



# HINDUSTAN ZINC LIMITED

Well positioned  
through the cycle



February 24, 2010

# Overview



**Revenue** FY 09 \$ 1.2 billion

**EBITDA** FY 09 \$ 0.6 billion

**Current Market Cap** \$ 10.9 billion

Nine months ended December 2009:

Revenue \$ 1.17 billion

EBITDA \$ 0.79 billion

Mined Metal (Zn+Pb) 575 kt

Saleable Metal (Zn+Pb) 474 kt

Listing: BSE & NSE

Net Cash March 2009: \$ 2.1 billion

Ore Reserves & Resources (31/03/09):

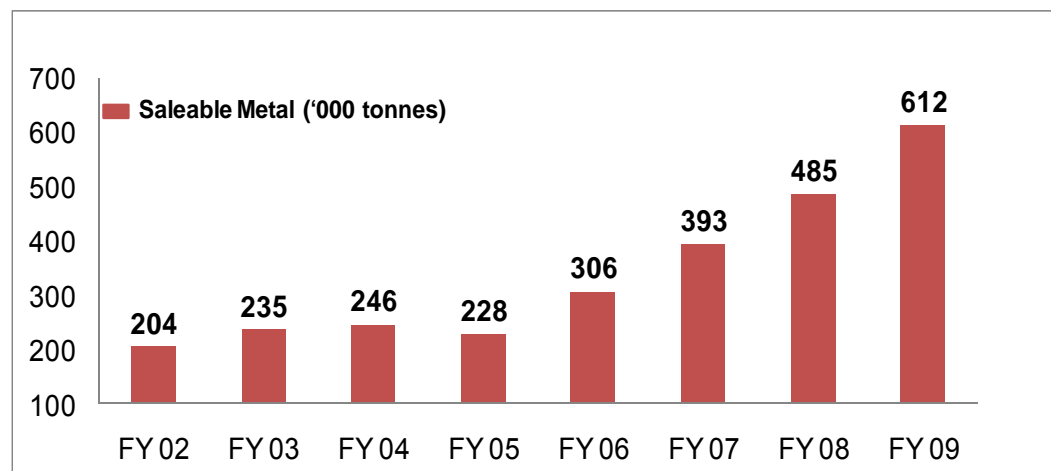
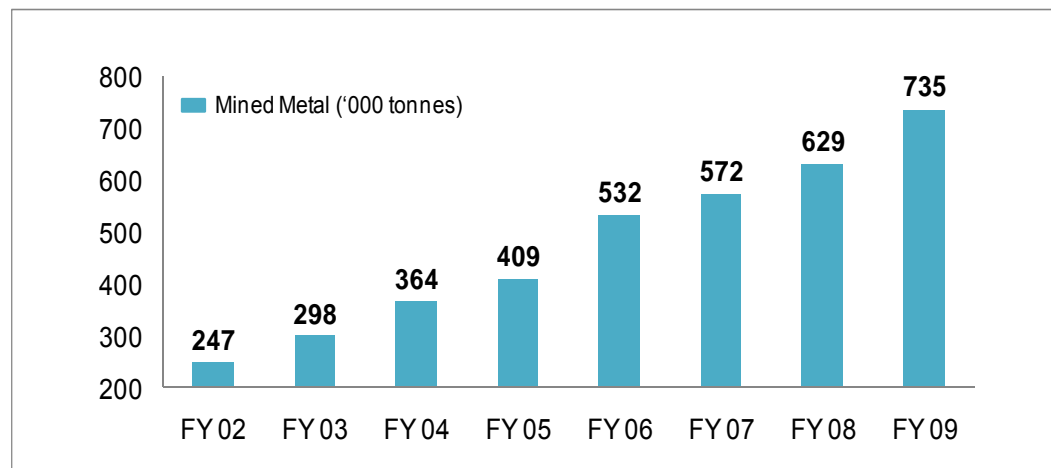
272 mt (31.5mt zinc and Lead)

