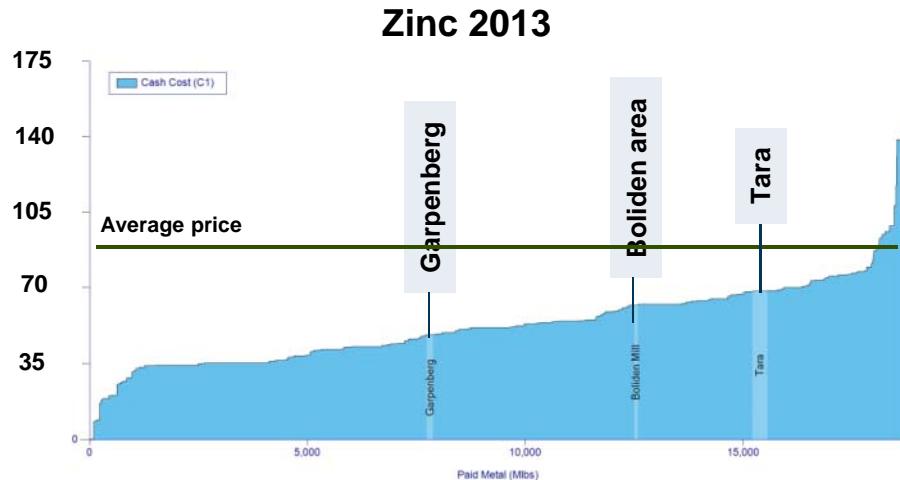
Source: SNL MEG

## Distribution by metal 2013

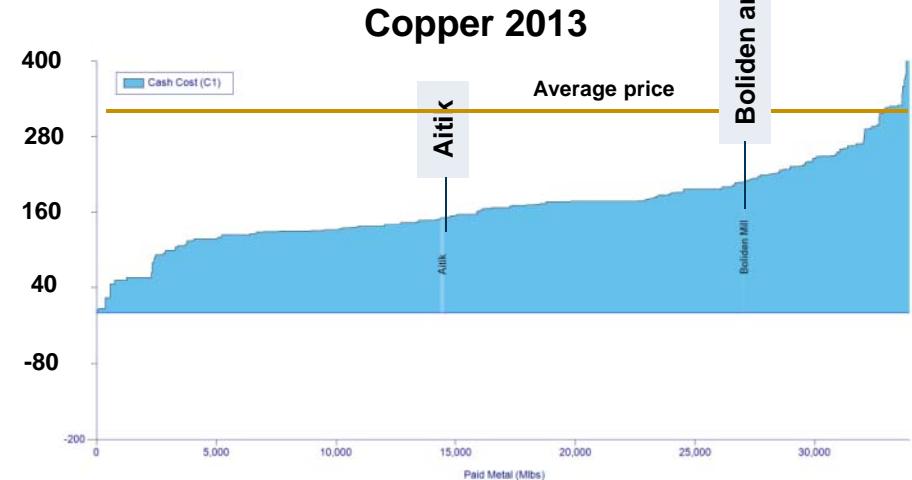


**BOLIDEN**

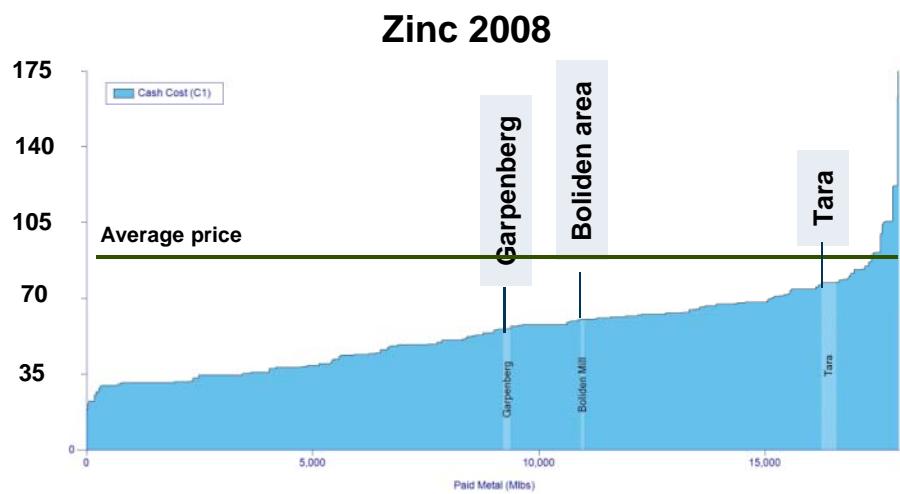
# Cash cost 5 years, Cu and Zn (composite costing)



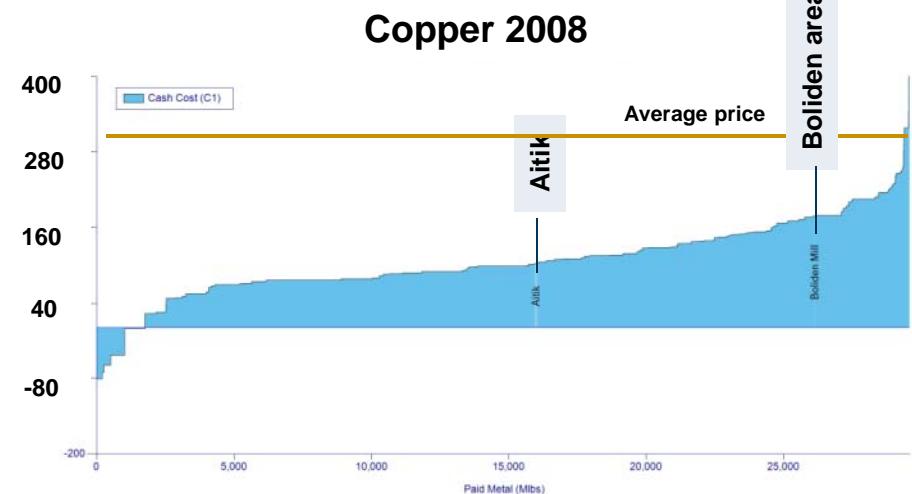
Source: Wood Mackenzie Ltd, Dataset: 2013 Q4