Employees: 6,988\*

Contract workmen: 5,169\*

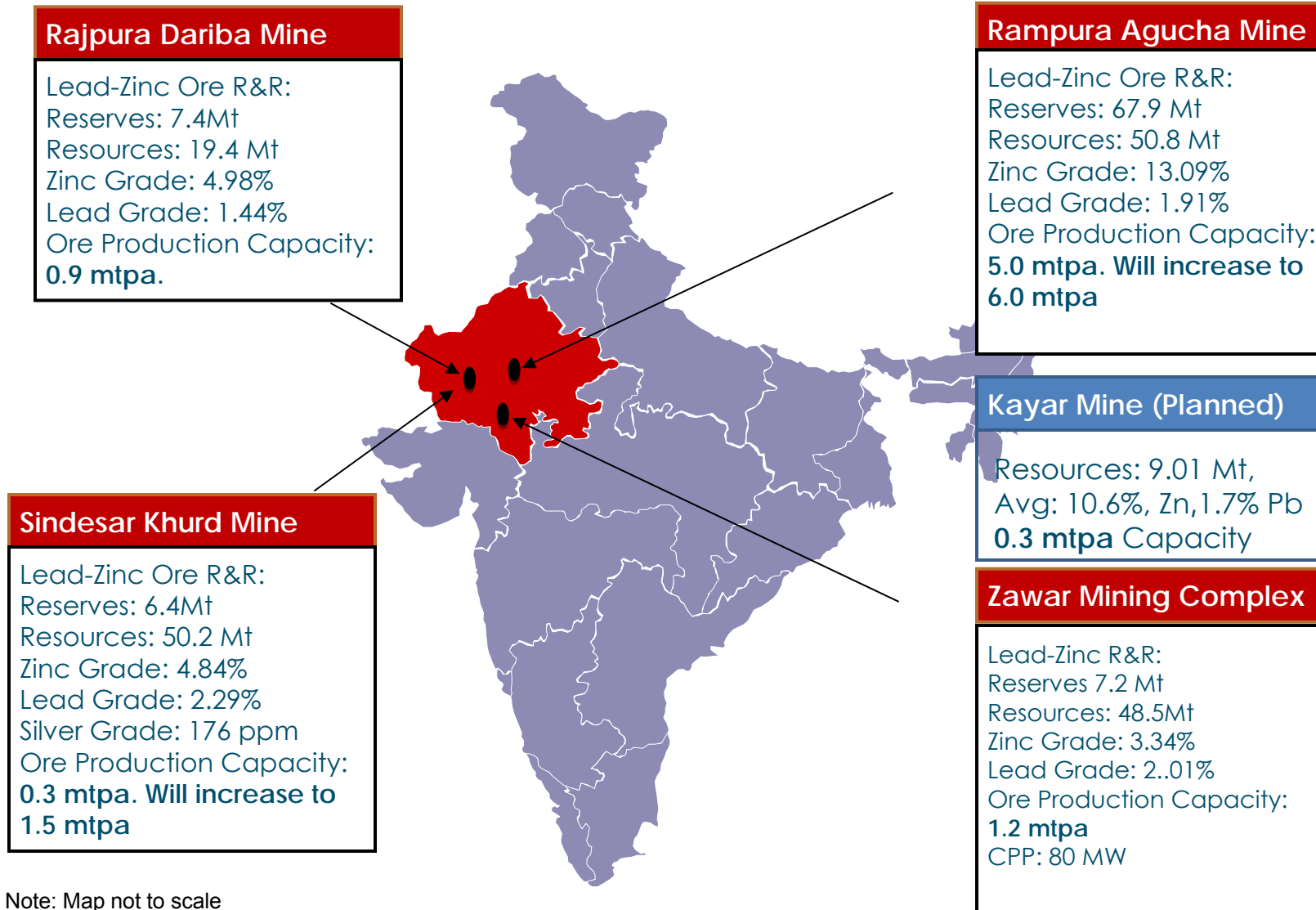
Metal production capacity in FY 2011 – 1064 ktpa

\* As on December 31, 2009



\*\* Saleable Metal excludes concentrate sales.

# World Class Mining Assets



Note: Map not to scale

**At expanded capacity of 10 million tonnes of ore per year, our current Reserves & resources base is sufficient for around 27 years.**

# World Class Smelting and Power Assets



## Chanderiya Smelting Complex

Pyrometallurgical Lead Zinc Smelter:  
**105,000 tpa Zinc**  
**35,000 tpa Lead**  
**150 tpa Silver**  
Hydrometallurgical Zinc Smelter:  
**420,000 tpa Zinc**  
Ausmelt™ Lead Smelter:  
**50,000 tpa Lead**  
Captive Power Plant: 234 MW

## Zinc Smelter Debari

Hydrometallurgical Zinc Smelter:  
**88,000 tpa Zinc**

## Dariba Complex – Phase III

Hydrometallurgical Zinc Smelter:  
**210,000 tpa Zinc**  
Lead Smelter  
**100,000 tpa Lead**  
Captive Power Plant: 160MW

## Zinc Smelter Vizag

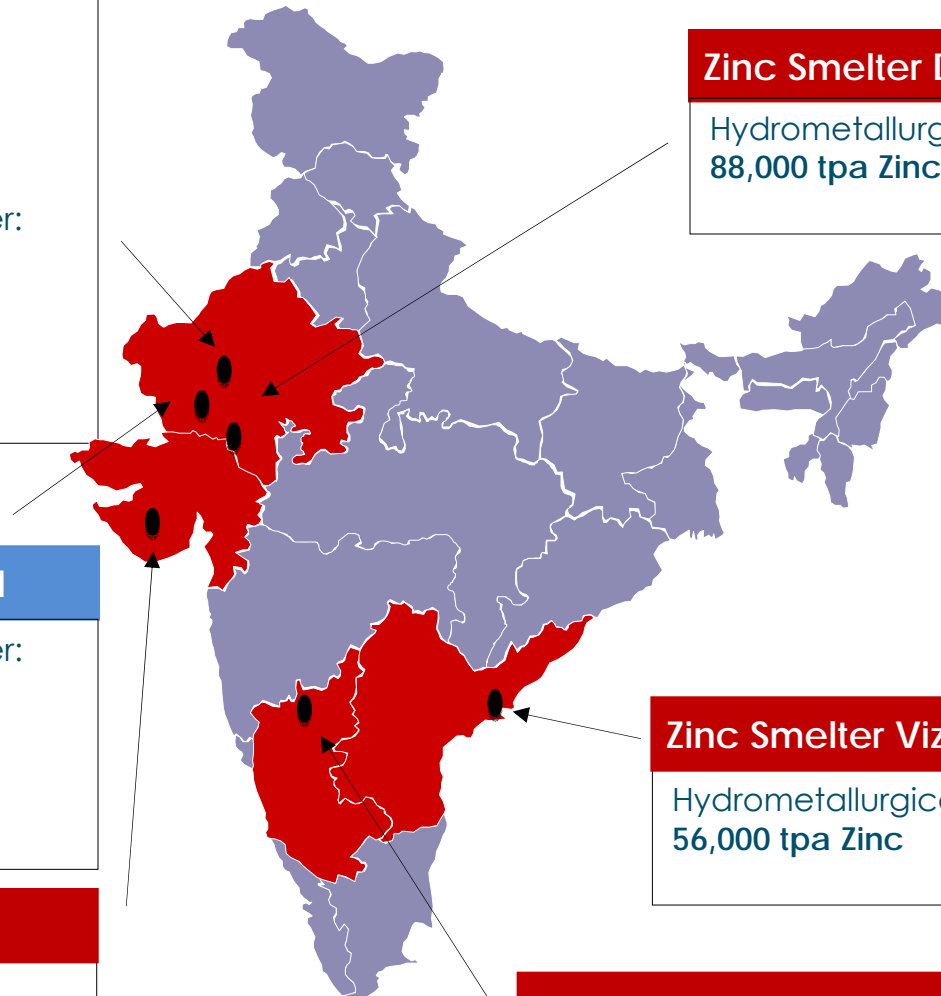
Hydrometallurgical Zinc Smelter:  
**56,000 tpa Zinc**