Source: Wood Mackenzie Ltd, Dataset: 2013 Q4



Source: Wood Mackenzie Ltd, Dataset: 2013 Q4



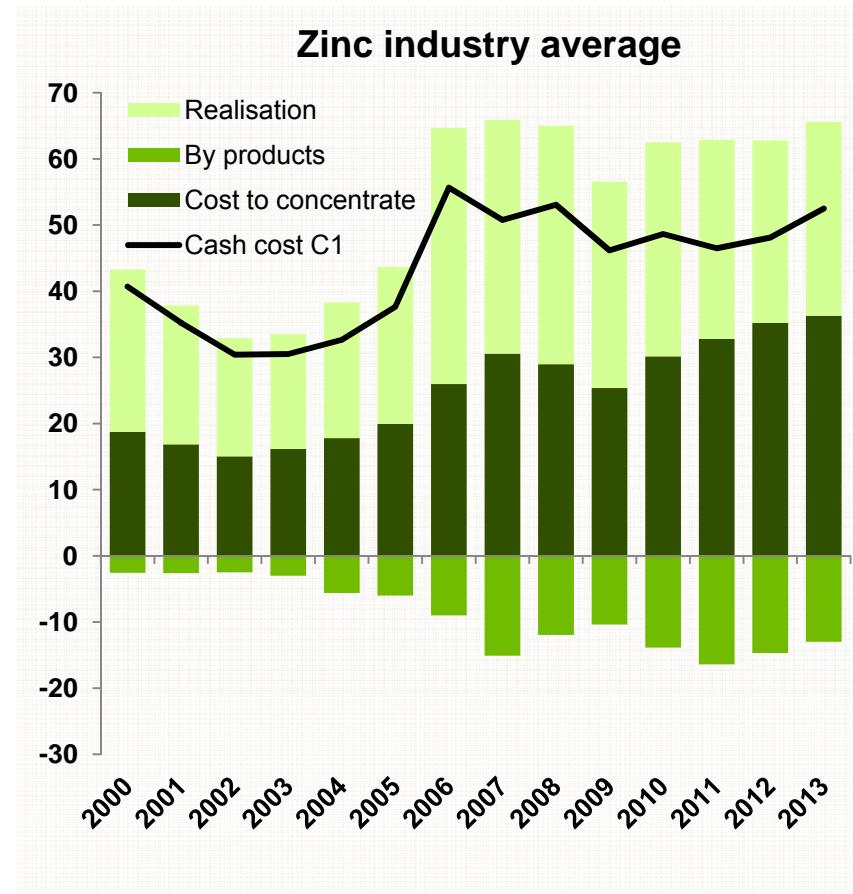
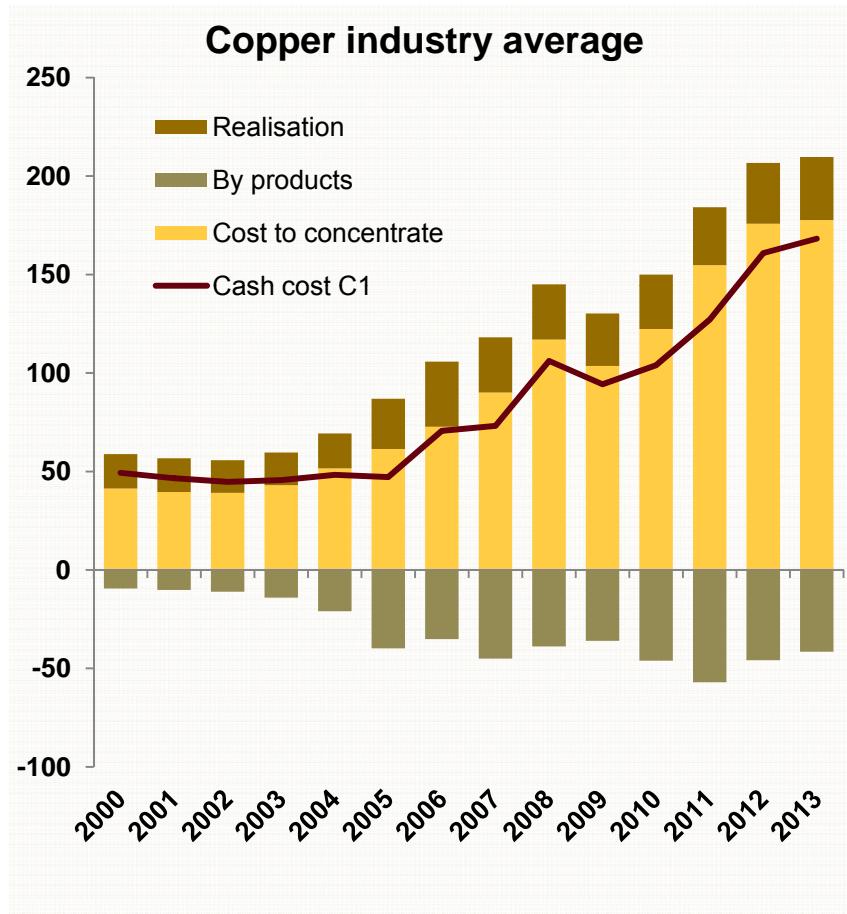
Source: Wood Mackenzie Ltd, Dataset: 2013 Q4

Source: Wood Mackenzie

BOLIDEN

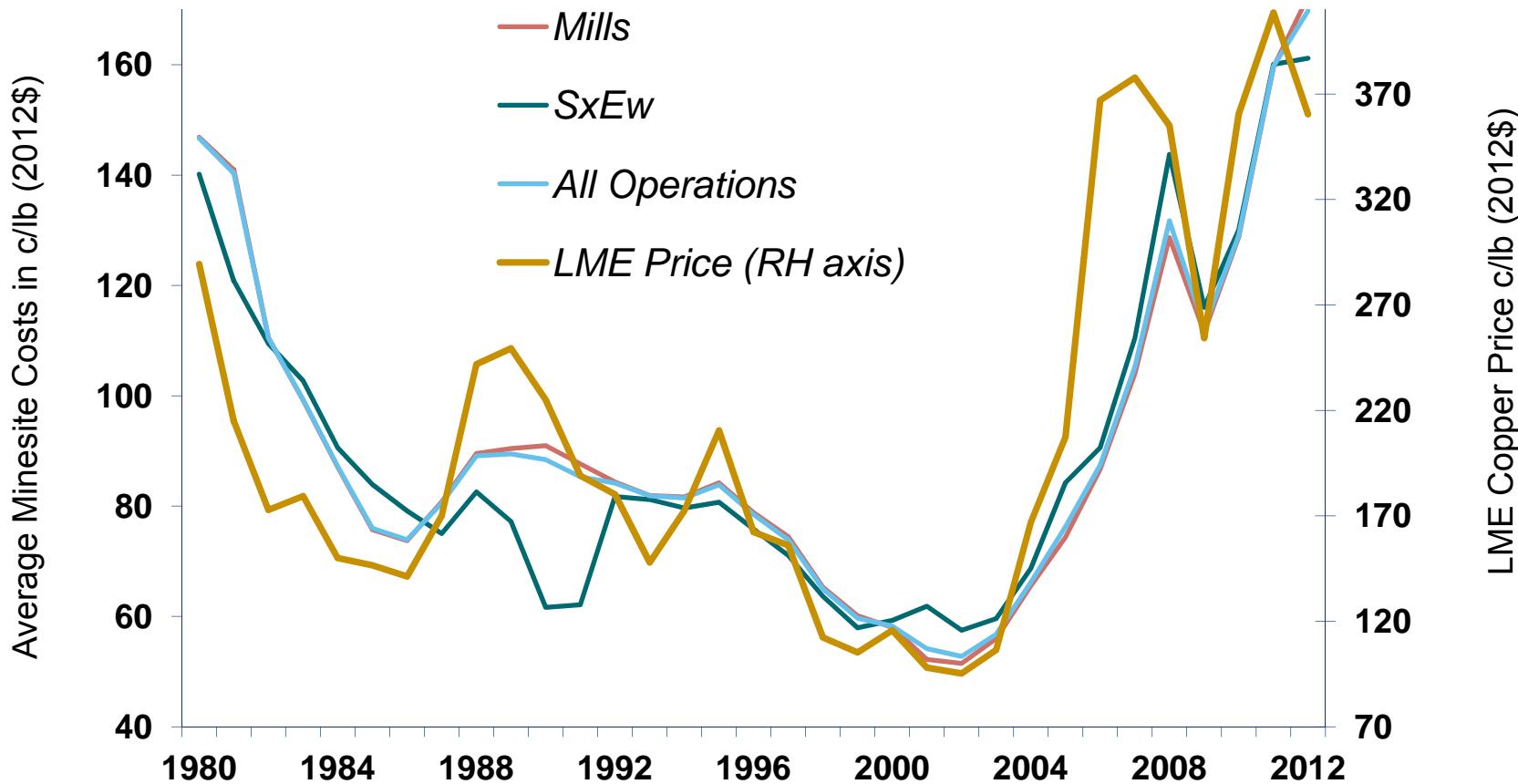
# Cash cost development

## Copper and zinc



# Price follows average mine site cost

## Copper

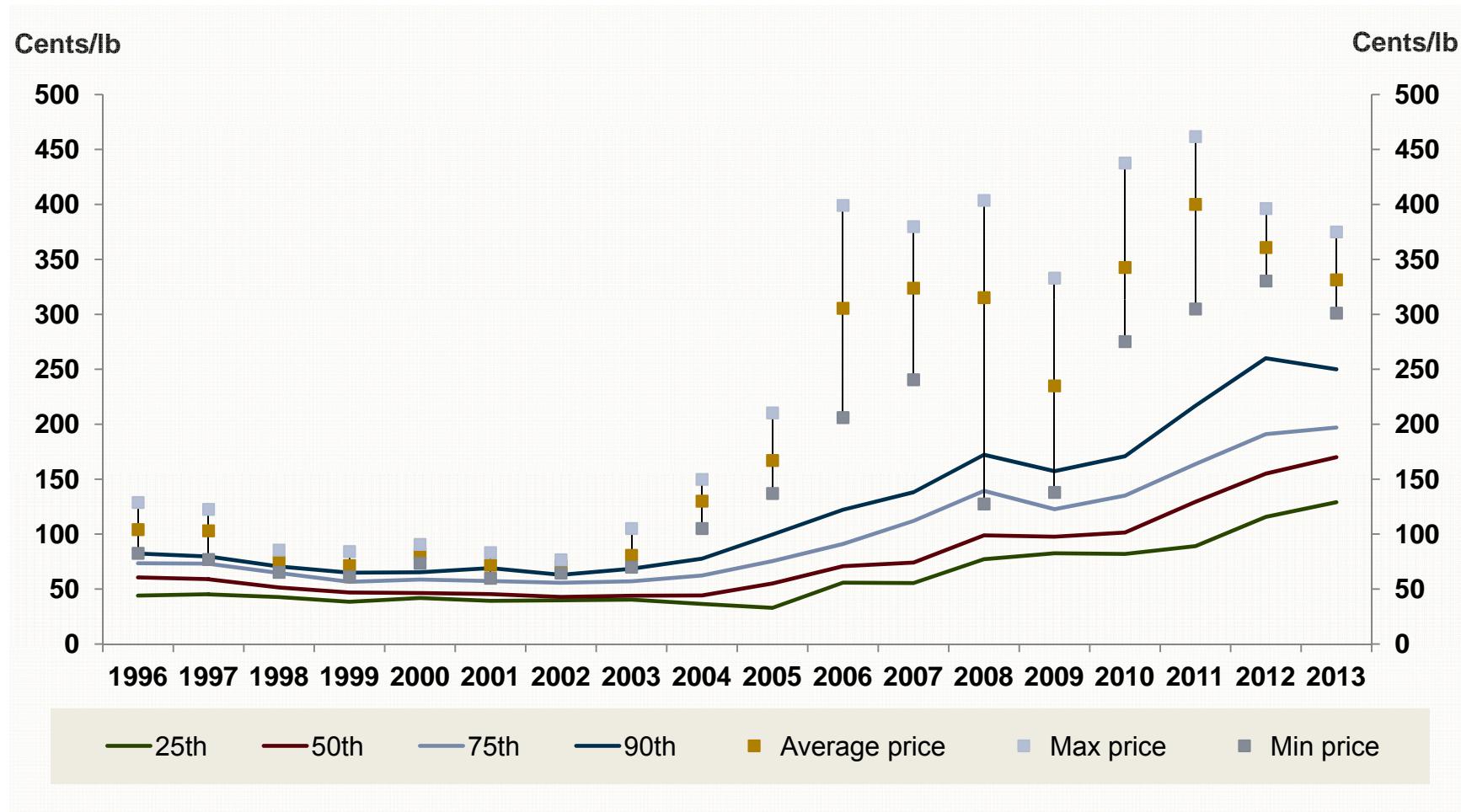


Source Wood Mackenzie

**BOLIDEN**

# Copper cash cost and price

## Composite costing

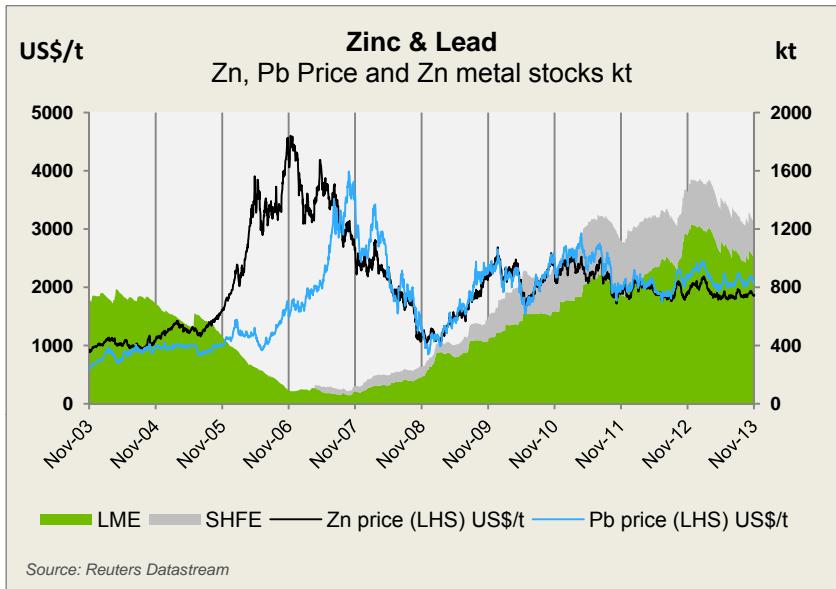
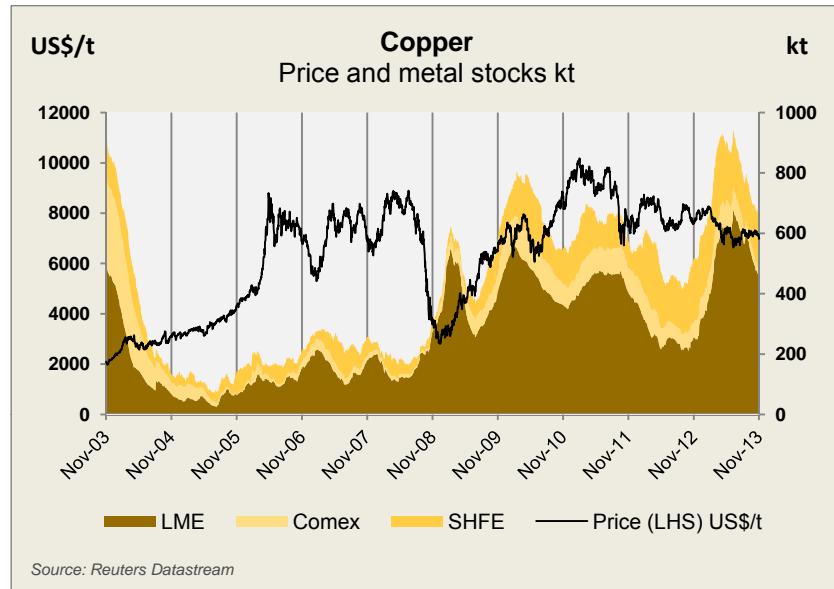