## Samana, Gujarat

88.8 MW Wind Power Plant

## Gadag, Karnataka

34.4 MW Wind Power Plant



Note: Map not to scale  
Dariba Smelting Complex is under implementation

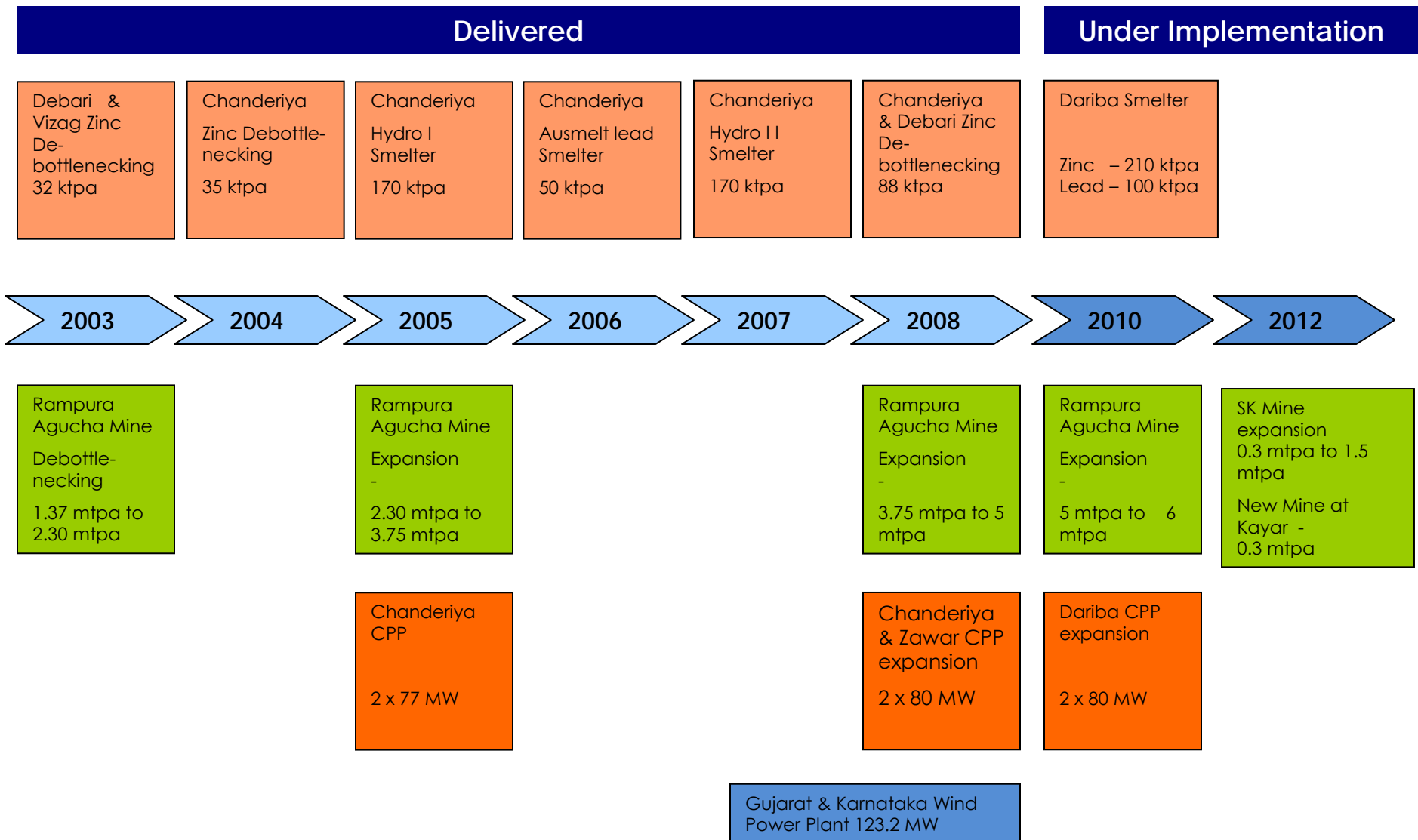
# Current Capacity



Mining Capacity	mtpa	Smelting Capacity	ktpa	Power generation Capacity	MW
Rampura Agucha	5.0	Chanderiya Smelting Complex	610	Chanderiya CPP	234
Rajpura Dariba	0.9	Zinc Smelter Debari	88	Zawar CPP	80
Zawar Mining Complex	1.2	Zinc Smelter Vizag	56	Samana WPP	88.8
Sindersar Khurd	0.3			Gadag WPP	34.4
<b>Total</b>	<b>7.4</b>	<b>Total</b>	<b>754</b>	<b>Total</b>	<b>437.2</b>

Mtpa – million tonnes per annum; ktpa – thousand tonnes per annum

# Milestones



Note: The year mentioned is Calendar Year

# Project Execution Philosophy

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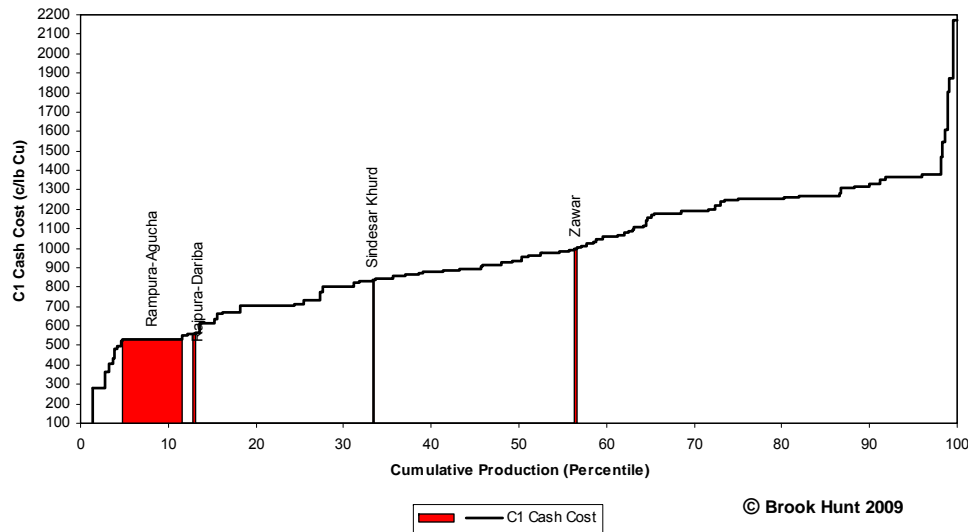
- Split between basic engineering & detail engineering
- Critical path analysis & de-bottlenecking at every phase
- Parallel engineering, procurement & construction
- Best in Class project partners like L&T, Outotec, BHEL, ABB etc.
- Community participation –involvement & job creation opportunities for local people
- Successful sourcing from Indian vendor base by our global suppliers - saving time & cost
- Independent Project audit & review mechanism
- Close & Proactive working with vendors, close watch on progress to avoid surprises.
- Dedicated & young energetic project management team