Source: Wood Mackenzie, Reuters Datastream, Boliden calculations



# Volatility 10 years

## Prices Zn, Cu, Pb Au Ag

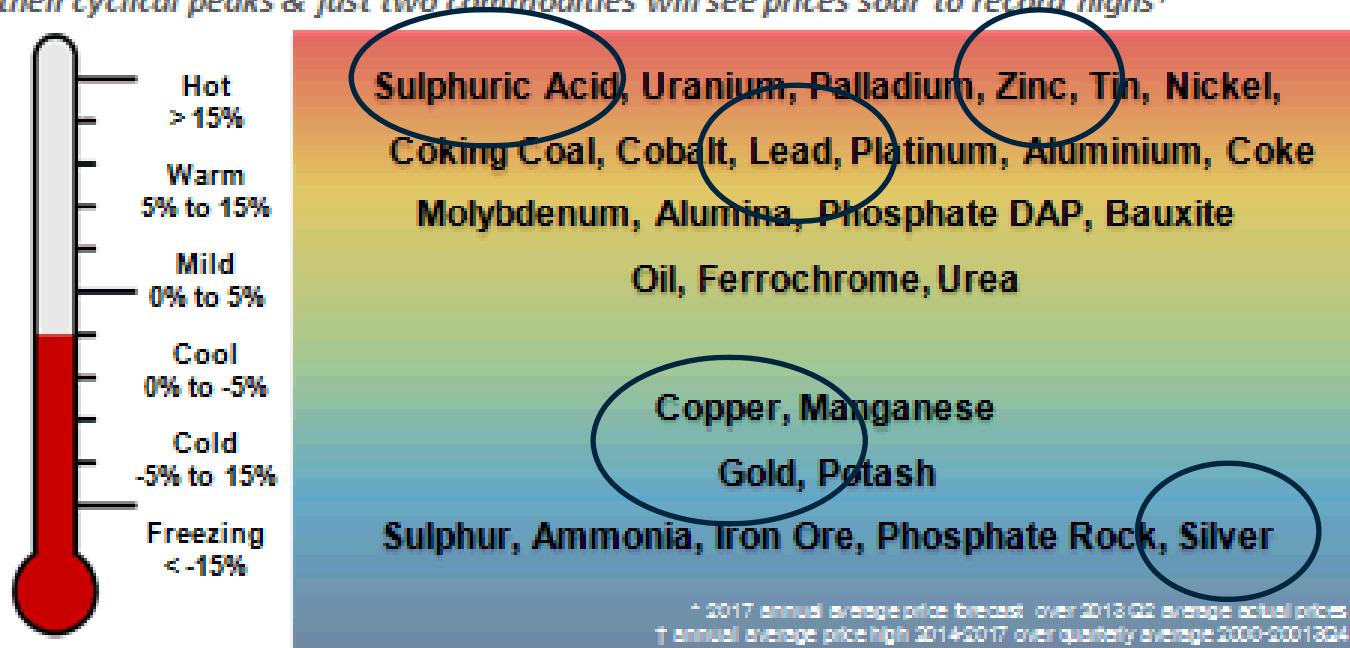


**BOLIDEN**

# CRU thermometer 2017

Commodities heat up again: by 2017 prices will increase 17% on ave.\*

*This is a relative story, on average commodities' prices will still be down by ~20% from their cyclical peaks & just two commodities will see prices soar to record highs†*



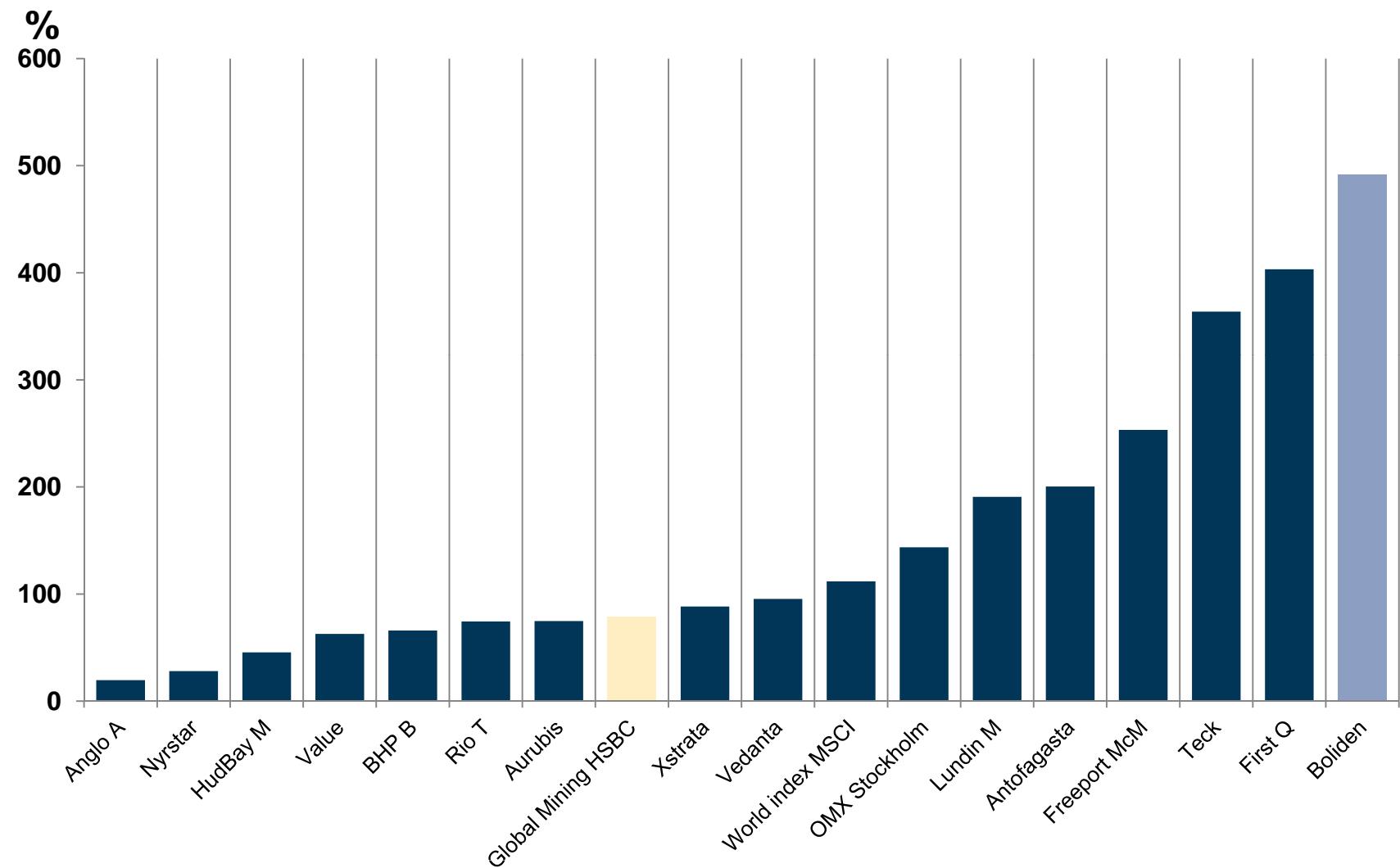
Market

## Boliden vs peers

Strategy



# TSR 5 years...(2008-2013)

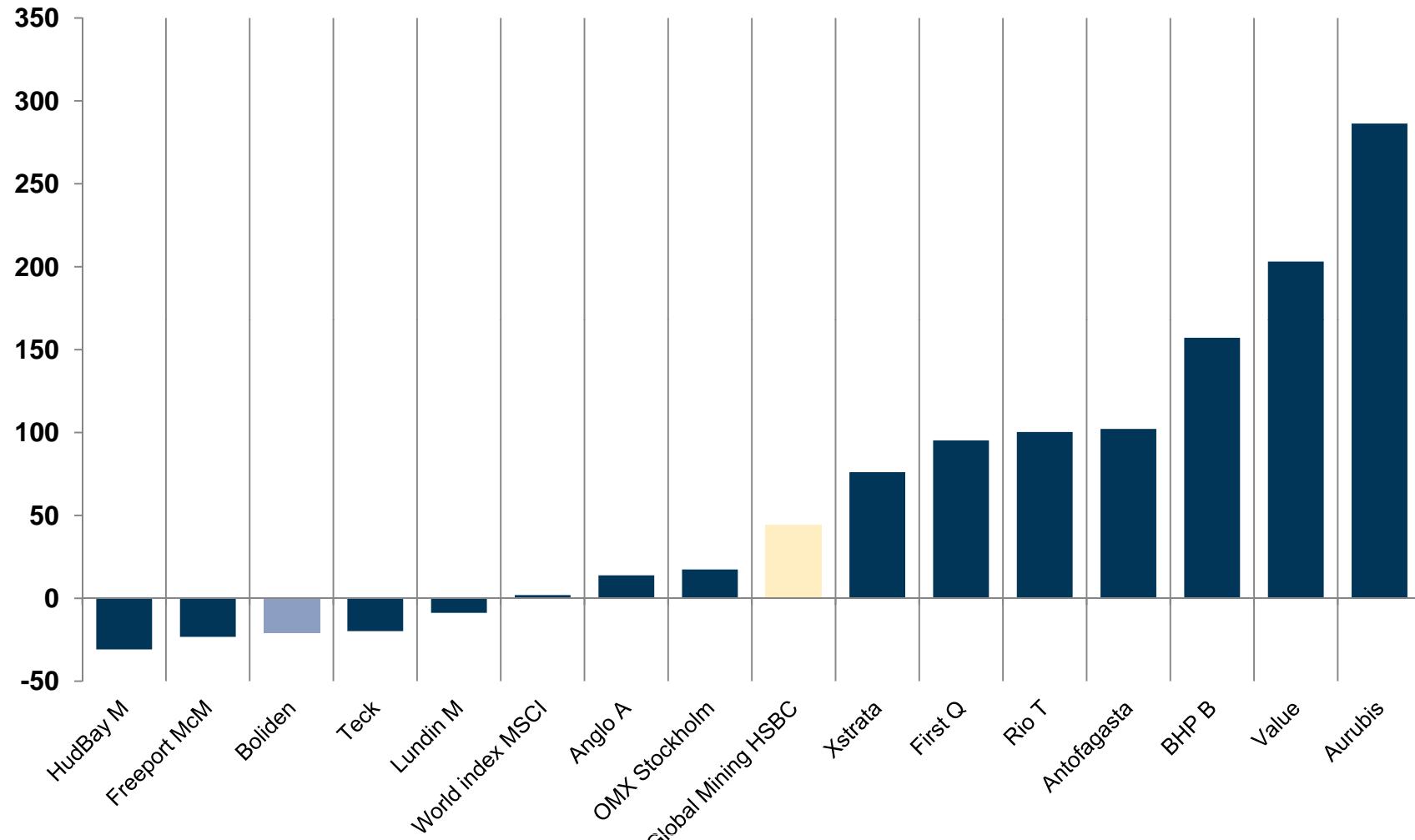


Source: Reuters Datastream



# TSR previous 5 years...(2003-2008)

%

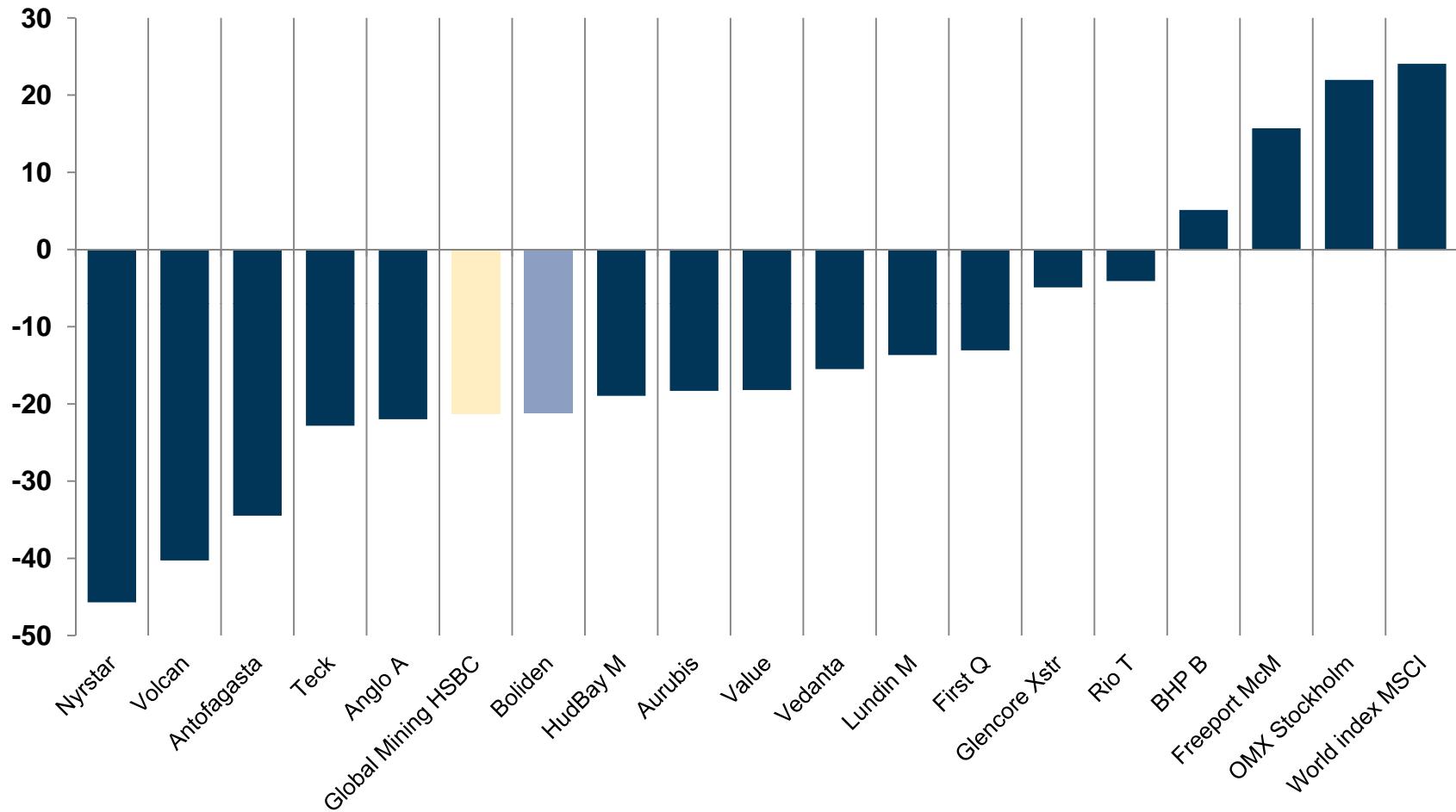


Source: Reuters Datastream



# ...TSR this year

%



Source: Reuters Datastream



Benchmark								Ranking Quartile
Year 2013 (numbers rounded)		Industry OP	Aitik	Percentile	1st	2nd	3rd	4th
<b>REVENUE VARIABLES</b>								
Head Grade	% Cu	1.1	0.2	98				•
Yield	%	83	86	26		•		
<b>OPERATING VARIABLES</b>								
<b>Productivity</b>								
Mine	t ore/hour	12	40	1		•		
Mill	t ore/hour	26	166	0		•		
G&A	t ore/hour	53	583	0		•		
Overall	t ore/hour	6	31	0		•		
Wage Rate	\$/hour	31	61	91				•
<b>Labour Cost</b>	<b>\$/t</b>	<b>10.2</b>	<b>2.0</b>	<b>12</b>		•		
<b>Energy Cost</b>	<b>\$/t</b>	<b>5.7</b>	<b>1.4</b>	<b>0</b>		•		
<b>Other Costs</b>	<b>\$/t</b>	<b>20.2</b>	<b>4.6</b>	<b>3</b>		•		
<b>Cost To Conc</b>	<b>\$/t</b>	<b>36.1</b>	<b>8.0</b>	<b>2</b>		•		
<b>CASH COST</b>								
<b>Cost To Conc</b>	<b>c/lb Cu</b>	<b>142</b>	<b>138</b>	<b>51</b>			•	
Freight	c/lb Cu	7	3	34		•		
TC/RC	c/lb Cu	27	22	61			•	
<b>Realisation</b>	<b>c/lb Cu</b>	<b>34</b>	<b>25</b>	<b>31</b>		•		
<b>C1 Cost</b>	<b>c/lb Cu</b>	<b>177</b>	<b>163</b>	<b>47</b>		•		