**Project Track Record - Hydro I Smelter commissioned in 22 months; Hydro II Smelter commissioned in 20 months**

# Low cost positioning

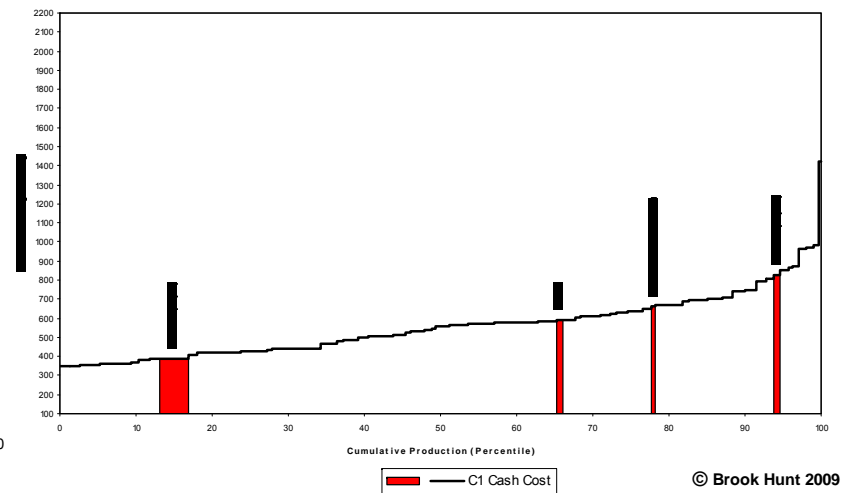


2009 Zn Cost League, Ranked By C1, Composite Costs, Grouped By Mine in c/lb (Editable Scenario 1 - Operating mines)



Cost curve - Mines

2009 Zn Cost League, Ranked By C1, Composite Costs, Grouped By Mine in c/lb (Editable Scenario 1 - Operating mines)



Cost curve - Smelters

- One of the lowest mining cost positioning
  - Rampura Agucha with 15% ore grade, 92% zinc recovery and fully mechanized efficient open-pit operations, is amongst the best in similar sized mines.
- Low smelting cost positioning
  - Latest technology, 96-97% metal recovery, high power efficiency- 3,950 kwh/tonne coupled with low cost captive power generation facility.
- Silver revenue of with a potential EBITDA of USD 290 million not counted in our cost matrix
- COP target - \$ 600/tonne
  - Culture of continuous improvement
  - Dedicated team of ~ 50 people working to achieve significant cost reduction
- Extremely experienced work-force