Source: Wood Mackenzie



Market

Boliden vs peers

**Strategy**

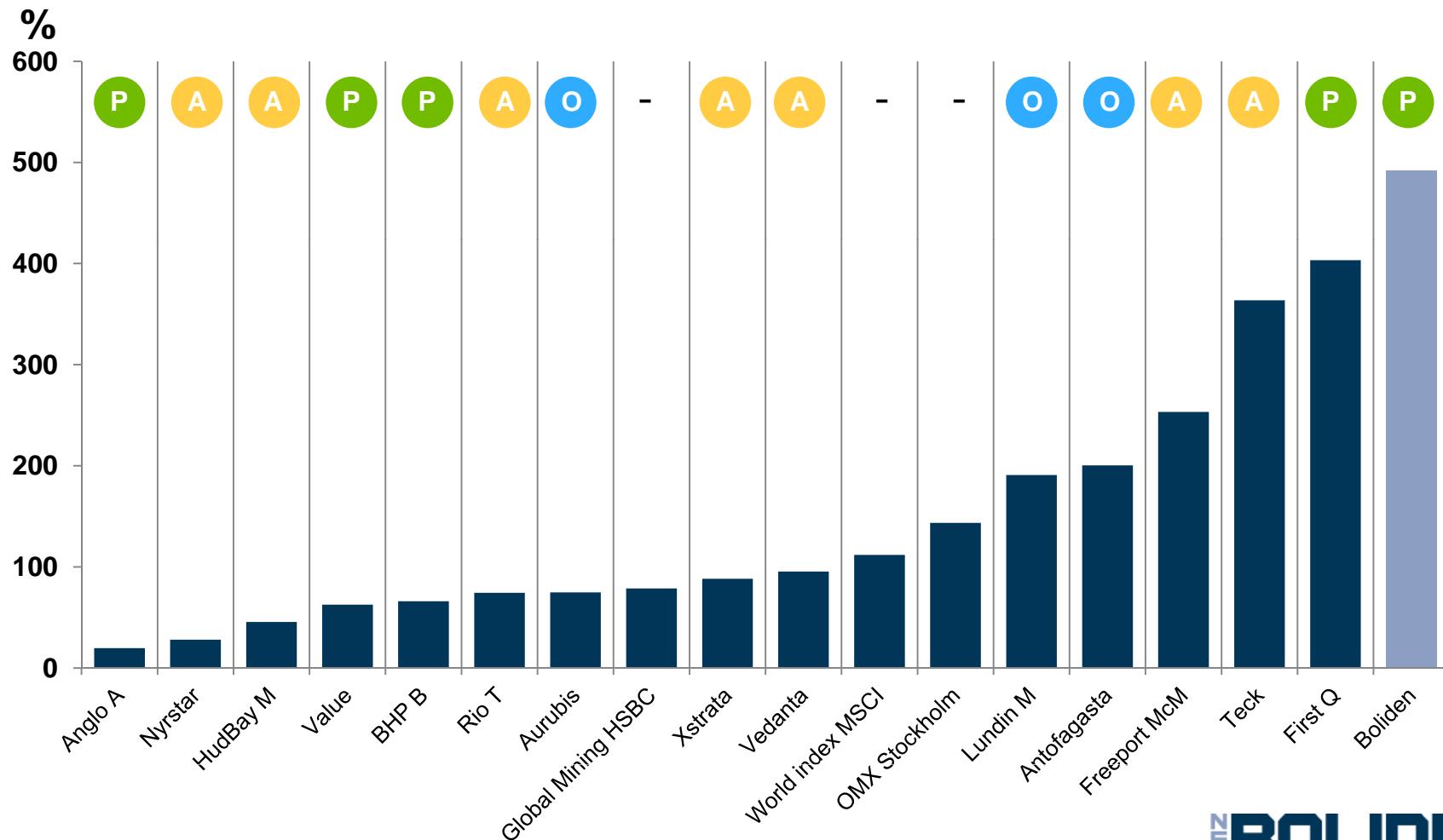


# Winning Strategies, 5 years

O perational Excellence

A cquisitions

P rojects



 BOLIDEN

# Boliden

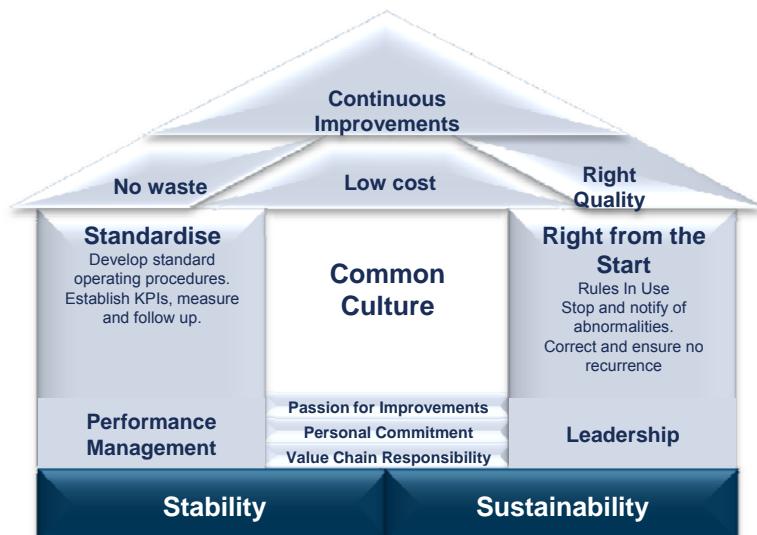
- Operational excellence
- Organic Growth
  - Project execution critical
- Acquisitions
  - At the right time, right price