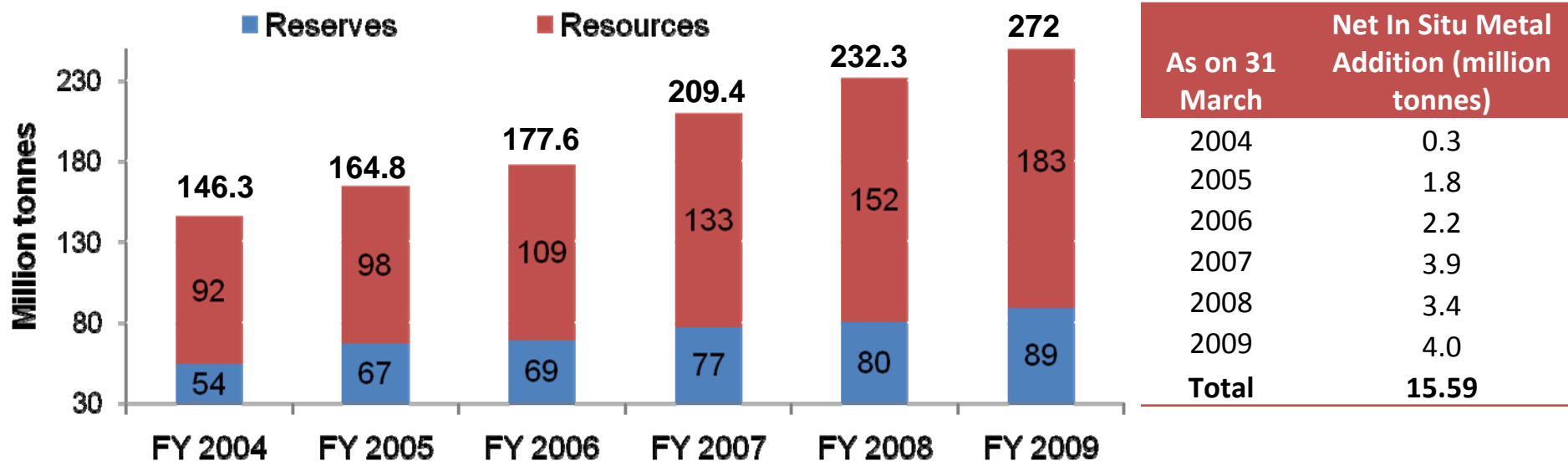
# Silver

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- FY 2008-09 production 3.4 million ounces, contributing USD 45 million in EBITDA
- Silver production will increase to 16.1 million ounces in 2013, post completion of ongoing expansion projects
- Increased silver production is attributable to
  - Increased mine volumes from Sindesar Khurd Mine which is rich in Silver  
(Average Silver grade is 176 ppm in ore)
  - Increase in mining production
  - Improvement in silver recovery in smelters & mines
- Silver is treated as co-product in cost of production computation, thus entire 16.1 million ounces of silver value travels to the bottom line
- At current price this implies an EBITDA of ~ USD 290 millions

# Exploration



- Use of best available technology & expertise
- Engaged best available high speed drilling rigs & deployed Australian drilling contractor
- Over 70,000 meters of drilling is carried out every year
- Team of 46 geologists lead by best in class professionals
- Continuous inputs and review by subject specialists
- Achieved under 8 million USD/ year expenditure on exploration.

**Overall R & R increased by 152 million tonnes, before depletion of 26.3 million tonnes.**

# Exploration

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## Exploration Success in FY 2009

- Total Reserves & Resources as on 31 March 2009 is 272 million tonnes containing 31.5 million tonnes of zinc-lead metal
- Rampura Agucha mine having Reserves & Resources of 118.8 million tonnes
- During the year, Reserves & Resources increased by 46 million tonnes containing 4.7 million tonnes of metal, prior to depletion

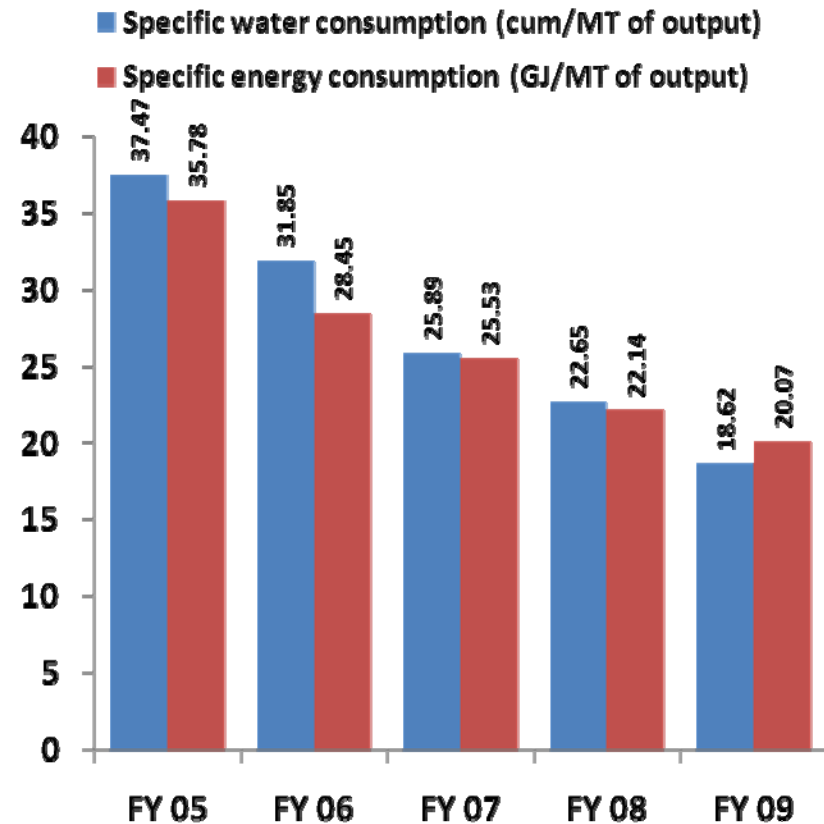
## Sindesar Khurd Mine

- Reserves & Resources increased from 13 million tonnes in 2005 to over 56 million tonnes in 2009
- Ore body of Sindesar Khurd mine is open in depth
- Total Reserves & Resources as on 31 March 2009 is 56.6 million tonnes containing 4.8 million tonnes of zinc-lead metal & 176 ppm of silver grade in ore.

# Environmental Focus



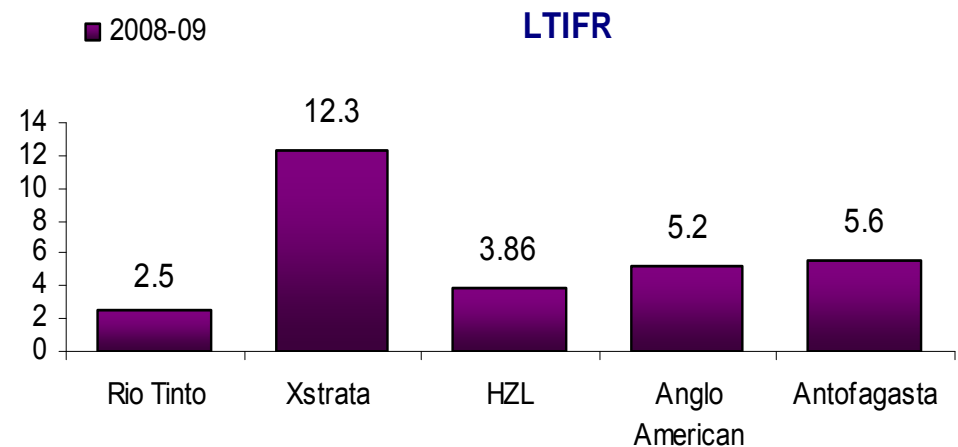
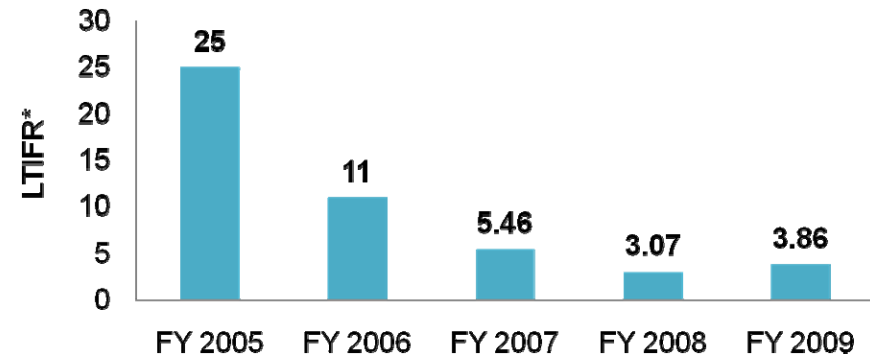
- 123.2 MW Wind power projects accruing 22,122,000 CERs.
- 20.2 MW of waste heat energy, 9.4 MW approved by UNFCC, approval for the remaining in process.
- World's largest and latest generation roasters
- Latest Jarofix technology to eliminate hazardous waste generation
- Reduced specific energy consumption by ~44% to 20.07 GJ/MT of output, in last 4 years
- Reduced specific water consumption to by ~50% to 18.62 cum/MT of output, in last 4 years
- Efficient byproduct recoveries eg: Cadmium and Copper.



# Focus on Safety



- Robust safety policy & practices, organization - supported by safety stewards.
- Increased focus on the behavior based safety program of all employees.
- Daily Safety performance review in unit meetings with total engagement of employees.
- External HSE audits are being done by agencies of international repute – PwC, E&Y, B.S.C
- Proactive actions like analysis of near miss incidences, periodic independent reviews, regular training etc.
- Equal focus on contract workmen's safety
- Compulsory use of Personal Protective Equipment (PPE) including contract workmen.
- No cases of occupational health diseases

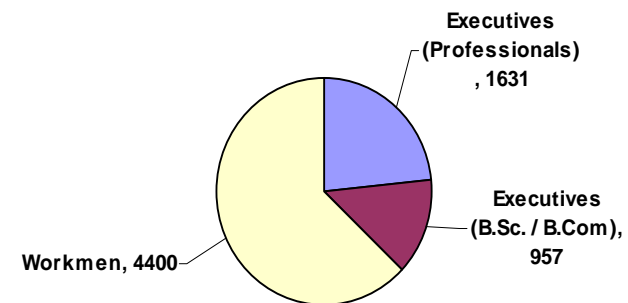
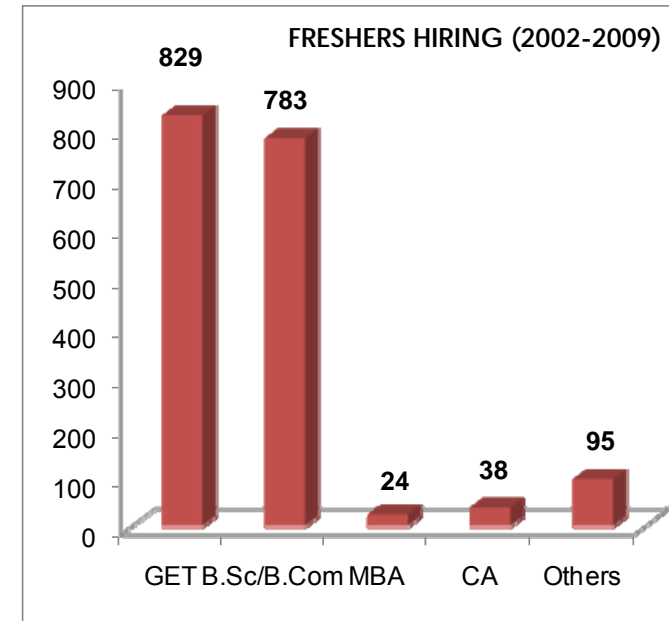