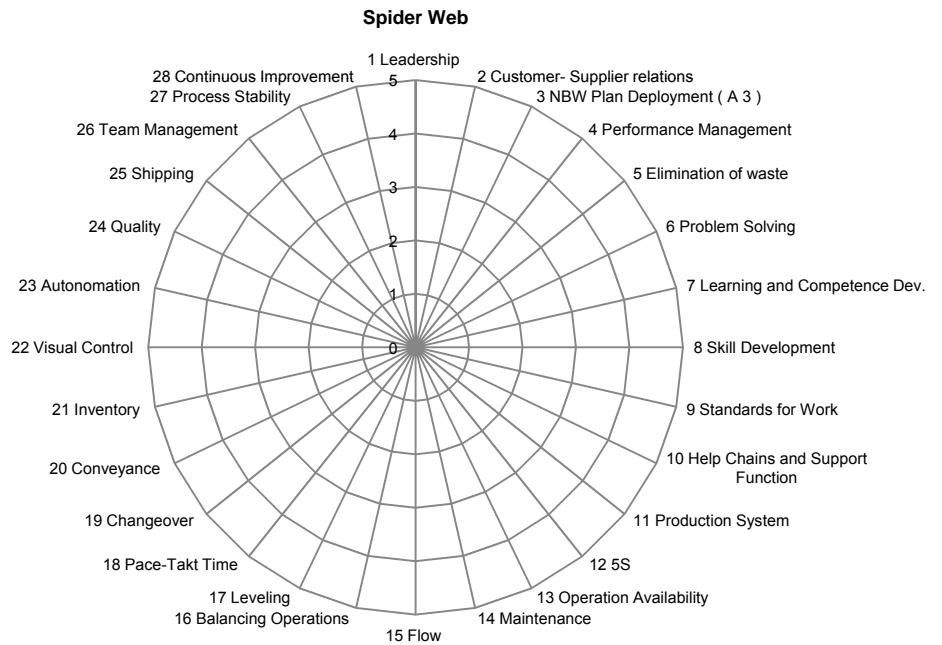
# Operational Excellence

## NBW holistic management

### Who we are



### How we do it



**BOLIDEN**

Under cover  
boss



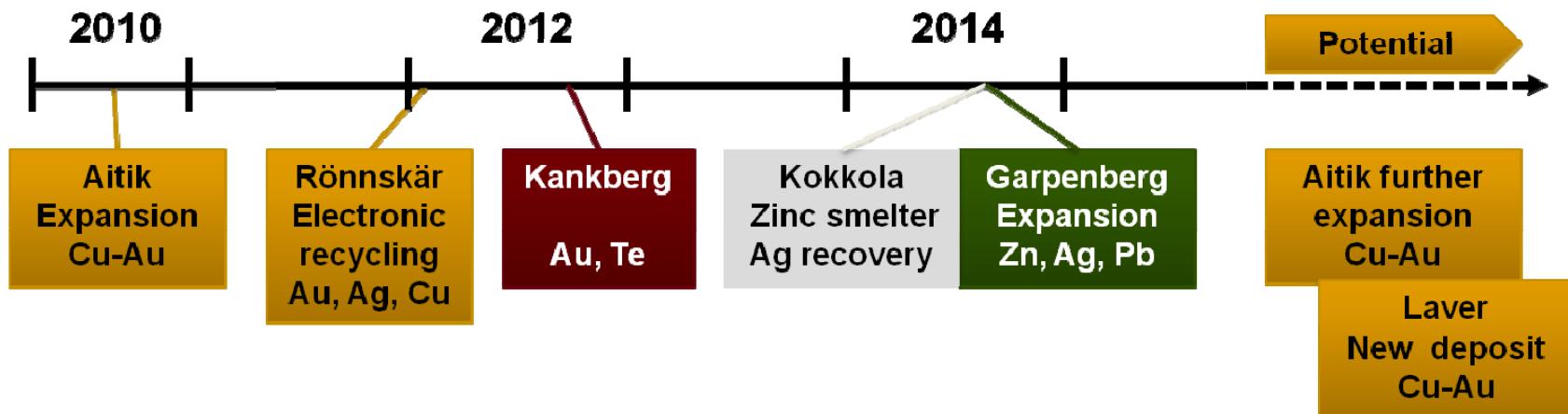


Cleaning floor,  
no shoes inside!



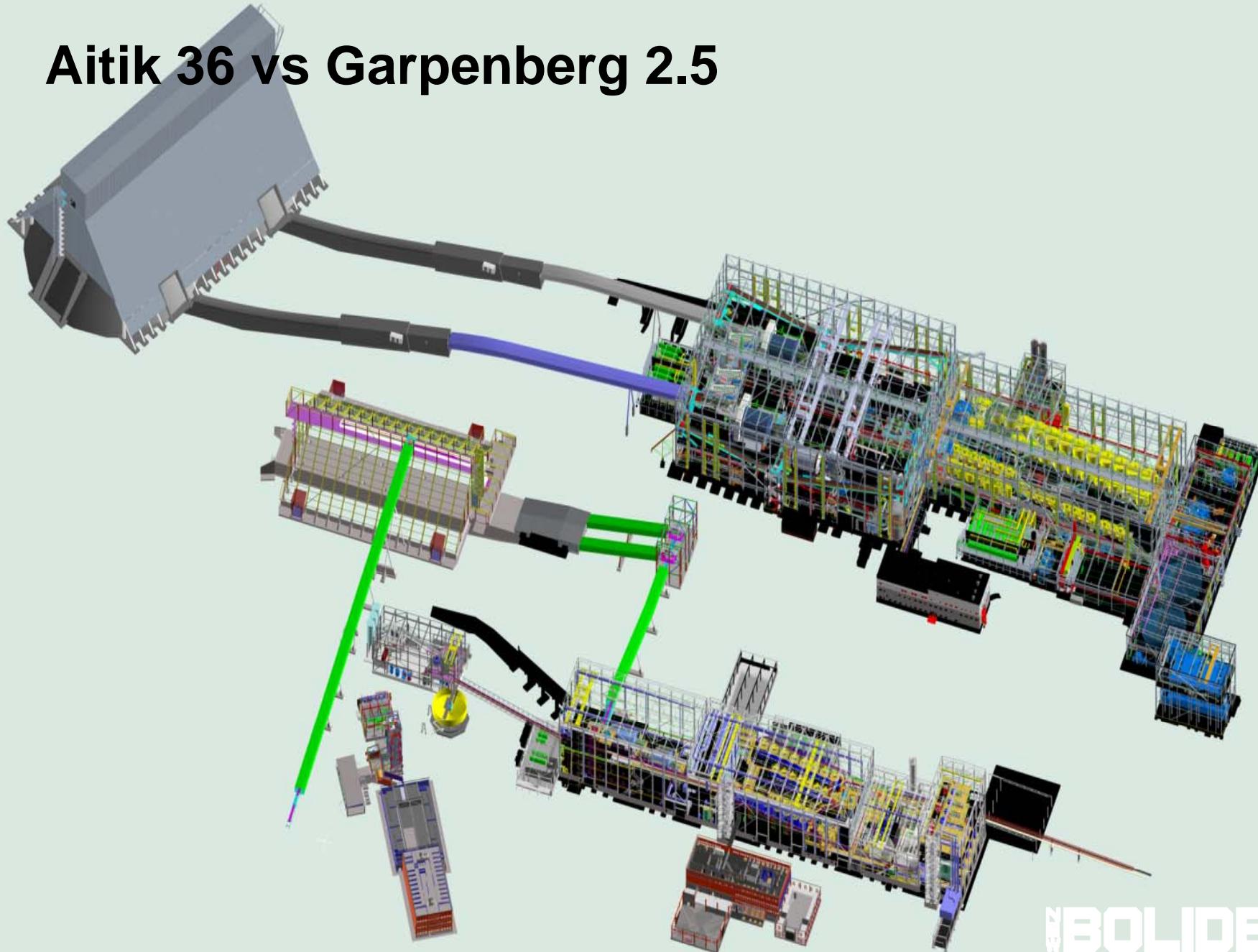
# Organic Growth

## Project Execution



**BOLIDEN**

# Aitik 36 vs Garpenberg 2.5



**BOLIDEN**

# Acquisitions

- More for sale
- Buyers are reluctant
- Some will be very good...



# Awards 2013

- **Fifth best annual report in the world**
  - ReportWatch ranking of 400 companies
- **SveMins EHS prize 2013**
  - Boliden Garpenberg
- **Swedish Industry Equal Opportunity Prize 2013**



# Disclaimer

- This presentation has been prepared by Boliden for information purposes only. Nothing in this material shall be construed as an offer or solicitation to buy or sell any security or product, or to engage in or refrain from engaging in any transaction.
- This presentation has been prepared as per the indicated date and Boliden does not undertake any obligation to correct or update the information or any statements made therein. Views that may have been expressed may be subject to change without notice.
- Certain statements in this presentation are forward-looking and are based on plans, estimates, assumptions, projections and expectations and are subject to risks and uncertainties. In addition to the factors explicitly discussed, other circumstances may also have a material effect on the actual outcome. Such factors include, but are not limited to, general economic or political conditions, fluctuations in exchange or interest rates or metal prices, technological factors, interruptions in supply or production, actions of courts, regulators, governmental agencies, competitors, customers, suppliers, employees or other third parties.
- Nothing contained herein shall constitute any representation or warranty as to the accuracy or completeness and Boliden accepts no responsibility or liability as to the accuracy or completeness of the information contained herein. The material may include information from third party sources believed to be reliable. However, Boliden has not made an independent verification of the information provided.
- Save as by prior approval in writing, this material may not be copied, transmitted or disclosed, whether in print, electronic or any other format. All rights to the material are reserved.
- Boliden does not accept any liability whatsoever for any direct, indirect, consequential or other loss arising from or in connection with any use of this information.
- This material has not been reviewed, registered or approved by any authority under any applicable laws.