\*Lost Time Injury Frequency Rate

# Human Resources

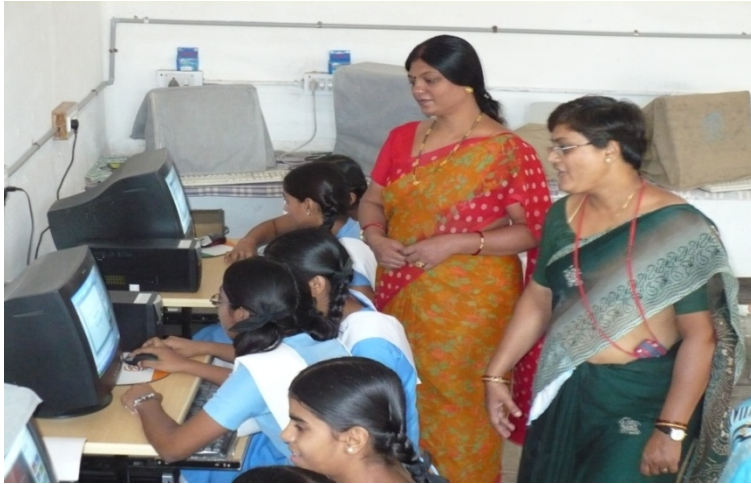


- **Organization Structure enhancing performance**
  - Empowered SBU work culture
  - Leadership development for succession planning
  - Talent identification, positioning and rewards
  - Performance oriented online appraisal
  
- **Competence Building**
  - Over 1,000 employees have undergone specially designed general management & technical training programs.
  - *Accelerated development of executives through specialized programs at reputed institutions - IIM / IIT / ISM / BITS*
  - Exposure to other world-class operations
  
- Attract best talent at induction level
- Qualification of fresh joiners – First Class Graduate
- High level of talent retention
- Cutting edge combination of experienced and young engineers in expertise & energy levels
- Tremendous focus on quality of life
- Contract workmen – 5,169



**HZL was Ranked # 2 Best Employer in India & Amongst Top 25 Best Employer in Asia in 2009  
– By Hewitt Associates**

# Corporate Social Responsibility - Snapshot



- Mid Day Meal – Serving over 200,000 primary school children through 6 Hi- Tech Kitchens established by HZL
- 1000 Anganwadi Centers adopted by HZL, benefiting around 16,000 children
- 1,000 computers installed in rural Government schools covering more than 40,000 students
- Covering 173 villages and amongst them transforming 59 poverty stricken villages into model one based on socio-economic indicators
- 32 model villages have been transformed and audited by ORG
- Post Graduate Girls College in Ringus serving around 900 girl students coming from rural areas

Impacting over 500,000 lives, covering 173 villages

# Awards & Recognition

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- Ranked # 2 Best Employer in India and amongst the Top 25 Best Employers in Asia in 2009 -By Hewitt Associate
- CII-ITC Sustainability Award (Commendation for Strong Commitment towards sustainability) 2009
- Golden Peacock Occupational Health & Safety Award to Debari Zinc Smelter, 2009.
- CII- National Award for Excellence in water Management to Rampura Agucha Mine, 2009.
- CII-Leadership & Excellence Award in Environment, Health & Safety to Vizag Zinc Smelter, 2009.
- International Safety Award 2008 from the British Safety Council - Debari Zinc Smelter.
- RoSPA gold award 2009 from Royal Society for Prevention of Accidents, UK - Debari Zinc Smelter.
- Golden Peacock Environment Management Award 2009 from World Environment Foundation (WEF), in association with Institute of Directors - Rampura Agucha Mine.
- Process Excellence Award –International Quality & Productivity Centre, London 2008
- FICCI Awards for Rural & Community Development 2007-08
- Golden Peacock Award for Excellence in Corporate Governance, 2007



# Summary

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- On way to become the world's largest integrated zinc-lead producer by 2010, with probably the lowest cost of production.
- Ramped up silver production will contribute \$ 290 million in EBITDA
- Overall R & R increased by 152 million tonnes , before depletion of 26.3 million tonnes, in the period from April 2004 to March 2009.
- Strong balance sheet with cash balance of over USD 2 billion.
- Strong focus on safety – significant reduction in LTIFR.
- Strong Environmental focus – steep decline in specific energy and specific water consumption.
- Impacting over 500,000 lives through our persistent Corporate Social Responsibility (CSR) activities.



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THANK YOU